Regional Administrator
USEPA Region 5
Mail Code SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3507
Attn: Michelle Kerr

Director, Remediation
Site Remediation Section
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155
Attn: Nile Fellows

John Jones
Vertellus Specialties, Inc.
201 North Illinois Street, Suite 1800
Indianapolis, Indiana 46204

Subject: United States of America, et al. vs. Reilly Tar & Chemical Corporation, et al.
File No. Civ. 4-80-469 CD-RAP Section 3.4

Dear Project Leaders,

The City of St. Louis Park has prepared the attached "2011 Annual Monitoring Report" in accordance with the above reference. You may direct any questions or comments to this office.

Sincerely,

William M. Gregg

William M. Gregg
Project Leader for the City of St. Louis Park

cc: Scott Anderson, City of St. Louis Park

ANNUAL MONITORING REPORT
FOR 2011

SUBMITTED TO THE

REGIONAL ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

EXECUTIVE DIRECTOR
MINNESOTA POLLUTION CONTROL AGENCY

BY

THE CITY OF ST. LOUIS PARK, MINNESOTA

PURSUANT TO
CONSENT DECREE - REMEDIAL ACTION PLAN
SECTION 3.4

UNITED STATES OF AMERICA, ET AL.

vs.

REILLY TAR & CHEMICAL CORPORATION, ET AL.

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA
CIVIL NO. 4-80-469

MARCH 15, 2011

CONTENTS

APPENDICES

Please refer to the Guide to Appended Laboratory Results for all 2011 samples. This guide precedes the Appendices.

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

Pursuant to Section 3.4 of the Consent Decree - Remedial Action Plan (CD-RAP) in the case of the United States of America, *et al.* vs. Reilly Tar & Chemical Corporation, *et al.*, this report presents the results of all chemical analyses and water level measurements for calendar year 2011 that are not presented in previous reports.

The ground water monitoring conducted in 2011 was performed in accordance with the methods and procedures identified in the 2011 Sampling Plan. The City of St. Louis Park (City) has overall responsibility for conducting the ground water monitoring required by the CD-RAP. In accordance with the 2011 Sampling Plan, AECOM, Inc. (AECOM) collected ground water samples from monitoring wells. TestAmerica Laboratories, Inc. (TA) and Pace Analytical Services (Pace) performed the analyses for PAH. Summit Envirosolutions, Inc. (Summit) assisted with various reporting and data validation tasks.

The 2011 monitoring data are presented separately for each aquifer, starting with the Mt. Simon-Hinckley Aquifer, which is the deepest aquifer below the ground surface, and ending with the Drift Aquifer, which is the uppermost aquifer monitored. A series of maps has been prepared to help present the monitoring data. Maps for the Prairie du Chien-Jordan, St. Peter, Platteville, and Drift Aquifers are contained in this report.

A series of tables has been prepared for each aquifer to help present the analytical results since 1988. These tables illustrate trends in PAH concentrations in the ground water for each monitoring well. The shaded tables represent wells that are no longer monitored as part of the Sampling Plan, were not scheduled to be sampled, or wells that were unavailable for sampling during the scheduled time.

A laboratory data review was conducted to assess the quality of the laboratory data. The data quality assessment (DQA) can be found in Section 9.0 of this report. Additionally, a total of four of the data packages (two from each laboratory) underwent full data validation. Each appendix includes a laboratory data package for a set of samples collected and submitted for analysis at the same time. Attached to the end of selected data packages are DQA reports summarizing the quality of the analytical data contained in each package. The data Appendices are organized chronologically throughout the year, as shown in the Guide to Appended Laboratory Results immediately preceding the Appendices.

2.0 MT. SIMON-HINCKLEY AQUIFER

St. Louis Park municipal water supply wells SLP11 and SLP12 were sampled once in 2011. Well SLP13 was out of operation due to maintenance for the year and well SLP 17 has not been used since 2000 and was not sampled. No new Mt. Simon-Hinckley Aquifer wells were installed within a mile of well W23. The 2011 analytical data for the Mt. Simon-Hinckley wells are shown on Figure 1. The laboratory reports of the analytical data are included in the Appendices. The Guide to Appended Laboratory Results for all of 2011 precedes the Appendices.

The advisory levels for the sum of benzo(a)pyrene and dibenz(a,h)anthracene, carcinogenic PAH, and Other PAH are 3, 15 and 175 nanograms/liter (ng/l or parts per trillion), respectively. Table 1 lists the historical results since 1988 of other PAH and carcinogenic PAH data collected from the three wells that are still in service. Well SLP17 has been out of service since 2000 and has not been sampled since then. The 2011 data indicate that the sums of the concentrations of benzo(a)pyrene and dibenz(a,h)anthracene, carcinogenic PAH, and other PAH in wells SLP11, SLP12, and SLP13 were below the advisory levels for these compounds. It appears that the Mt. Simon-Hinckley Aquifer has not been significantly affected by contaminants originating from the former Reilly Tar & Chemical Corporation (Reilly) site.

3.0 IRONTON-GALESVILLE AQUIFER

Analytical results from ground water samples collected during 1988 through 1991 from well W105 had consistently met the criterion (less than 10 parts per billion [ppb] total PAH) for discontinuing the 25 gallons per minute (gpm) pumping rate. Therefore, in accordance with CD-RAP Section 6.1.5, the pump in well W105 was inactivated on December 23, 1991, and remains inactivated.

Ground water samples are required to be collected biannually from well W105. The sampling schedule for well W105 requires once per year sampling during even-numbered years (i.e. 2012, 2014, and 2016). No new Ironton-Galesville Aquifer wells were installed within a mile of well W23.

The historical analytical results for well W105 from 1988 through 2010 are presented on Table 2. PAH concentrations exceeded the 10ppb cessation criteria in 2008 and 2010 due to purging problems with the original sample. Confirmation sampling conducted indicated concentrations that were consistent with previous years. Total Other PAH in well W105 have been trending downward over the last 10 years. W105 will next be sampled in 2012.

4.0 PRAIRIE DU CHIEN-JORDAN AQUIFER

Prairie du Chien-Jordan Aquifer wells were monitored in accordance with the 2011 Sampling Plan. However, some wells listed in the sampling plan (because they are identified in the CD-RAP) were not available for one or more sampling events in 2011. These wells included:

- W29 was due to be sampled once in 2011. Flame Industries vacated the property and the well was not operational for the year.
- W40 and W70 were due to be sampled once in 2011. These two Prairie du Chien-Jordan Aquifer industrial wells have been abandoned in prior years.
- E7 was due to be sampled once in 2011. The City of Edina is not using this well pending completion of a VOC treatment facility, and did not provide access to the well for PAH sampling.
- SLP 6 was due to be sampled quarterly in 2011. It was sampled in the first three quarters of the year, but was unavailable for sampling in the fourth quarter due to maintenance.
- W119 was due to be sampled quarterly in 2011 but was only available for sampling in the second and third quarters. During the off season, the golf course winterizes the well and did not provide access.

An annual sample is collected from Well SLP10 or SLP15. In 2011, a sample was collected from SLP10. Wells SLP14, SLP16, and W405 or W406 are required to be sampled every other year. The recent sampling schedule has these wells sampled on even-numbered years (e.g., 2012, 2014, and 2016). Samples were collected from these wells in 2010; therefore, these wells will be sampled again in 2012.

In addition to water quality monitoring, ground water elevations were recorded at most municipal Prairie du Chien-Jordan Aquifer wells that are equipped with pressure transducers. A total of 13 wells were used to collect ground water samples during 2011. The laboratory reports of the analytical data are included in the Appendices. The Guide to Appended Laboratory Results for all of 2011 precedes the Appendices.

Summaries of analytical data are shown in Figures 2 and 3, and Figure 2 includes groundwater elevation contours. The direction of ground water flow in the Prairie du Chien-Jordan Aquifer is strongly affected by pumping wells. Municipal wells in St. Louis Park and surrounding cities pump at greater than 1,000 gpm and have a considerable effect on localized ground water flow. However, these wells systematically turn on and turn off; therefore, the general ground water flow is affected by which wells are pumping and at what rates. According to several literature resources, including the USGS (Water Supply Paper 2211, 1984), Norvitch and others (Water Resources Outlook of the Minneapolis and St. Paul Metropolitan Area, 1973), the general ground

water flow in the Prairie du Chien-Jordan Aquifer is toward the east.

Table 3 presents a historical summary of analytical results from 1988 through 2011 for Prairie du Chien-Jordan Aquifer wells. St. Louis Park wells SLP10 and SLP4 continue to show decreasing concentrations of PAH. Water quality results for the 2011 samples from well SLP4 meet the CD-RAP drinking water criteria without GAC treatment. However, the City continues to treat the water from well SLP4. Groundwater samples from Edina municipal wells E2, E3 and E15 continue to indicate stable concentrations of PAH. Edina well E13 samples have shown an increasing trend in PAH concentrations since 1996, although the results appear to have stabilized below the CD-RAP drinking water advisory level in the past few years. Figure 4 shows the well E13 PAH concentrations plotted over time.

The CD-RAP relies on pumping wells to control the gradients and groundwater flow directions in the Prairie du Chien-Jordan Aquifer. The effectiveness of the gradient control system in the Priaire du Chien-Jordan Aquifer can be evaluated three ways:

1. Groundwater elevations measured at wells can be contoured to estimate the groundwater flow directions in the study area. As discussed above, snapshots of water elevations may present a distorted view of groundwater flow directions. A separate analysis of continuous elevation measurements using pressure transducers in St. Louis Park and Edina municipal wells is ongoing and will be reported separately, once the Edina transducer data are available for inclusion.
2. Groundwater models can be used to predict groundwater movement and PAH migration. Past use of groundwater models has shown a possibility that PAH could migrate from St. Louis Park into Edina.
3. Groundwater samples can provide analytical data on the extent and magnitude of PAH in the aquifer. These data provide an actual indication of the migration of PAH.

The water quality data in the Prairie du Chien-Jordan Aquifer indicate that concentrations of PAH exceeding the CD-RAP drinking water standards have not migrated to new areas such as Edina. The effectiveness of the constant pumping of wells SLP10 (or SLP15) and SLP4 is further highlighted by historical water quality results in wells SLP6 and W48. Both these wells have shown a pattern of increased PAH concentrations when pumping compared to non-pumping conditions. This pattern demonstrates their position on the southern margin of the area of the Prairie du Chien-Jordan Aquifer containing PAH in concentrations above the CD-RAP drinking water criteria. A depiction of this area is shown in Figures 2 and 3.

The sums of the concentrations of benzo(a)pyrene and dibenz(a,h)anthracene, carcinogenic PAH, and other PAH were below the drinking water criteria in all of the Prairie du Chien-Jordan Aquifer municipal supply wells during 2011. However, an anomalous result was obtained from the extended analysis performed by Test America on the September 13, 2011 sample from well

SLP10 after carbon treatment (SLP10T). The extended analysis reported a total of 62.8 ng/l of carcinogenic PAH which is higher than the drinking water criteria and higher than the results for contemporaneous samples collected from well SLP10 before and after carbon treatment (analyzed for 31 PAH compounds). The data report for this analysis is provided in Appendix I. None of the “extra” compounds on the extended list contributed to the elevated CPAH total. Also, the split sample sent to PACE laboratory which was analyzed for 25 CPAH did not detect any CPAH (Appendix J). Additional treated water samples were collected in accordance with CD-RAP Section 4.3.2. The reanalysis (Appendixes L and M) showed that no CPAH were detected, although relatively high levels of Other PAH were detected in the blanks. As a result of these tests, the carbon is due to be replaced in 2012 in accordance with the normal replacement schedule.

Overall, the amount and distribution of PAH in the aquifer in 2011 was consistent with historical patterns and continues to show a stable or decreasing trend of PAH concentrations in most of the wells.

5.0 ST. PETER AQUIFER

Eleven St. Peter Aquifer wells were monitored in 2011 in accordance with the 2011 Sampling Plan. In addition to water quality monitoring, ground water elevations were measured in St. Peter Aquifer wells throughout the year. Summaries of analytical data and ground water elevations are shown in Figure 5. Laboratory reports of the analytical data are included in the Appendices. The Guide to Appended Laboratory Results for all of 2011 precedes the Appendices. Table 4 presents a historical summary of analytical results from 1988 through 2011 for St. Peter Aquifer wells.

The groundwater contours in Figure 5 are illustrated using the water level data measured during sampling. Figure 5 also shows the estimated hypothetical capture area of well W410 as calculated from the formula Q=kiA (well discharge or pumping rate equals the product of hydraulic conductivity, hydraulic gradient, and cross-sectional area of flow to the well). The estimated capture area of well W421 is nearly 4000 feet wide using a pumping rate of 53 gallons per minute (2011 average pumping rate), a hydraulic conductivity of 13 ft/day, a gradient of 0.002 and an aquifer thickness of 100 feet. The capture zone can also be inferred by the shape of the water elevation contours, and it extends over a relatively large portion of the study area. The uniformity of hydrogeologic characteristics of the St. Peter Aquifer tends to increase the accuracy of the estimated capture zone, as based on calculations and/or graphical solutions. However, inherent assumptions about the uniform gradient and transmissivity of the aquifer never match the natural condition.

The water quality measured in St. Peter Aquifer wells does not depend on the effectiveness of pumping well W410. With the notable exception of wells W409 and W410, PAH concentration trends at individual wells appear to be unaffected by pumping, and have shown a steady or decreasing trend both inside and outside the well W410 capture area. As discussed below, pumping at well W410 has clearly drawn higher concentrations of PAH into the well from source areas closer to the Reilly Site.

No groundwater samples from the St. Peter Aquifer contained PAH concentrations above MDH HRLs/HBVs. Pumping well W410 is therefore not needed to effectively control the migration of PAH above the MDH HRLs/HBVs.

The inferred area of the St. Peter Aquifer that exceeds CD-RAP drinking water criteria is shown in Figure 5. Well W410 does not hydraulically control all areas of the St. Peter Aquifer that exceed the CD-RAP drinking water criteria. This measure of well W410's effectiveness is illustrated by wells W122 and W133 which are discussed below.

Pumping well W410 does not have any influence or hydraulic control on well W122 because well W122 is completed in the basal St. Peter Formation and is separated from the well W410 pumping stress by shale confining layers. The water quality in well W122 is not expected to change in response to pumping conditions at well W410 and PAH concentrations will remain close to the CD-RAP drinking water criteria. One sample from 2009, one sample from 2010, and many previous well W122 samples have exceeded the CD-RAP drinking water criteria. The 2011 sample from well W122 contained relatively little PAH.

As shown on Figure 5, the inferred area where PAH concentrations exceed CD-RAP drinking water criteria extends beyond the hypothetical capture area of well W410. Wells W129, W411, W412 and W414 are located in this area, as is well W133 which was not sampled in 2011. Except for well W414, which was recently installed by U.S.EPA and has only been sampled once, each of these wells have historically produced samples that have occasionally exceeded CD-RAP drinking water criteria. Well W129 exceeded the CD-RAP drinking water criteria in 2011 and is arguably the most downgradient well in the St. Peter Aquifer.

Another assessment of the effectiveness of pumping well W410 is revealed by the water quality trends in wells W409 and W410. Well W409 is located relatively close to the Reilly Site and is likely within the capture area of the pumping well. PAH concentrations were initially relatively low in well W409, but increased after pumping began in 1991 to a high in 2000 and the PAH concentrations have been decreasing since then. Pumping well W410 has apparently caused relatively high concentrations of PAH that were close to the Reilly Site to migrate downgradient into the pumping well, where concentrations continue to increase. Therefore, well W410 has had mixed effectiveness in controlling PAH: on one hand the relatively high PAH concentrations have not been found downgradient of the pumping well, but on the other hand the PAH have been spread farther downgradient from the Reilly Site.

There are no known drinking water wells or other receptors downgradient from the areas containing PAH shown on Figure 5.

6.0 PLATTEVILLE AQUIFER

In accordance with the 2011 Sampling Plan, 19 samples were collected from 16 Platteville Aquifer monitoring wells (including quarterly samples from well W421) in 2011. A second sample from well W22 was inadvertently omitted. In addition to water quality monitoring, ground water elevations were measured in Platteville Aquifer wells on the sampling dates. Summaries of analytical data and ground water elevations for 2011 are shown in Figure 6. Laboratory reports of the analytical data are included in the Appendices. The Guide to Appended Laboratory Results for all of 2011 precedes the Appendices.

Table 5 is a historical summary of analytical results since 1988 for Platteville Aquifer wells. The analytical results for all Platteville Aquifer wells are reported in micrograms per liter (ug/l), or parts per billion. The historical water quality data shown in Table 5 indicates a steady or decreasing trend of PAH concentrations in the Platteville Aquifer wells that were sampled in 2011. However, the pumping of well W421 has drawn DNAPL into that well and the samples show higher and more variable PAH concentrations as a result. Only wells W421 and W437 provided samples that contained PAH concentrations above the MDH HRLs/HBVs. The inferred areas where Platteville Aquifer groundwater exceeds the MDH and CD-RAP criteria are shown in Figure 6.

Well W421 pumped at an average rate of 31 gpm in 2011. Figure 6 shows the estimated capture area of well W421 as derived from a calculation using the formula Q=kiA (well discharge or pumping rate equals the product of hydraulic conductivity, hydraulic gradient, and cross-sectional area of flow to the well). The estimated capture area of well W421 is approximately 800 feet wide using a pumping rate of 31 gallons per minute, a hydraulic conductivity of 187 ft/day, a gradient of 0.002 and an aquifer thickness of 20 feet. The value for hydraulic conductivity was derived from the 1988 pump test at well W421.

The simplifying assumptions required for this calculation are not well matched to the anisotropic characteristics of the Platteville Aquifer. For example, a recent study calculated hydraulic conductivities of six Platteville wells ranging between 300 ft/day and 47,000 ft/day ("Hydrostratigraphy of a fractured, urban aquitard", Anderson, Runkel, and Tipping of the MGS. GSA Field Guide 24, GSA Annual Meeting, October 13, 2011). Even the aquifer thickness is debatable due to the degree of hydraulic connection between the Drift and Platteville Aquifers, which would tend to increase the effective aquifer thickness, and due to the secondary porosity in the Platteville Limestone which may provide significant flow pathways through relatively small bedding plane solution features. Thus the estimated capture area is subject to considerable professional judgment. The density of groundwater monitoring points that would be needed to clarify the assumptions, and/or provide hydrologic data for a graphical capture area solution, does not exist.

The well W421 capture area is located in the middle of the bog area where DNAPL is present and the largest source of PAH is believed to exist. The pumping of this well has extracted at least a portion of the PAH from the bog area, and in recent years DNAPL has migrated into the well. The DNAPL migration is likely due to the combined pumping of well W420 in the Drift Aquifer and well W421 in the Platteville. Previously, on Drift Aquifer well W13 in the bog area contained DNAPL and many borings placed near well W13 were unable to locate additional DNAPL. The 20+ years of pumping at wells W420 and W421 provided enough hydraulic stress to mobilize a small amount of DNAPL into well W421. Given the prior studies around well W13 and the unrecoverable amounts of DNAPL that entered well W421, there does not appear to be a large body of DNAPL in the subsurface. The DNAPL is expected to stop migrating under steady-state conditions, and may already have stopped even while the wells remain pumping.

As depicted in Figure 6, well W420 appears to be hydraulically controlling most of the bog area as required by the CD-RAP, however, well W421 does not capture or hydraulically control all of the groundwater in the Platteville Aquifer that exceeds the MDH or CD-RAP drinking water criteria. It is not clear that the pumping at well W421 has influenced the steady or decreasing trends of PAH concentrations in any of the Platteville Aquifer wells. The lack of high PAH concentrations downgradient from sources that are not controlled by wells W421 suggests that PAH are not migrating even where they are outside of the capture areas.

7.0 DRIFT AQUIFER

In accordance with the 2011 Sampling Plan, 19 samples were collected from 11 Drift Aquifer monitoring wells (including pumping wells) in 2011. Well W7 was not sampled because it was removed prior to 1983 and well W422 was inadvertently omitted from 2011 sampling. In addition to water quality monitoring, ground water elevations were measured in the Drift Aquifer wells on the sampling dates. Summaries of 2011 analytical data and ground water elevations are shown in Figure 7. The water level contours illustrated in Figure 7 illustrates the regional east-southeast ground water flow direction.

Table 6 is a summary of analytical results since 1988 of Other PAH, carcinogenic PAH, and phenolic data for the Drift Aquifer wells. The 2011 analytical results for all Drift Aquifer wells are reported in micrograms per liter (ug/l), or parts per billion. The historical water quality data shown in Table 6 indicates a decreasing trend in PAH concentrations in all Drift Aquifer wells that were sampled in 2011. Only wells W420 and W439 routinely provide samples that contained PAH concentrations above the MDH HRLs/HBVs. The inferred areas where Drift Aquifer groundwater exceeds the MDH and CD-RAP criteria, as based on current and historical analytical results, are shown in Figure 7.

The average pumping rates for wells W420 and W439 were 40 and 58 gpm, respectively in 2011. A calculation of the theoretical width of the capture area can be made based on Q=kiA (well discharge or pumping rate equals the product of hydraulic conductivity, hydraulic gradient, and cross-sectional area of flow to the well). Of these parameters, the hydraulic conductivity and its distribution in three dimensions, is the least well known value. The range of hydraulic conductivity for the Drift Aquifer can vary by several orders of magnitude. For example, the Metropolitan Council groundwater model (Metro Model 2) identified horizontal hydraulic conductivity for Quaternary deposits at 20 ft/day to 240 ft/day with a mean of 80 ft/day. Also, this calculation assumes that the gradient and aquifer thickness are constant in all directions, which greatly simplifies the natural condition.

The theoretical capture area of well W420 is approximately 800 feet wide using a pumping rate of 40 gallons per minute, a hydraulic conductivity of 80 ft/day, a gradient of 0.002 and an aquifer thickness of 60 feet. The theoretical capture area of well W439 is 1160 feet wide using a pumping rate of 58 gpm and the same other values. However, the assumptions required for these calculations are not well matched to the anisotropic characteristics of the Drift Aquifer. For example, nearby monitoring wells W9 (only 110 feet south of well W420) and W425 (approximately 72 feet northwest of well W439) do not show drawdown from the pumping wells, and several episodes of turning the pumps off and on confirm a lack of response in the nearby

monitoring wells. This lack of response may be due to till layers that act as confining layers in the local areas of the pumping wells, or other heterogeneities. Thus the three dimensional size and shape of the capture areas of the pumping wells, and the three dimensional distribution of PAH in the Drift Aquifer, are not known to a degree sufficient to fully document the effectiveness of the pumping wells.

Figure 7 shows the theoretical extent of the W420 and W439 capture areas based on the calculations presented above and well W420 appears to be hydraulically controlling most of the bog area as required by the CD-RAP. However, the capture areas shown in Figure 7 do not take into account three dimensional characteristics of the Drift Aquifer such as clay layers that are known to influence PAH migration and groundwater flow. The density of monitoring wells that would be necessary to provide a realistic graphical representation of the three-dimensional capture area for wells W420 and W439 does not exist.

Figure 7 shows that many of the Drift Aquifer monitoring wells are located outside the estimated capture area of the pumping wells, as is a portion of the inferred area where Drift Aquifer groundwater exceeds the MDH and CD-RAP criteria. Thus the pumping wells are not hydraulically controlling these plume areas and do not influence the water quality in much of the study area. The original goals of the pumping did not include controlling all portions of the aquifer, and the resulting experience has shown that the PAH concentrations downgradient from source areas outside the capture areas of the pumping wells have continued to decrease. From this perspective, the pumping wells have had limited effectiveness because they have not influenced the PAH concentrations.

8.0 DATA QUALITY ASSESSMENT

In accordance with the 2011 Sampling Plan, all laboratory data packages underwent a data quality assessment (DQA). The DQA was conducted to determine whether or not the reported laboratory data may be used for decision-making purposes. Results of the data quality assessment can be found at the end of each laboratory data package. The laboratory reports of the 2011 analytical data are included in the Appendices. The Guide to Appended Laboratory Results for all of 2011 precedes the Appendices.

The basis for the review, including the elements to be reviewed and applicable validation guidelines were defined in the Quality Assurance Project Plan (QAPP). The 2011 DQA was conducted as follows. The number of samples was checked to verify that the results corresponded to the analytical requests designated on the chain of custody. The chain of custody was examined to determine the completeness pertaining to sampling dates, times, quantities, and analyses performed. The sample holding times, preservation, and cooler temperatures were noted. The method blanks, field blanks, equipment blanks, and trip blanks were examined for any contamination problems. Surrogate spike recoveries were checked to confirm they were within the range determined by the QAPP quality control (QC) limits. Matrix spikes and laboratory control samples (LCS) were reviewed to confirm they meet the QC acceptance criteria. All duplicate samples were checked for precision. In addition, sample quantitation limits (SQLs) were compared to those required in the QAPP.

A full data validation was completed on three of 15 data packages, representing 31 of 79 samples, or approximately 40% of the samples. The full data validation includes all of the items reviewed in the DQA plus a review of the gas chromatography/mass spectrometry (GC/MS) tuning, the initial and continuing calibrations, and internal standard performance.

All 15 of the 2011 laboratory data packages (labeled A through O) were reviewed during the DQA. The data packages contain usable results for all wells that were sampled in 2011. The holding times for aqueous PAH analysis require extraction to occur within seven days after collection. All sample holding times were met during 2011. Cooler temperatures for overnight shipments were all within the QAPP acceptance criteria of 4 ± 2º C. No more than one of the three surrogates used had recoveries lower than the stated laboratory QAPP control limits for any individual 2011 sample. Therefore, none of the data were qualified based on the surrogate recoveries. For all samples that were diluted for analysis, the Sample Quantitation Limits (SQLs) were checked to confirm they were adjusted accordingly.

PAH were detected in the method blanks and/or field blanks for several of the 2011 data packages. All results with method blank concentrations are qualified with a “B”. All concentrations qualified with a B are included in the total PAH calculations. No samples exceeded the action levels established for each compound (the action level is 5 times the concentration found in the blank) in any of the data packages that had Method Blank

contamination. All estimated data ("J" qualifier) and concentrations qualified with a B are included as part of the PAH sums that constitute the Drinking Water Criteria and the Advisory Levels for this project. Because none of the samples exceeded the Drinking Water Criteria or the Advisory Levels based on the addition of the estimated data to the various PAH sums, the usability of the data is not compromised.

Overall, the 2011 laboratory data was found to be usable for evaluating PAH concentrations in the ground water and decision-making purposes. Criteria for validation actions were specified in the QAPP, data review worksheets or the appropriate validation guidelines and were given precedence in that order. QAPP criteria were used for surrogate, MS/MSD, and LCS recoveries. The 2011 sampling data have been reviewed and the QAPP goals for field and laboratory completeness have been met.

This project benefits from years of collecting high quality data in accordance with the Agency approved Sampling Plan and QAPP. Therefore, an additional measure of quality assurance is gained by comparing current analytical results to the historical analytical results. The findings of CPAH above the CD-RAP drinking water criteria in sample SLP10TEXTENDED-091311, and the subsequent levels of PAH found in the method blanks during the analyses of re-sampled SLP10T, indicate a concern for data quality. The laboratory could not identify a specific cause for these anomalous findings, but offered the following discussion:

> "TestAmerica Denver has supported the low level analysis of polyaromatic hydrocarbons (PAHs) for the City of St. Louis project for several years. The method was designed to support reporting limits in the part per trillion (ppt) range. The laboratory purchased custom glassware that accommodates a 4-liter aliquot of sample for extraction. The extract is then concentrated to a final volume of 1 mL, resulting is a 4000 fold concentration of the PAHs. Analysis of the extract by gas chromatography/mass spectrometry (GCMS), with the instrument in the selected ion monitoring (SIM) mode is then utilized. The methodology has a number of complexities and challenges that can be difficult to overcome.
>
> The Denver laboratory has struggled with reproducibility and sensitivity problems. Original validation studies were performed when all glassware utilized in the extraction of samples was relatively new. As glassware undergoes repeated use and cleaning, the laboratory has struggled to reproduce the sensitivity obtained in the original method detection limit studies. The 4-liter extraction apparatus has a large surface area that develops active sites even with minimal use. At the very low concentrations, this can cause significant losses of some of the PAH compounds. Currently a method detection limit verification spike is required to be analyzed with each sampling event. This low level spike is used by the laboratory to verify that the losses during the extraction process have are not significant enough to compromise the required reporting limits.
>
> The second significant challenge is the control of laboratory background and reagents to levels low enough that these do not contribute significantly to the reported sample results. There are a number of

factors that can cause problems. The first is obtaining reagents that are controlled to the required ppt method detection and reporting limits. The reagent water used for method blanks and laboratory control spikes has to be pre-extracted. Despite the pre-extraction process, there are still frequent low level (less than the reporting limit) detections in the method blanks. The method blank detections are typically the more common PAH compounds, such as naphthalene, but other analytes have also been detected on a less frequent basis. For example, an evaluation of lab historical data indicates that naphthalene is detected in the method blank 90% of the time, while benzo(a)pyrene has been detected in 18% of the method blanks.

Because of the uncertainty in the method detection limit procedure described in 40 CFR, the laboratory likes to have at least a factor of two times between the statistically derived method detection limit and the reporting limit. In this case, the project required reporting limits were written into the quality assurance project plan many years ago. There are a couple of cases where the project reporting limit is very close or equivalent to the method detection limit (for example, perylene). In these cases, the probability of a false negative could be significant.

Given the developments in technology since the implementation of this procedure, there may be other extraction or analytical techniques that will support the project. One example is the use of solid phase extraction. This could simplify a number of the issues involved with the extraction procedures. Other options might include the use of high performance liquid chromatography coupled with mass spectrometry. This technique might not require any extraction process."

Based on the laboratory's assessment of the existing ultra low level method, and their self-assessment of their ability to perform this test, an alternative method should be considered for use on this project. The technological advances in laboratory sciences and updated toxicological information about the health risks of PAH should be used to refine the list of analytes and the method(s) used to measure PAH in St. Louis Park groundwater.

Tables

Table 1
Historical Summary of Other PAH and
CPAH Analytical Results
1988 through 2010

SLP11, SLP12, SLP13, and SLP17

All concentrations reported in nanograms per liter (ng/l).

SLP11		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
6-88	0 [3]	42
6-89	0	34
3-90	Out of Service	
3-91	0	43
5-92	0	43
3-93	0	50
3-94	0	66
10-95	3	113
6-96	0	109
10-97	0	78
5-98	0	70
5-99	0	151
9-00	0	22
8-01	0	19
9-02	Out of Service	
8-03	46	37
2-04	0	26
3-04	0	22
8-04	0	24
9-05	0	27
5-06	3	25
5-07	0	29
8-08	0	28
5-09	0	10
9-10	0	11
9-11	0	92

SLP12		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
6-88	0	11
6-89	0	16
3-90	0	109
3-91	0	21
5-92	1	25
3-93	0	9
3-94	0	21
10-95	0	9
6-96	0	3
10-97	0	12
5-98	0	3
9-99	0	10
9-00	0	11
8-01	0	2
9-02	3	7
8-03	0	2
8-04	0	20
9-05	0	5
8-06	0	4
5-07	0	4
8-08	0	1
5-09	0	0
9-10	0	2
9-11	0	4

SLP13		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
6-88	0	15
6-89	0	9
3-90	0	14
3-91	0	13
5-92	2	11
6-93	0	11
12-94	0	28
10-95	0	9
6-96	0	5
10-97	0	22
5-98	0	4
5-99	0	15
9-00	0	6
8-01	0	0
9-02	0	0
8-03	0	0
8-04	Out of Service	
9-05	0	10
5-06	3	8
5-07	0	5
8-08	0	11
5-09	0	0
9-10	0	4
9-11	Out of Service	

SLP17		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	12
6-89	0	12
6-90	1	18
3-91	0	41
11-92	3	41
6-93	0	12
12-94	4	35
10-95	0	8
6-96	0	5
10-97	62	406
5-98	0	3
5-99	0	40
9-00	Out of Service	

[1] Total Carcinogenic PAHs (as listed in the CD/RAP (A.1.1)), consist of the sum of:

benzo(a) anthracene	chrysene	quinoline*
benzo(a)pyrene	dibenzo(a,h)anthracene	benzo(j)fluoranthene**
benzo(b)flouranthene	indeno(1,2,3-cd)pyrene	benzo(g,h,i)perylene

*Quinoline is included in the sum of CPAH if other CPAHs were detected. If no CPAHs are detected, quinoline is included in the Total Other PAH.

**Benzo(j)fluoranthene will coelute with either benzo(b)fluoranthene or benzo(k)fluoranthene. Benzo(j)flouranthene can not be consistently separated by the laboratory. Therefore, if present, it will be reported as benzo(b)- and/or benzo(k)-fluoranthene.

[2] Total Other PAHs (as listed in the CD/RAP (A.1.2), consists of the sum of:

acenapthene	benzo(e)pyrene	2,3-dihydroindene	1-methylnaphthalene
acenaphthylene	benzo(b)thiophene	fluoranthene	2-methylnaphthalene
acridine	biphenyl	fluorene	naphthalene
anthracene	carbazole	indene	perylene
benzo(k)fluoranthene	dibenzothiophene	indole	phenanthrene
2,3-benzofuran	dibenzofuran		pyrene

[3] Result reported as 0 indicates that all parameters were not detected above the laboratory detection limit.

Table 2

Historical Summary of Other PAH and CPAH in Well W105
1988 Through 2010

All concentrations reported in nanograms per liter (ng/l).

W105		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
2-88	0 [3]	9,000
6-88	0	2,400
9-88	0	3,670
12-88	0	2,035
6-89	0	1,400
12-89	0	1,086
5-90	0	2,347
8-90	0	2,600
5-91	9.5	2,164
8-91	0	1,014
2-92	0	2,185
6-92	355	5,057
11-92	0	30,900
1-93	38	1,797
1-93	23	1,966
3-94	60	2,576
5-96	29	2,746
4-98	0	5,493
5-00	89	5,593
6-02	142	5,247
5-04	33	2,363
5-06	200	5,725
5-08	195	14,546
3-09	273	4,107
3-09	166	4,450
6-10	105	13,797
12-10	17	984
12-10	23	894

NOTES:

[1] Total Carcinogenic PAHs (as listed in the CD/RAP (A.1.1), consist of the sum of:

- benzo(a) anthracene
- benzo(a)pyrene
- benzo(b)flouranthene
- chrysene
- dibenzo(a,h)anthracene
- indeno(1,2,3-cd)pyrene
- quinoline*
- benzo(j)fluoranthene**
- benzo(g,h,i)perylene

*Quinoline is included in the sum of CPAH if other CPAHs were detected. If no CPAHs are detected, quinoline is included in the Total Other PAH.

**Benzo(j)fluoranthene will coelute with either benzo(b)fluoranthene or benzo(k)fluoranthene. Benzo-(j)flouranthene can not be consistently separated by the laboratory. Therefore if present, it will be reported as benzo(b)- and/or benzo(k)-fluoranthene.

[2] Total Other PAHs (as listed in the CD/RAP (A.1.2)), consists of the sum of:

- acenapthene
- acenaphthylene
- acridine
- anthracene
- benzo(k)fluoranthene
- 2,3-benzofuran
- benzo(e)pyrene
- benzo(b)thiophene
- biphenyl
- carbazole
- dibenzofuran
- dibenzothiophene
- 2,3-dihydroindene
- fluoranthene
- fluorene
- indene
- indole
- 1-methylnaphthalene
- 2-methylnaphthalene
- naphthalene
- perylene
- phenanthrene
- pyrene

[3] Result reported as 0 indicates that all parameters were not detected above the laboratory detection limit.

Table 3 Historical Summary of Other PAH and CPAH Analytical Results for
Prairie Du Chien-Jordan Aquifer Wells, 1988 through 2011
Results in nanograms per liter

SLP4		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0 [3]	244
10-89	0	232
3-90	0	210
6-90	2	239
11-92	3	309
3-93	0	237
6-93	0	259
3-94	0	552
10-94	1	571
9-95	3	561
12-95	6	229
6-96	0	431
9-96	0	526
4-97	0	596
9-97	0	533
4-98	0	440
9-98	1	361
11-98	5	91
5-99	0	485
8-99	0	328
5-00	0	465
9-00	0	376
5-01	3	397
5-02	0	281
5-03	0	249
5-04	0	248
9-05	0	107
5-06	0	185
5-07	0	99
4-08	0	107
5-09	0	107
6-10	0	156
9-11	0	118

SLP14		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	112
6-89	0	134
9-89	0	84
3-90	0	98
8-90	0	145
5-91	1	99
8-91	0	19
5-92	1	90
8-93	0	78
9-94	0	57
6-95	0	89
6-96	0	52
4-97	0	46
5-98	0	55
5-99	0	49
5-00	0	50
5-02	0	25
5-04	Out of Service	
5-06	82	17
7-06	0	14
8-06	0	19
8-08	0	28
6-10	30	46
7-10	0	10
7-10	0	9

SLP5		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
10-88	0	613
6-89	0	94
6-90	0	49
5-91	1	42
6-92	1	71
8-93	5	77

SLP8		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	18
6-89	0	8
10-89	0	9
3-90	0	15
3-91	0	50
5-92	1	19
11-92	2	9

H3		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	378
6-89	0	93
9-89	0	370
6-90	0	188
8-90	0	5,300
	Abandoned	

SLP10		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	8,200
10-89	0	5,120
6-90	0	5,403
8-90	0	7,386
5-91	5	315
6-92	0	3,070
8-93	0	2,091
6-94	0	2,174
6-95	0	1,737
6-96	0	1,742
10-97	0	1,859
5-98	0	1,354
5-99	0	1,452
5-00	0	2,947
5-01	0	1,929
6-02	2	1,453
9-03	8	1,327
5-05	9	2,101
5-06	1	1,524
5-07	3	1,476
5-08	1	1,797
9-10	1	529
9-11	3	537

SLP6		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	33
10-88	0	55
6-89	7	52
9-89	0	36
10-89	0	40
3-90	0	45
6-90	3	80
8-90	0	117
10-90	0	68
8-91	0	123
5-92	1	123
11-92	0	173
3-93	0	212
6-93	0	113
2-94	1	74
6-95	0	88
6-96	1	180
8-96	0	178
10-96	0	189
1-97	0	236
2-97	0	210
3-97	0	277
6-97	0	217
5-98	0	146
8-98	0	173
8-99	0	174
5-00	0	218
8-01	0	158
11-01	0	138
3-02	0	181
5-02	0	189
9-02	0	219
10-02	0	178
3-03	0	124
5-03	0	165
8-03	5	137
11-03	0	238
3-04	0	235
5-04	0	161
8-04	0	244
11-04	0	187
3-05	0	205
5-05	0	197
9-05	3	188
11-05	0	194
3-06	0	127
5-06	0	275
8-06	6	220
11-06	0	151
3-07	0	196
5-07	0	139
8-07	0	220
11-07	0	168
3-08	0	173
4-08	0	140
8-08	0	196
11-08	0	213
3-09	0	212
5-09	0	144
8-09	0	221
11-09	0	213
3-10	0	198
6-10	0	251
9-10	0	192
12-10	0	183
3-11	0	183
6-11	1	190
9-11	0	188

Table 3 Historical Summary of Other PAH and CPAH Analytical Results for Prairie Du Chien-Jordan Aquifer Wells, 1988 through 2011

SLP7		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	78
10-88	0	51
6-89	0	61
9-89	0	25
10-89	0	25
3-90	0	43
6-90	2	48
8-90	2	91
10-90	0	49
3-91	0	50
5-91	0	37
8-91	0	65
5-92	1	40
3-93	0	32
6-94	0	60
6-95	0	28
6-96	0	22
4-97	0	11
5-98	0	17
5-99	0	17
Out of Service		

SLP16		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	48
6-89	0	28
9-89	0	24
8-90	8	374
11-90	0	59
5-91	1	32
8-91	0	64
11-92	1	42
8-93	0	11
6-94	0	22
6-95	0	13
6-96	0	8
9-97	0	9
5-98	0	7
5-99	0	0
5-00	0	9
5-02	0	0
5-04	0	8
5-06	0	12
8-08	0	5
6-10	0	1

SLP15		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
6-89	0	4,026
11-92	0	3,206
8-93	0	2,091
5-04	0	168
5-09	0	157

E15		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	11
6-89	0	16
6-90	0	11
5-91	0	13
5-92	0	23
8-93	0	4
6-94	0	6
6-95	0	8
6-96	0	10
10-96	0	29
6-97	0	3
10-97	0	14
5-98	0	22
8-98	0	7
5-99	0	38
8-99	0	18
5-00	0	26
9-00	0	14
5-01	0	27
9-02	0	5
8-03	0	5
5-04	0	15
9-05	0	26
5-06	0	12
5-07	0	9
5-08	0	5
5-09	0	5
9-10	0	7
6-11	0	8

E13		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	4
6-89	0	20
9-89	0	6
6-90	0	13
8-90	2	227
5-91	1	11
8-91	0	12
5-92	0	43
8-93	0	4
6-94	0	3
6-96	0	3
10-96	0	4
4-97	0	38
10-97	0	8
5-98	0	21
8-98	0	36
5-99	0	15
8-99	0	35
5-00	0	39
9-00	0	49
5-01	0	41
5-02	0	80
8-03	7	87
5-04	0	116
9-05	0	208
10-05	0	169
11-05	0	172
5-06	0	112
5-07	9	155
5-08	0	158
5-09	0	169
9-10	0	142
6-11	0	154
9-11	2	155

E2		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	14
6-89	0	21
9-89	0	8
6-90	3	22
8-90	0	14
5-91	4	21
8-91	0	17
5-92	0	19
8-93	0	9
6-94	0	16
12-95	0	10
6-96	0	14
10-96	0	20
4-97	0	45
10-97	0	13
5-98	0	13
8-98	0	196
10-98	0	34
8-99	0	6
5-00	0	8
9-00	0	6
5-01	0	16
9-02	0	0
8-03	0	8
5-04	0	5
6-07	0	72
5-08	0	7
5-09	0	8
9-10	0	4
6-11	0	9

Table 3 Historical Summary of Other PAH and CPAH Analytical Results for Prairie Du Chien-Jordan Aquifer Wells, 1988 through 2011

E3		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	15
6-89	0	15
6-90	1	17
8-91	0	13
5-92	4	21
8-93	0	5
6-94	0	7
6-95	0	8
6-96	0	3
6-97	0	4
5-98	0	3
5-99	0	0
5-00	0	0
5-01	0	16
5-02	0	0
8-03	0	1
5-04	0	4
9-05	0	5
5-06	0	8
5-09	0	0
9-10	0	2
6-11	0	3

H6		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	19
6-89	0	16
6-90	0	15
5-91	0	16
5-92	0	16
8-93	0	3
6-94	0	6
6-95	0	3
6-96	0	3
4-97	0	2
5-98	0	5
5-99	0	5
5-00	0	5
5-02	0	0
5-04	0	6
5-06	5	99
4-08	0	16
9-10	0	96
1/1/2011	NS	NS

W119		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	3
6-89	0	18
9-89	0	11
9-01	0	294
Well Out of Service in 2002		
10-03	1	196
5-04	0	126
8-04	0	226
5-05	0	152
9-05	0	140
5-06	0	210
8-06	0	148
5-07	0	136
8-07	0	138
8-08	0	105
5-09	0	76
8-09	0	124
6-10	0	95
9-10	0	131
6-11	0	61
9-11	3	95

E7		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
6-96	0	3
10-96	0	5
6-97	0	3
10-97	0	2
5-98	0	1
8-98	0	6
5-99	0	5
8-99	0	2
5-00	0	16
9-00	0	9
5-01	0	22
5-02	0	29
8-03	0	22
5-04	Out of Service	

W48		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	2,418
6-89	0	1,636
9-89	0	1,850
10-89	0	1,130
3-90	0	1,690
6-90	0	1,809
8-90	22	4,566
8-93	2	428
6-94	1	285
6-95	3	310
6-96	3	259
6-97	0	316
10-97	0	290
5-98	0	186
8-98	0	50
5-99	0	226
8-99	0	226
5-00	0	222
9-00	0	130
5-01	0	234
8-01	0	149
11-01	0	180
3-02	0	222
5-02	0	185
9-02	0	138
10-02	0	187
3-03	0	108
5-03	0	135
8-03	0	135
10-03	0	173
3-04	0	156
5-04	0	189
8-04	0	161
11-04	0	170
3-05	0	144
5-05	0	141
9-05	0	82
11-05	0	156

MTK6		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	4
6-89	0	12
6-90	5	22
5-91	0	17
5-92	4	19
8-93	0	7
6-94	0	8
6-95	0	15
6-96	0	4
4-97	0	3
5-98	0	0
5-99	0	2
5-00	0	3
5-02	0	0
5-04	0	8
5-06	0	14
4-08	0	0
9-10	0	3

W48		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
3-06	0	154
5-06	0	111
8-06	0	169
11-06	0	53
3-07	0	154
5-07	1	114
8-07	0	156
11-07	0	147
3-08	0	132
5-08	0	144
8-08	0	191
11-08	0	176
5-09	0	156
8-09	0	271
11-09	1	225
3-10	0	164
6-10	1	187
9-10	0	188
12-10	0	152
3-11	0	143
6-11	0	151
9-11	8	153
12-11	0	145

Table 3 Historical Summary of Other PAH and CPAH Analytical Results for Prairie Du Chien-Jordan Aquifer Wells, 1988 through 2011

W23		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
9-88	0	111,100
12-88	0	123,100
3-89	0	120,200
6-89	0	117,600
9-89	0	106,300
3-90	0	129,100
8-90	0	114,700
3-91	0	87,800
6-91	0	71,800
9-91	0	91,200
10-91	0	82,600
2-92	0	67,600
9-92	0	78,000
6-94	0	60,000
10-94	0	64,000
5-95	4,000	128,000
9-95	0	70,000
4-96	0	48,000
7-96	0	50,000
4-97	0	34,000
10-97	0	47,000
2-98	0	0[3]
11-98	0	42,090
4-99	0	25,970
8-99	0	14,850
5-00	0	8,790
9-00	0	37,980
12-00	0	25,000
4-01	472	25,840
3-02	0	28,700
6-02	654	29,832
9-03	514	23,391
5-04	275	17,796
5-05	254	25,141
5-06	111	12,181
5-07	292	19,603
5-08	215	18,793
5-09	365	14,357
6-10	313	19,088
12-10	389	14,181
6-11	144	12,830

W401		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	12
6-89	0	15
6-90	0	27
5-91	0	28
5-92	0	10
8-93	1	10
6-94	0	8
6-95	0	16
6-96	0	19
10-96	0	29
6-97	0	174
10-97	0	121
5-98	0	66
8-98	0	5
5-99	0	64
8-99	0	23
5-00	0	105
9-00	0	158
5-01	0	295
5-02	0	149
8-03	0	60
5-04	0	195
10-05	0	92
5-06	0	48
5-07	0	41
4-08	0	35
5-09	0	42
6-10	0	9
9-11	0	48

W29		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	495
6-89	28	338
6-90	4	372
5-91	6	405
5-92	12	531
8-93	39	1,887
6-94	9	749
6-95	0	1,164
6-96	0	82
4-97	0	418
5-98	0	261
5-99	0	99
5-00	3	212
5-01	3	175
5-02	0	44
5-03	0	62
5-04	11	157
9-05	0	21
5-06	9	45
5-07	1	14
5-08	0	20
5-09	1	27
Well Not Accessible		

W40		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	1,062
6-89	0	540
6-90	16	705
5-91	5	474
5-92	2	283
8-93	5	345
6-94	0	484
6-95	0	369
6-96	0	498
4-97	0	624
5-98	0	220
5-99	0	299
5-00	2	129
5-01	7	390
Abandoned		

W70		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	481
6-89	5	426
9-89	0	280
6-90	9	560
5-91	8	669
6-92	8	401
8-93	2	317
6-94	4	299
6-95	0	384
6-96	0	342
4-97	0	335
5-98	0	307
5-99	0	254
5-00	0	3
Well Out of Service in 2001, 2002		
5-03	0	0
8-04	Out of Service	
9-05	7	18
5-06	0	5
Abandoned in 2007		

Table 3 Historical Summary of Other PAH and CPAH Analytical Results for Prairie Du Chien-Jordan Aquifer Wells, 1988 through 2011

W402		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
9-89	0	151
6-90	47	720
8-90	16	133
5-91	16	408
8-91	0	18,320
6-92	12	895
8-93	7	145
6-94	5	104
6-95	0	567
6-96	13	383
4-97	0	257
5-98	0	349
5-99	1	545
5-00	0	1,287
5-01	0	267
5-02	13	165
5-03	3	56
5-04	73	67
5-05	96	88
5-06	3	92
5-07	9	67
4-08	0	48
5-09	0	149
6-10	1	77
9-11	0	72

W403		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
8-88	0	57
6-89	40	974
9-89	0	177
8-90	49	1,102
5-91	110	976
8-91	0	11,570
6-92	19	816
8-93	7	516
6-94	7	1,271
6-95	0	543
6-96	3	182
4-97	0	172
5-98	0	11
5-99	0	169
5-00	0	195
5-01	0	458
5-02	3	134
5-03	125	66
5-04	131	88
9-05	4	83
5-06	2	74
5-07	302	304
5-08	1003	796
5-09	450	796
6-10	121	162
9-11	178	91

W406		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
6-89	0	36
10-89	0	26
6-90	8	43
8-90	15	119
5-91	1	30
8-91	1	40
5-92	6	53
8-93	0	22
6-94	0	31
6-95	0	34
6-96	0	21
4-97	0	27
5-98	0	15
5-99	0	28
5-00	0	30
5-02	Out of Service	
5-04	0	10
5-06	2	21
8-08	0	11
6-10	0	7

NOTES:

[1] Total Carcinogenic PAHs (as listed in the CD/RAP (A.1.1)), consist of the sum of:

benzo(a)anthracene
benzo(a)pyrene
benzo(b)flouranthene
chrysene
dibenz(a,h)anthracene
indeno(1,2,3-cd)pyrene
quinoline*
benzo(j)fluoranthene**
benzo(g,h,i)perylene

*Quinoline is included in the sum of CPAH if other CPAHs were detected. If no CPAHs are detected, quinoline is included in the Total Other PAH.

**Benzo(j)fluoranthene will coelute with either benzo(b)fluoranthene or benzo(k)fluoranthene. Benzo(j)fluoranthene can not be consistently separated by the laboratory. Therefore if present, it will be reported as benzo(b)- and/or benzo(k)-fluoranthene.

[2] Total Other PAHs (as listed in the CD/RAP (A.1.2), consists of the sum of:

acenapthene
acenaphthylene
acridine
anthracene
benzo(k)fluoranthene
2,3-benzofuran
benzo(e)pyrene
benzo(b)thiophene
biphenyl
carbazole
dibenzofuran
dibenzothiophene
2,3-dihydroindene
fluoranthene
fluorene
indene
indole
1-methylnaphthalene
2-methylnaphthalene
naphthalene
perylene
phenanthrene
pyrene

[3] Result reported as 0 indicates that all parameters were not detected above the laboratory detection limit.

Table 4
Historical Summary of Other PAH and
CPAH Analytical Results for St. Peter Aquifer Wells
1988 Through 2011

All concentrations reported in nanograms per liter (ng/l)

SLP3		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	0 [3]	8
10-88	0	9
6-89	0	10
10-89	0	15
6-90	5	29
8-90	1	18
8-91	1	23
6-92	0	16
11-92	0	13
4-93	0	9
7-93	0	5
5-94	0	8
10-94	0	5
5-95	0	7
10-95	0	16
6-96	0	11
10-96	0	4
4-97	0	6
10-97	0	5
4-98	0	7
9-98	0	247
5-99	0	7
8-99	0	0
5-00	0	5
9-00	2	25
5-01	0	10
8-01	0	2
5-02	0	15
9-02	0	0
5-03	0	0
8-03	0	0
5-04	0	6
8-04	0	8
5-05	0	10
9-05	2	13
5-06	1	5
8-06	0	5
5-07	0	4
8-07	1	5
8-08	0	2
5-09	0	0
8-09	0	0
6-10	0	2
9-10	0	3

P116		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	8	196
10-88	0	3,770
6-89	1	82
10-89	3	42
8-90	2	20
4-91	0	61
8-91	3	40
6-92	13	118
11-92	10	219
4-93	4	52
7-93	2	38
5-94	1	64
11-94	0	66
5-95	0	50
10-95	0	53
6-96	0	7
10-96	0	43
4-97	0	35
10-97	0	82
4-98	5	148
9-98	0	60
5-99	4	50
8-99	0	55
5-00	2	36

W14		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	57	95
10-88	0	439
6-11	75	98

W24		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	0	3,309
10-88	0	3,622
4-91	0	4,023
8-91	0	4,160
6-92	0	3,380
11-92	0	3,650
4-93	0	2,950
7-93	0	3,294
5-94	0	2,669
11-94	0	4,029
5-95	0	3,190
10-95	0	1,550
5-96	0	974
10-96	0	1,603
4-97	0	1,513
10-97	0	1,340
4-98	0	689
9-98	0	1,120
4-99	0	2,085
9-99	0	3,590
5-00	0	940
5-01	0	152
9-01	0	619
6-02	0	439
9-02	0	307
6-03	0	335
9-03	0	246
5-04	0	212
8-04	0	188
5-05	0	102
9-05	0	130
5-06	11	72
8-06	0	93
5-07	0	65
5-08	0	24
8-08	0	53
5-09	0	26
8-09	0	51
6-10	0	82
9-10	0	38
6-11	0	40

NOTES:

[1] Total Carcinogenic PAHs (as listed in the CD/RAP (A.1.1)), consist of the sum of:

- benzo(a) anthracene
- benzo(a)pyrene
- benzo(b)flouranthene
- chrysene
- dibenz(a,h)anthracene
- indeno(1,2,3-cd)pyrene
- quinoline*
- benzo(j)fluoranthene**
- benzo(g,h,i)perylene

*Quinoline is included in the sum of CPAH if other CPAHs were detected. If no CPAHs are detected, quinoline is included with the Total Other PAH.

**Benzo(j)fluoranthene will coelute with either benzo(b)fluoranthene or benzo(k)fluoranthene. Benzo(j)fluoranthene can not be consistently separated by the laboratory. Therefore if present, it will be reported as benzo(b)- and/or benzo(k)-fluoranthene.

[2] Total Other PAHs (as listed in the CD/RAP (A.1.2), consists of the sum of:

- acenapthene
- acenaphthylene
- acridine
- anthracene
- benzo(k)fluoranthene
- 2,3-benzofuran
- benzo(e)pyrene
- benzo(b)thiophene
- biphenyl
- carbazole
- dibenzofuran
- 2,3-dihydroindene
- fluoranthene
- fluorene
- indene
- indole
- 1-methylnaphthalene
- 2-methylnaphthalene
- naphthalene
- perylene
- phenanthrene
- pyrene

[3] Result reported as 0 indicates that all parameters were not detected above the laboratory detection limit.

Table 4
Historical Summary of Other PAH and
CPAH Analytical Results for St. Peter Aquifer Wells
1988 Through 2011

All concentrations reported in nanograms per liter (ng/l)

W122		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	21	142
10-88	0	2,246
6-89	20	965
10-89	15	114
4-91	36	757
8-91	10	853
6-92	43	568
11-92	7	179
4-93	32	308
7-93	24	330
5-94	23	583
10-94	10	374
5-95	0	281
10-95	11	220
6-96	0	144
10-96	0	235
4-97	0	256
10-97	0	243
4-98	7	370
9-98	0	99
5-99	0	71
8-99	7	46
5-00	39	65
9-00	6	142
5-01	0	92
8-01	0	24
5-02	0	92
9-02	5	73
5-03	29	73
8-03	6	134
5-04	100	69
8-04	1	79
5-05	78	88
9-05	6	78
5-06	8	63
8-06	1	88
5-07	13	79
8-07	9	54
5-08	11	104
8-08	0	95
5-09	0	329
8-09	2	194
6-10	4	282
9-10	5	243
6-11	6	22

W129		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	0	88
10-88	0	290
6-89	0	27
10-89	0	43
6-90	0	143
8-90	0	96
4-91	27	159
8-91	0	430
6-92	47	247
11-92	5	296
4-93	15	121
7-93	2	53
5-94	0	171
11-94	2	110
5-95	12	94
10-95	0	55
6-96	0	53
10-96	0	75
4-97	0	104
10-97	0	181
4-98	9	88
9-98	0	8
5-99	1	79
8-99	0	80
5-00	26	223
9-00	8	150
6-11	22	535

W33R		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
5-07/8-07	14	778
5-08	2	497
8-08	15	182
5-09	45	883
8-09	11	109
6-10	14	122
9-10	31	96
6-11	0	27

W133		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	0	52,370
10-88	0	29,830
6-89	0	37,870
10-89	0	21,099
6-90	0	19,448
8-90	0	14,030
4-91	5	2,587
8-91	0	4,610
6-92	0	2,453
11-92	0	1,920
4-93	0	1,134
7-93	0	836
5-94	5	665
10-94	0	434
5-95	0	165
10-95	0	157
5-96	0	142
10-96	0	285
4-97	0	241
10-97	0	108
4-98	0	88
9-98	0	299
4-99	7	633
9-99	0	190
5-00	0	167
9-00	0	327
5-01	0	156
8-01	0	40
5-02	0	904
9-02	0	338
5-03	6	114
8-03	11	411
5-04	0	905
8-04	84	186
5-05	50	1,617
9-05	9	434
5-06	15	1,988
8-06	0	463
5-07	0	552
8-07	14	730
5-08	23	182
8-08	0	567
5-09	0	856
8-09	2	343
6-10	6	514
9-10	27	217

Table 4
Historical Summary of Other PAH and
CPAH Analytical Results for St. Peter Aquifer Wells
1988 Through 2011

All concentrations reported in nanograms per liter (ng/l)

W408		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	2	151
10-88	0	34
6-89	5	145
10-89	0	110
6-90	0	24
8-90	28	130
4-91	13	343
8-91	25	1,163
6-92	32	283
11-92	2	172
4-93	4	150
7-93	6	217
5-94	5	70
11-94	0	170
5-95	9	143
10-95	15	135
6-96	0	66
10-96	0	103
4-97	0	169
10-97	0	166
4-98	1	96
9-98	0	62
5-99	0	64
8-99	2	51
5-00	89	103
9-00	0	53
6-11	2	41

W414		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
6-11	4	47

W409		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	159	2,198
10-88	0	890
6-89	53	571
10-89	0	830
6-90	0	141
8-90	43	200
4-91	0	360
8-91	0	3,833
6-92	0	49,660
11-92	0	49,399
4-93	0	50,060
7-93	0	42,440
5-95	0	173,000
10-95	0	167,000
4-96	0	805,420
10-96	0	312,500
5-97	0	157,000
9-97	0	64,000
5-98	0	159,200
9-98	0	107,700
4-99	0	446,860
8-99	0	342,000
5-00	0	1,196,900
9-00	620	468,710
5-01	0	269,800
8-01	0	228,300
5-02	0	324,300
9-02	0	135,200
5-03	0	170,600
8-03	0	213,700
5-04	0	152,200
8-04	0	125,800
5-05	0	148,300
9-05	0	91,300
5-06	0	48,480
8-06	0	33,000
5-07	0	28,800
8-07	0	18,170
5-08	0	28,200
8-08	0	35,900
5-09	0	1,600
8-09	0	29,000
6-10	0	18,170
9-10	0	8,623
6-11	0	15,289

W410		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	0	1,288
10-88	0	1,435
6-89	5	424
10-89	0	357
4-91	0	85
8-91	0	5,330
2-92	0	14,070
6-92	0	12,850
11-92	0	16,470
4-93	0	17,600
7-93	0	16,609
5-94	0	14,505
10-94	0	20,880
5-95	0	21,640
10-95	0	13,940
5-96	0	15,970
10-96	0	14,170
4-97	0	14,690
10-97	0	10,150
4-98	0	8,620
5-98	0	1,900
9-98	0	9,690
11-98	0	5,942
3-99	0	8,780
4-99	0	21,606
9-99	0	8,780
11-99	0	3,800
2-00	0	4,750
5-00	0	6,502
9-00	0	6,269
12-00	0	1,500
3-01	0	2,940
5-01	0	6,217
9-01	0	2,854
3-02	0	2,090
6-02	0	2,142
9-02	0	3,327
6-03	0	4,593
9-03	0	4,332
5-04	0	4,489
8-04	0	7,086
5-05	0	7,701
9-05	0	10,553
5-06	0	9,545
8-06	0	8,359
5-07	0	17,690
5-09	0	32,718
8-09	0	61,812
6-10	0	53,603
9-10	0	62,470
6-11	0	82,505

Table 4
Historical Summary of Other PAH and
CPAH Analytical Results for St. Peter Aquifer Wells
1988 Through 2011

All concentrations reported in nanograms per liter (ng/l)

W411		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	0	1,274
10-88	0	1,161
6-89	8	200
10-89	0	460
6-90	15	451
8-90	0	336
4-91	12	384
8-91	0	251
6-92	24	313
11-92	1	181
4-93	7	189
7-93	5	113
5-94	3	120
11-94	6	219
5-95	6	235
10-95	1	183
6-96	0	79
10-96	0	253
4-97	0	82
10-97	3	253
4-98	1	120
9-98	61	424
5-99	0	99
8-99	0	79
5-00	0	56
9-00	17	138
5-01	0	124
8-01	0	46
5-02	0	34
9-02	0	16
5-03	38	113
8-03	0	57
5-04	97	107
8-04	0	90
5-05	43	75
9-05	3	76
5-06	1	56
8-06	0	68
5-07	4	84
8-07	1	93
5-08	0	84
8-08	0	95
5-09	0	114
8-09	0	22
6-10	2	183
9-10	0	197
6-11	0	26

W412		
Sampling Date	Total CPAH[1]	Total Other PAH[2]
7-88	8	1,309
10-88	0	209
6-89	18	211
10-89	0	132
8-90	1	484
4-91	48	1,470
8-91	0	5,283
6-92	12	1,319
11-92	0	3,796
4-93	154	842
7-93	16	777
5-94	25	291
10-94	10	538
5-95	18	369
10-95	0	402
5-96	0	139
10-96	0	1,620
4-97	0	806
10-97	0	614
4-98	30	260
9-98	60	557
4-99	20	267
9-99	0	764
5-00	250	105
9-00	1	164
5-01	4	363
8-01	0	1125
5-02	10	243
9-02	3	135
5-03	12	82
8-03	15	130
5-04	84	129
8-04	11	236
5-05	85	132
9-05	3	115
5-06	21	118
8-06	9	246
5-07	3	54
8-07	2	255
5-08	15	297
8-08	0	710
5-09	0	530
8-09	0	450
6-10	0	207
9-10	0	10
6-11	21	72

Table 5
Historical Summary of Other PAH, CPAH, and Phenolic Analytical Results
1988 Through 2011

Platteville Aquifer Wells

PAH and Phenolic concentrations in micrograms per liter (ug/l)

W18

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0 [3]	0	20
10-88	0	361	20
6-89	0	39	44
2-92	0	10	8
5-96	0	2	NA
9-96	0	2	NA
4-97	0	1	NA
9-97	0	1	NA
5-98	0	1	NA
9-98	0	0	NA
5-99	0	1	NA
9-99	0	1	NA
5-00	0	1	NA
9-00	0	1	NA
9-11	0	8	NA

W20

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	28
10-88	0	3	16
6-89	0	6	34
5-90	0	7	9
5-94	0	1	0
5-96	0	1	NA
9-96	0	1	NA
4-97	0	2	NA
10-97	0	2	NA
5-98	0	1	NA
9-98	0	0	NA
5-99	0	1	NA
9-99	0	1	NA
5-00	0	1	NA
9-00	0	1	NA
5-01	0	0	NA
8-01[4]	0	0	NA
5-02	0	0	NA
9-02	0	0	NA
5-03	0	6	NA
8-03	0	5	NA
5-04	0	2	NA
8-04	0	0	NA
5-05	0	0	NA
9-05	0	0	NA
5-06	0	0	NA
8-06	0	0	NA
5-07	0	0	NA
8-07	0	4	NA
5-08	0	0	NA
8-08	0	0	NA
5-09	0	0	NA
8-09	0	0	NA
6-10	0	0	NA
9-10	0	0	NA
6-11	0	0	NA

W22

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
5-90	0	0	0
2-92	0	1	0
3-92	0	5	NA
5-96	0	0	NA
9-96	0	0	NA
4-97	0	2	NA
9-97	0	2	NA
4-98	0	1	NA
9-98	0	8	NA
4-99	0	22	NA
9-99	0	24	NA
5-00	0	3	NA
9-00	0	42	NA
6-11	0	0	NA

W27

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
10-88	0	1,882	NA
6-89	0	1,345	NA
5-96	0	1	NA
10-96	0	9	NA
4-97	0	281	NA
9-97	0	416	NA
4-98	0	184	NA
9-98	0	422	NA
4-99	0	312	NA
8-99	0	158	NA
5-00	0	415	NA
9-00	0	243	NA
5-01	0	199	NA
8-01[4]	0	99	NA
5-02	0	123	NA
9-02	0	193	NA
5-03	0	89	NA
8-03	0	85	NA
5-04	0	196	NA
8-04	0	116	NA
5-05	0	143	NA
9-05	0	106	NA
5-06	0	133	NA
8-06	0	118	NA
5-07	0	77	NA
8-07	0	97	NA
5-08	0	48	NA
8-08	0	109	NA
5-09	0	76	NA
8-09	0	121	NA
6-10	0	54	NA
9-10	1	69	NA
6-11	0	79	NA

W101

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	4	7
10-88	0	23	0
6-89	0	48	20
5-90	0	22	0
2-92	0	18	6
5-94	0	11	0
5-96	0	5	NA
10-96	0	32	NA
4-97	0	31	NA
9-97	0	15	NA
4-98	0	17	NA
9-98	0	125	NA
4-99	0	32	NA
9-99	0	24	NA
5-00	0	41	NA
9-00	0	32	NA
4-01	0	18	NA
9-01[4]	0	12	NA
5-02	0	17	NA
9-02	0	6	NA
5-03	0	14	NA
8-03	0	3	NA
5-04	0	19	NA
8-04	0	3	NA
5-05	0	3	NA
9-05	0	2	NA
5-06	0	2	NA
8-06	0	3	NA
5-07	0	8	NA
8-07	0	0	NA
5-08	0	0	NA
8-08	0	0	NA
5-09	0	0	NA
8-09	0	10	NA
6-10	0	0	NA
9-10	0	0	NA
9-11	0	0	NA

W121

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	73
10-88	0	0	35
6-89	0	0	35
5-90	0	0	0
5-94	0	0	0
5-96	0	0	NA
10-96	0	0	NA
4-97	0	0	NA
10-97	0	0	NA
5-98	0	0	NA
9-98	0	0	NA
5-99	0	0	NA
9-99	0	0	NA
5-00	0	0	NA
9-00	0	0	NA
9-11	0	0	NA

Table 5
Historical Summary of Other PAH, CPAH, and
Phenolic Analytical Results
1988 Through 2011

Platteville Aquifer Wells

PAH and Phenolic concentrations in micrograms per liter (ug/l)

W120			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	35	44
10-88	0	41	57
6-89	0	76	48
5-96	0	2	NA
10-96	0	11	NA
4-97	0	12	NA
9-97	0	6	NA
4-98	0	2	NA
9-98	0	4	NA
4-99	0	3	NA
9-99	0	2	NA
5-00	0	2	NA
9-00	0	2	NA
5-07	0	0	NA
8-07	0	0	NA
5-08	0	0	NA
8-08	0	0	NA
5-09	0	0	NA
8-09	0	0	NA
6-10	0	0	NA
9-10	0	0	NA

W131			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	0
10-88	0	0	13
6-89	0	0	0
2-92	0	13	0
5-94	0	0	0
5-96	0	0	NA
10-96	0	0	NA
4-97	0	0	NA
10-97	0	0	NA
5-98	0	0	NA
9-98	0	0	NA
5-99	0	0	NA
9-99	0	0	NA
5-00	0	0	NA
5-01	0	0	NA
8-01[4]	0	0	NA
5-02	0	0	NA
9-02	0	0	NA
5-03	0	0	NA
8-03	0	0	NA
5-04	0	2	NA
8-04	0	3	NA
5-05	0	0	NA
9-05	0	0	NA
5-06	0	0	NA
8-06	0	2	NA
5-07	0	0	NA
8-07	0	0	NA
5-08	0	0	NA
8-08	0	0	NA
5-09	0	0	NA
8-09	0	0	NA
6-10	0	0	NA
9-10	0	0	NA
9-11	0	0	NA

W130			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	0
10-88	0	0	0
6-89	0	0	0
5-90	0	0	0
5-96	0	0	NA
10-96	0	0	NA
4-97	0	0	NA
10-97	0	0	NA
5-98	0	0	NA
9-98	0	0	NA
5-99	0	0	NA
9-99	0	0	NA
5-00	0	0	NA
9-00	0	0	NA
6-11	0	0	NA

W143			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	0
10-88	0	0	0
6-89	0	1	33
5-96	0	1	NA
10-96	0	1	NA
4-97	0	9	NA
9-97	0	1	NA
4-98	0	4	NA
9-98	0	10	NA
4-99	0	15	NA
9-99	0	4	NA
5-00	0	0	NA
5-01	0	5	NA
9-01[4]	0	3	NA
5-02	0	10	NA
9-02	0	0	NA
5-03	0	0	NA
8-03	0	0	NA
5-04	0	0	NA
8-04	0	3	NA
5-05	0	6	NA
9-05	0	2	NA
5-06	0	14	NA
8-06	0	3	NA
5-07	0	3	NA
8-07	0	0	NA
5-08	0	0	NA
8-08	0	2	NA
5-09	0	0	NA
8-09	0	8	NA
6-10	0	0	NA
9-10	0	0	NA
9-11	0	0	NA

W424			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	10
10-88	0	0.	0
6-89	0	1	17
5-90	0	0	0
2-92	0	5	0
3-92	0	11	0
5-94	0	0	0
5-96	0	0	NA
10-96	0	0	NA
4-97	0	0	NA
9-97	0	0	NA
5-98	0	0	NA
9-98	0	0	NA
5-99	0	0	NA
9-99	0	0	NA
5-00	0	0	NA
9-00	0	0	NA
6-11	0	0	NA

W426			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	1	905	25
10-88	0	639	35
6-89	0	498	80
2-92	0	82	15
3-92	0	47	NA
5-96	0	55	NA
4-97	0	76	NA
9-97	0	64	NA
4-98	0	108	NA
9-98	0	1,508	NA
4-99	0	642	NA
8-99	0	258	NA
5-00	0	112	NA
9-00	0	160	NA
5-01	0	131	NA
8-01[4]	0	32	NA
5-02	0	564	NA
9-02	0	271	NA
5-03	0	574	NA
8-03	0	289	NA
5-04	0	636	NA
8-04	0	218	NA
5-05	0	601	NA
9-05	0	415	NA
5-06	0	259	NA
8-06	0	262	NA
5-07	0	301	NA
8-07	0	144	NA
5-08	0	147	NA
8-08	0	267	NA
5-09	0	141	NA
8-09	0	116	NA
6-10	0	92	NA
9-10	0	37	NA
6-11	0	121	NA

Table 5
Historical Summary of Other PAH, CPAH, and
Phenolic Analytical Results
1988 Through 2011

Platteville Aquifer Wells

PAH and Phenolic concentrations in micrograms per liter (ug/l)

W421			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
1st Quarter	0	566	33
2nd Quarter	0	821	0
8-88	0	764	30
10-88	0	1,107	35
3-89	0	878	29
6-89	0	1,000	26
9-89	0	1,000	33
12-89	0	730	27
3-90	0	1,420	33
5-90	0	715	29
8-90	0	1,410	36
12-90	0	1,145	29
3-91	0	1,449	30
6-91	10	1,389	31
9-91	0	1,226	27
10-91	0	1,285	30
2-92	0	988	31
6-92	0	1,163	26
9-92	0	1,547	28
10-92	0	1,299	45
3-93	0	1,332	15
4-93	0	1,184	21
8-93	0	1,025	32
11-93	0	1,017	29
2-94	0	1,045	14
6-94	0	939	17
8-94	0	788	31
10-94	0	966	24
3-95	0	949	31
5-95	0	911	19
9-95	0	966	29
10-95	0	764	20
2-96	0	618	28
4-96	0	630	123
7-96	0	884	24
10-96	0	843	24
2-97	0	709	26
5-97	0	741	27
9-97	0	699	25
1-98	0	787	26
2-98	0	915	20
5-98	0	684	21
9-98	0	306	5
11-98	0	518	26
3-99	0	393	21
4-99	0	611	21
8-99	0	389	25
11-99	0	479	12
2-00	0	462	23
5-00	0	626	24
9-00	44	1,022	19
12-00	0	376	18
3-01	8	341	21
5-01	7	717	29
8-01	31	415	23
10-01	36	266	27
3-02	6	557	7
5-02	3	410	NA
9-02	0	551	NA
10-02	5	530	NA
3-03	430	1,302	NA
5-03	310	2,112	NA
8-03	5	545	NA
11-03	715	4,396	NA
3-04	23	675	NA
4-04	0	619	NA
8-04	13	780	NA
11-04	18	995	NA
3-05	8	532	NA

W421			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
5-05	0	518	NA
9-05	0	533	NA
11-05	6	407	NA
3-06	0	645	NA
5-06	0	539	NA
8-06	2	577	NA
11-06	2	596	NA
3-07	36	655	NA
5-07	9	608	NA
8-07	22	797	NA
11-07	7	682	NA
3-08	106	868	NA
4-08	38	648	NA
5-09	14	525	NA
8-09	140	1,307	NA
11-09	171	1,731	NA
3-10	360	3,048	NA
6-10	111	818	NA
9-10	260	1,635	NA
12-10	74	993	NA
3-11	65	737	NA
6-11	6	606	NA
9-11	181	2,131	NA
12-11	392	2,822	NA

W434			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
2-92	0	4	9
10-96	0	4	NA
4-97	0	7	NA
9-97[4]	0	5	8
10-97	0	3	NA
1-98	0	4	0
2-98	0	3	5
5-98	0	3	5
9-98	0	73	0
11-98	0	12	0
3-99	0	14	0
4-99	0	1	0
8-99	0	1	6
11-99	0	1	0
2-00	0	2	0
5-00	0	5	3
9-00	0.3	4	0
12-00	0	1	0
3-01	0	3	5
5-01	0	6	6
9-01	0	4	NA
10-01	0	4	5
3-02	0	5	25
5-02	0	5	NA
9-02	0	5	NA
5-03	0	4	NA
8-03	0	3	NA
5-04	0	6	NA
8-04	0	3	NA
5-05	0	3	NA
9-05	0	3	NA
5-06	0	3	NA
8-06	0	3	NA
5-07	0	2	NA
8-07	0	2	NA
5-08	0	2	NA
8-08	0	2	NA
5-09	0	0	NA
6-10	0	2	NA
9-10	0	1	NA
9-11	0	1	NA

Table 5
Historical Summary of Other PAH, CPAH, and Phenolic Analytical Results
1988 Through 2011

Platteville Aquifer Wells

PAH and Phenolic concentrations in micrograms per liter (ug/l)

W428			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	0
10-88	0	1	8
6-89	0	1	16
5-90	0	0	0
2-92	0	2	6
3-92	0	9	NA
5-94	0	0	0
5-96	0	0	NA
10-96	0	0	NA
4-97	0	0	NA
5-98	0	0	NA
9-98	0	1	NA
5-99	0	1	NA
9-99	0	0	NA
5-00	0	2	NA
9-00	0	1	NA
5-01	0	2	NA
8-01[4]	0	0	NA
5-02	0	0	NA
9-02	0	0	NA
5-03	0	0	NA
8-03	0	0	NA
5-04	0	0	NA
8-04	0	0	NA
5-05	0	0	NA
9-05	0	0	NA
5-06	0	0	NA
8-06	0	0	NA
5-07	0	0	NA
8-07	0	0	NA
5-08	0	0	NA
8-08	0	0	NA
5-09	0	0	NA
8-09	0	0	NA
6-10	0	0	NA
9-10	0	0	NA
9-11	0	0	NA

W437			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
2-92	0	3,096	20
3-92	0	489	NA
5-01	0	6,305	NA
8-01[4]	0	5,342	NA
5-02	0	5,438	NA
9-02	0	5,292	NA
5-03	0	1,116	NA
8-03	0	5,977	NA
5-04	0	6,265	NA
8-04	0	4,553	NA
5-05	0	4,749	NA
9-05	0	5,802	NA
5-06	0	4,241	NA
8-06	0	5,443	NA
5-07	0	3,699	NA
8-07	0	3,703	NA
5-08	0	2,667	NA
8-08	0	3,520	NA
5-09	0	2,507	NA
8-09	0	2,868	NA
6-10	0	1,248	NA
9-10	0	1,515	NA
6-11	0	907	NA

W438			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
2-92	0	20	5
3-92	0	0	NA
5-01	1	1	NA
9-01[4]	1	1	NA
5-02	0	5	NA
9-02	0	0	NA
5-03	0	0	NA
8-03	0	0	NA
5-04	0	0	NA
8-04	0	0	NA
5-05	0	0	NA
9-05	0	0	NA
5-06	0	0	NA
8-06	0	0	NA
5-07	0	0	NA
8-07	0	0	NA
5-08	0	0	NA
8-08	0	0	NA
5-09	0	0	NA
8-09	0	0	NA
6-10	0	0	NA
9-10	0	0	NA
6-11	0	0	NA

NOTES:

[1] Total Carcinogenic PAHs (as listed in the CD/RAP (A.1.1)), consist of the sum of:

benzo(a) anthracene
benzo(a)pyrene
benzo(b)flouranthene
chrysene
dibenz(a,h)anthracene
indeno(1,2,3-cd)pyrene
quinoline*
benzo(j)fluoranthene**
benzo(g,h,i)perylene

*Quinoline is included in the sum of CPAH if other CPAHs were detected. If no CPAHs are detected, quinoline is included in the Total Other PAH.

**Benzo(j)fluoranthene will coelute with either benzo(b)fluoranthene or benzo(k)fluoranthene. Benzo(j)fluoranthene can not be consistently separated by the laboratory. Therefore if present, it will be reported as benzo(b)- and/or benzo(k)-fluoranthene.

[2] Total Other PAHs (as listed in the CD/RAP (A.1.2), consists of the sum of:

acenapthene
acenaphthylene
acridine
anthracene
benzo(k)fluoranthene
2,3-benzofuran
benzo(e)pyrene
benzo(b)thiophene
biphenyl
carbazole
dibenzofuran
dibenzothiophene
2,3-dihydroindene
fluoranthene
fluorene
indene
indole
1-methylnaphthalene
2-methylnaphthalene
naphthalene
perylene
phenanthrene
pyrene

[3] Result reported as 0 indicates that all parameters were not detected above the laboratory detection limit, or were below 0.5 ug/l.

[4] For this report, the analytical results prior to 2002 have been rounded to the nearest part per billion.

NA = Not analyzed for identified compound class.

Table 6
Historical Summary of Other PAH, CPAH, and Phenolic Analytical Results
1988 Through 2011

Drift Aquifer Wells

All concentrations in micrograms per liter (ug/l).

P109			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0 [3]	3	8
10-88	0	4	0
6-89	0	4	15.5
5-90	0	5	0
4-01	0	1	NA
9-01[4]	0	0	NA
5-02	0	0	NA
9-02	0	0	NA
5-03	0	0	NA
8-03	0	0	NA
4-04	0	0	NA
8-04	0	0	NA
4-05	0	0	NA
9-05	0	0	NA
5-06	0	0	NA
8-06	0	0	NA
5-07	0	0	NA
8-07	0	0	NA
4-08	0	0	NA
8-08	0	0	NA
5-09	0	0	NA
8-09	0	0	NA
6-10	0	0	NA
9-10	0	0	NA
6-11	0	0	NA

P307			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
4-91	0	226	18.5
8-01[4]	0	76	NA
5-02	0	42	NA
9-02	0	89	NA
5-03	0	42	NA
8-03	0	60	NA
4-04	0	52	NA
8-04	0	68	NA
4-05	0	110	NA
9-05	0	122	NA
5-06	0	27	NA
8-06	0	140	NA
5-07	0	97	NA
8-07	0	78	NA
4-08	0	63	NA
8-08	0	41	NA
5-09	0	43	NA
8-09	0	46	NA
6-10	0	16	NA
9-10	0	15	NA
6-11	0	14	NA

P308			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
4-91	0	98	10.5
2-92	0	0	11.7
10-94	0	41	NA
5-01	0	2	NA
8-01[4]	0	12	NA
5-02	0	3	NA
9-02	0	0	NA
5-03	0	0	NA
8-03	0	0	NA
4-04	0	0	NA
8-04	0	2	NA
4-05	0	0	NA
9-05	0	0	NA
5-06	0	5	NA
8-06	0	0	NA
5-07	0	9	NA
8-07	0	4	NA
4-08	0	1	NA
8-08	0	1	NA
5-09	0	0	NA
8-09	0	0	NA
6-10	0	1	NA
9-10	0	4	NA
6-11	0	2	NA

[1] Total Carcinogenic PAHs (as listed in the CD/RAP (A.1.1)), consist of the sum of:

benzo(a) anthracene
benzo(a)pyrene
benzo(b)flouranthene
chrysene
dibenz(a,h)anthracene
indeno(1,2,3-cd)pyrene
quinoline*
benzo(j)fluoranthene**
benzo(g,h,i)perylene

*Quinoline is included in the sum of CPAH if other CPAHs were detected. If no CPAHs are detected, quinoline is included in the Total Other PAH.

**Benzo(j)fluoranthene will coelute with either benzo(b)fluoranthene or benzo(k)fluoranthene. Benzo(j)fluoranthene can not be consistently separated by the laboratory. Therefore if present, it will be reported as benzo(b)- and/or benzo(k)-fluoranthene.

[2] Total Other PAHs (as listed in the CD/RAP (A.1.2), consists of the sum of:

acenapthene
acenaphthylene
acridine
anthracene
benzo(k)fluoranthene
2,3-benzofuran
benzo(e)pyrene
benzo(b)thiophene
biphenyl
carbazole
dibenzofuran
dibenzothiophene
2,3-dihydroindene
fluoranthene
fluorene
indene
indole
1-methylnaphthalene
2-methylnaphthalene
naphthalene
perylene
phenanthrene
pyrene

[3] Result reported as 0 indicates that all parameters were not detected above the laboratory detection limit, or were below 0.5 ug/l.

[4] For this report, the analytical results prior to 2002 have been rounded to the nearest part per billion.

Table 6
Historical Summary of Other PAH, CPAH, and Phenolic Analytical Results
1988 Through 2011

Drift Aquifer Wells

All concentrations in micrograms per liter (ug/l).

P112

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	0
10-88	0	0	8.6
6-89	0	0	35.7
5-90	0	0	0
2-92	0	0	0
5-01	0	0	NA
8-01[4]	0	0	NA
5-02	0	0	NA
9-02	0	0	NA
5-03	0	0	NA
8-03	0	0	NA
4-04	0	0	NA
8-04	0	0	NA
4-05	0	0	NA
9-05	0	0	NA
5-06	0	0	NA
8-06	0	0	NA
5-07	0	0	NA
8-07	0	0	NA
4-08	0	0	NA
8-08	0	0	NA
5-09	0	0	NA
8-09	0	0	NA
6-10	0	0	NA
9-10	0	0	NA

W2

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
8-88	0	0	NA
10-88	0	0	NA
6-89	0	0	NA
5-94	0	0	NA
6-11	0	0	NA
9-11	0	0	NA

W9

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
6-11	0	9	NA
9-11	0	11	NA

W15

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
5-90	0	11	NA
2-92	1	8	NA
5-94	0	1	NA
6-11	0	0	NA
9-11	0	0	NA

W439

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
3-95	0	3,933	91
5-95	0	4,053	74
9-95	0	2,564	54
10-95	0	2,115	50
2-96	0	1,552	46
4-96	0	1,419	43
7-96	0	1,765	43
10-96	0	1,557	45
2-97	0	1,277	43
5-97	0	1,683	48
9-97	0	1,547	42
1-98	0	1,236	34
2-98	0	1,377	31
5-98	0	1,221	35
9-98	0	978	12
11-98	0	954	53
3-99	0	1,385	29
4-99	0	1,278	31
8-99	0	755	45
11-99	0	1,123	17
2-00	0	1,081	31
5-00	0	1,975	31
9-00	0	1,859	26
12-00	0	1,187	37
3-01	0	1,498	34
5-01	0	1,623	37
8-01	0	1,056	NA
10-01	0	1,095	42
3-02	0	1,205	27
5-02	0	1,214	NA
9-02	0	1,027	NA
5-03	0	981	NA
8-03	0	1,535	NA
4-04	0	1,260	NA
8-04	0	1800	NA
4-05	0	1396	NA
9-05	0	1,303	NA
5-06	0	1,327	NA
8-06	0	1,015	NA
5-07	0	898	NA
8-07	0	963	NA
4-08	0	1,776	NA
5-09	0	1,144	NA
8-09	0	1,308	NA
6-10	0	904	NA
9-10	0	788	NA
6-11	0	1,002	NA
9-11	0	433	NA

P309

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
6-89	0	1	0
4-91	0	318	22.5
5-01	0	27	NA
8-01[4]	0	40	NA
5-02	0	50	NA
9-02	0	24	NA
5-03	0	91	NA
8-03	0	43	NA
4-04	0	38	NA
8-04	0	35	NA
4-05	0	75	NA
9-05	0	57	NA
5-06	0	47	NA
8-06	0	31	NA
5-07	0	47	NA
8-07	0	26	NA
4-08	0	20	NA
8-08	0	21	NA
5-09	0	16	NA
8-09	0	10	NA
6-10	0	12	NA
9-10	0	7	NA
6-11	0	7	NA
9-11	0	13	NA

P310

Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
4-91	0	33	8
5-01	0	13	NA
8-01[4]	0	31	NA
5-02	0	14	NA
9-02	0	10	NA
5-03	0	16	NA
8-03	0	18	NA
4-04	0	14	NA
8-04	0	37	NA
4-05	0	31	NA
9-05	0	28	NA
5-06	0	11	NA
8-06	0	15	NA
5-07	0	12	NA
8-07	0	9	NA
4-08	0	5	NA
8-08	0	8	NA
5-09	0	2	NA
8-09	0	0	NA
6-10	0	3	NA
9-10	0	2	NA
6-11	0	1	NA

Table 6
Historical Summary of Other PAH, CPAH, and Phenolic Analytical Results
1988 Through 2011

Drift Aquifer Wells

All concentrations in micrograms per liter (ug/l).

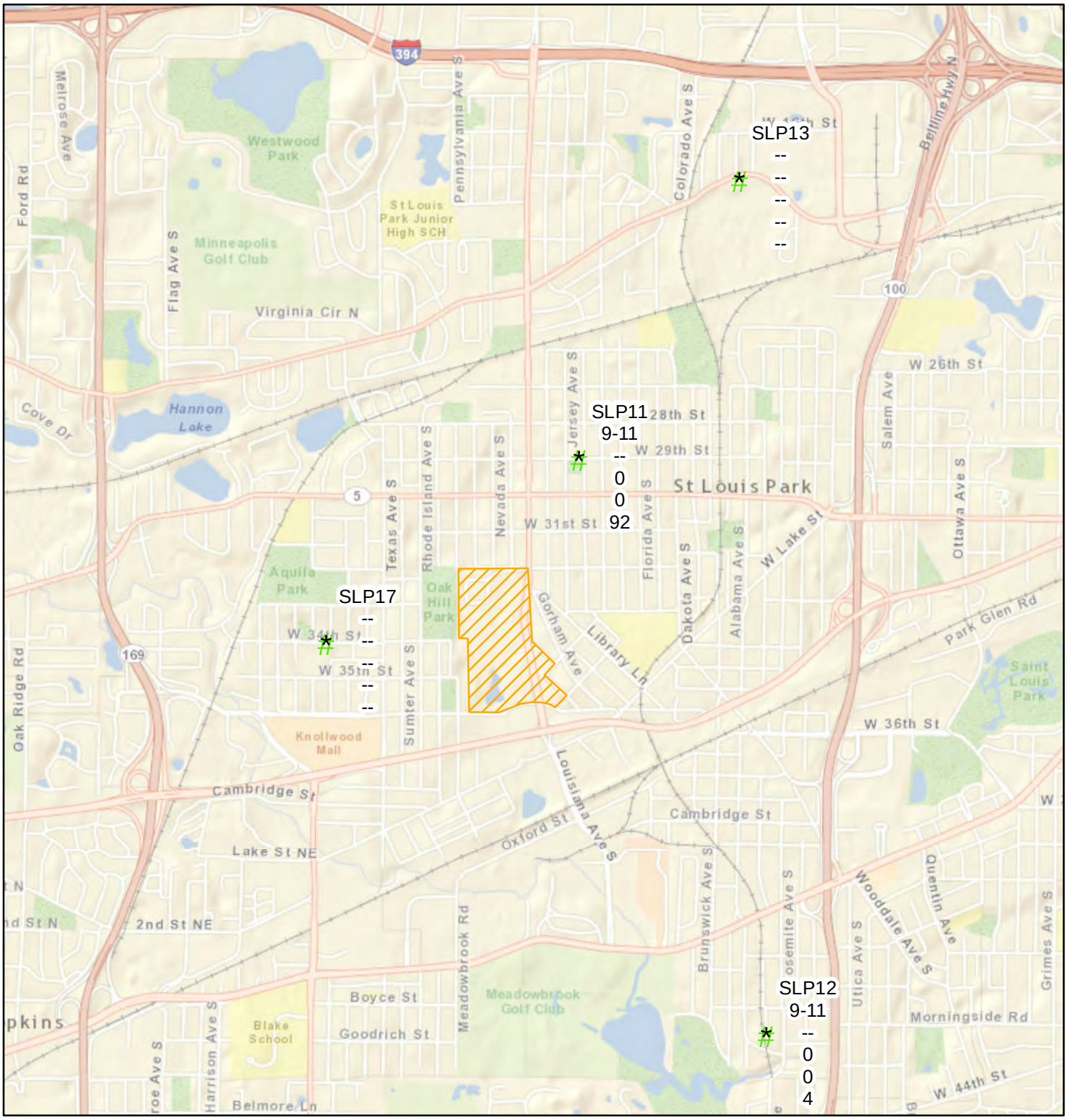
W420			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
3-88	0 [3]	3,242	440
5-88	0	3,420	330
8-88	0	2,477	220
10-88	0	1,148	44
3-89	0	2,400	120
6-89	0	3,400	129
9-89	0	3,400	220
12-89	0	3,400	110
3-90	0	3,950	239
5-90	0	2,430	231
8-90	0	3,150	244
12-90	0	3,030	228
3-91	0	4,200	232
6-91	0	2,494	221
9-91	0	4,967	210
10-91	0	4,163	194
2-92	0	1,526	177
6-92	0	3,229	204
9-92	0	2,281	167
10-92	0	2,374	236
3-93	0	4,337	18
4-93	0	2,929	207
8-93	0	1,825	136
11-93	0	2,052	148
2-94	0	2,033	109
6-94	0	2,181	151
8-94	0	2,026	147
10-94	0	2,082	151
3-95	0	2,431	143
5-95	0	1,873	134
9-95	0	2,523	91
10-95	0	2,332	113
2-96	0	1,968	121
4-96	0	2,165	130
7-96	0	2,725	87
10-96	0	2,164	118
2-97	0	2,324	122
5-97	0	3,343	134
9-97	0	2,151	261
1-98	0	2,483	140
2-98	0	2,938	124
5-98	0	2,933	160
9-98	0	3,144	80
11-98	0	2,570	180
3-99	0	3,314	200
4-99	0	3,414	170
8-99	0	2,425	140
11-99	0	2,345	170
2-00	0	2,312	150
5-00	0	4,441	190
9-00	0	3,070	110
12-00	0	2,500	90
3-01	0	3,680	110
5-01	0	6,956	300
8-01	0	2,535	140
10-01	0	3,608	190
3-02	0	8,578	110
5-02	0	4,163	NA
9-02	0	3,981	NA
10-02	0	3,456	NA
3-03	0	3,558	NA
5-03	0	4,122	NA
8-03	0	3,148	NA
11-03	0	2,835	NA
3-04	0	3,776	NA
4-04	0	3,805	NA
8-04	0	3,167	NA
11-04	0	4,685	NA
3-05	0	4,005	NA
5-05	0	2,463	NA
9-05	0	4,447	NA
11-05	0	4,205	NA
3-06	0	3,605	NA

W420			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
5-06	0	3,511	NA
8-06	0	3,782	NA
11-06	0	3,682	NA
3-07	0	3,444	NA
5-07	0	3,029	NA
8-07	0	3,209	NA
11-07	0	3,539	NA
3-08	0	3,397	NA
4-08	0	3,514	NA
3-09	0	2,073	NA
5-09	0	3,168	NA
8-09	0	3,483	NA
11-09	0	3,492	NA
3-10	0	2,911	NA
6-10	0	2,623	NA
9-10	0	2,389	NA
12-10	0	2,202	NA
3-11	0	2,277	NA
6-11	0	2,252	NA
9-11	0	1,762	NA
12-11	0	1,371	NA

W422			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
1st Quarter	0	27	11
2nd Quarter	0	57	0
8-88	0	77	24
10-88	0	50	84
3-89	0	50	11
6-89	0	50	14
9-89	0	60	20
12-89	0	50	13
3-90	0	75	21
5-90	0	60	14
8-90	0	90	14
12-90	0	60	18
4-91	0	67	13
9-91	0	-	17
10-91	0	88	18
2-92	0	121	16
6-92	0	872	-
9-92	0	91	9
10-92	0	89	28
3-93	0	94	0
4-93	0	96	10
8-93	0	81	16
11-93	0	74	16
2-94	0	61	0
6-94	0	66	7
8-94	0	66	30
10-94	0	59	11
3-95	0	54	11
5-95	0	62	5
9-95	0	53	14
10-95	0	29	10
2-96	0	24	12
4-96	0	26	11
7-96	0	26	9
10-96	0	23	8

W422			
Sampling Date	Total CPAH[1]	Total Other PAH[2]	Total Phenolics
2-97	0	21	9
5-97	0	20	11
9-97	0	19	18
1-98	0	18	11
2-98	0	21	6
5-98	0	17	9
9-98	0	7	0
11-98	0	13	9
3-99	0	20	0
4-99	0	14	8
8-99	0	13	10
11-99	0	13	4
2-00	0	12	10
5-00	0	19	10
9-00	0	13	5
12-00	0	6	4
5-01	0	19	5
9-01	0	13	-
10-01	0	7	5
3-02	0	15	11
5-02	0	15	NA
9-02	0	9	NA
5-03	0	9	NA
8-03	0	4	NA
4-04	0	4	NA
8-04	0	1	NA
4-05	0	7	NA
9-05	0	9	NA
5-06	0	7	NA
8-06	0	0	NA
5-07	0	6	NA
8-07	0	9	NA
4-08	0	28	NA
8-08	0	10	NA
5-09	0	7	NA
8-09	0	5	NA
6-10	0	14	NA
9-10	0	9	NA

Figures



Map adapted from U.S. and Canada Detailed Streets (2008), Tele Atlas North America, Inc., ESRI.

Explanation

REILLY SITE

Well Location

SLP11 Well Name
9-11 Date
-- Water Level (ft)
-- Sum of Benzo(a)pyrene and Dibenzo(a,h)anthracene (ng/L)
-- Sum of Carconogenic PAH parameters (ng/L)
-- Sum of Other PAH parameters (ng/L)
0 = Not Detected
-- = Not Sampled/Not Available

0 2,500 Feet
1 inch = 2,500 feet

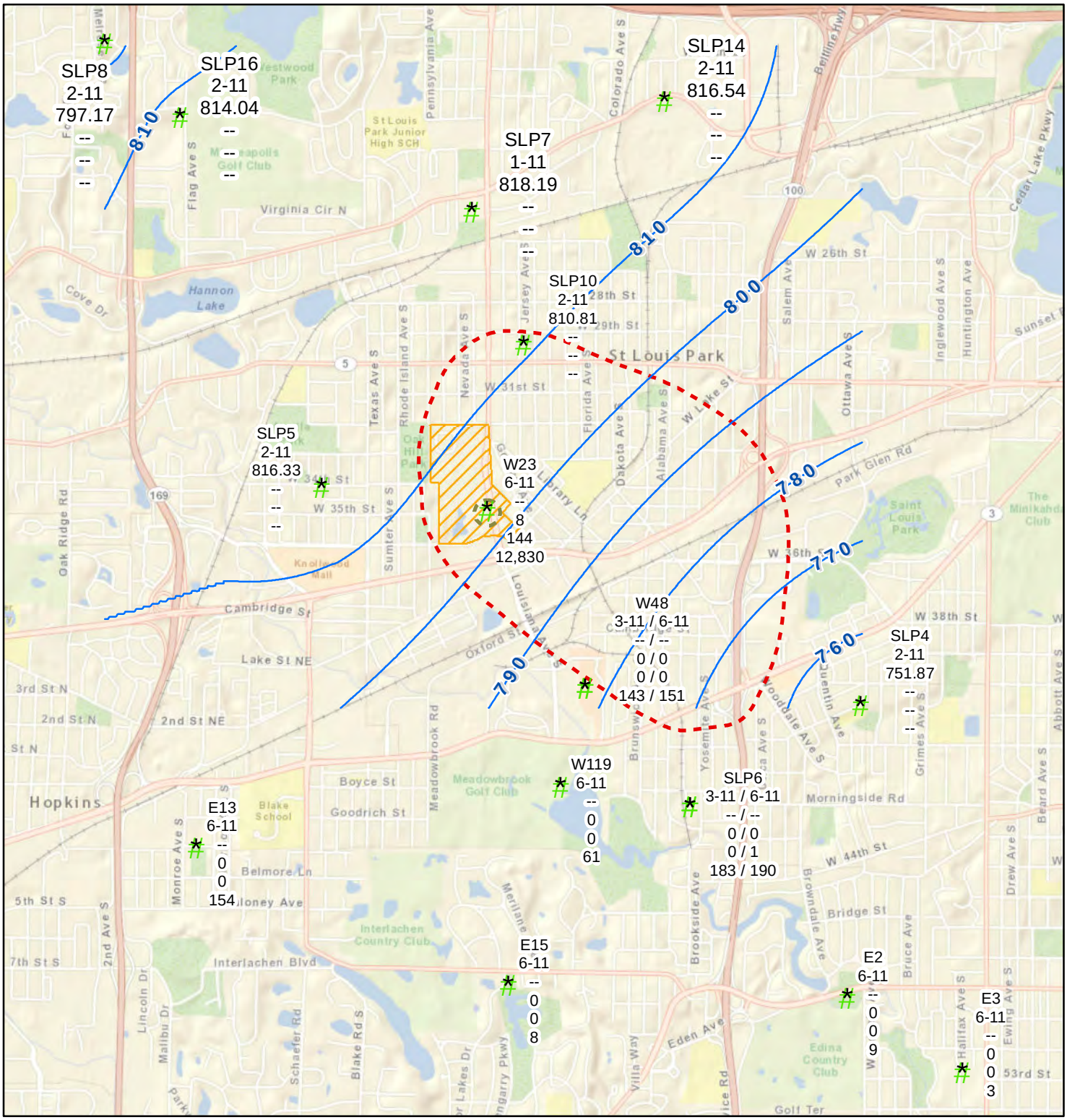

Site Location

Summary of Groundwater Monitroing Results For the Mt. Simon-Hinckley Aquifer - 2011
2011 Annual Report
Reilly Site, City of St. Louis Park, Minnesota

Summit Envirosolutions

Figure 1

File: Fig1_MSH
Summit Proj. No.: 0987-0009
Plot Date: 03-06-12
Arc Operator: PRB
Reviewed by: WMG



Map adapted from U.S. and Canada Detailed Streets (2008), Tele Atlas North America, Inc., ESRI.

Explanation

Inferred area where PAH concentrations exceed:

- REILLY SITE
- MDH criteria
- CD-RAP criteria
- Groundwater Elevation Contour (CI = 10)
- Well Location

SLP11 Well Name
6-11 Date
-- Water Level (ft)
-- Sum of Benzo(a)pyrene and Dibenzo(a,h)anthracene (ng/L)
-- Sum of Carconogenic PAH parameters (ng/L)
-- Sum of Other PAH parameters (ng/L)
0 = Not Detected
-- = Not Sampled/Not Available

Site Location

0 3,000 Feet

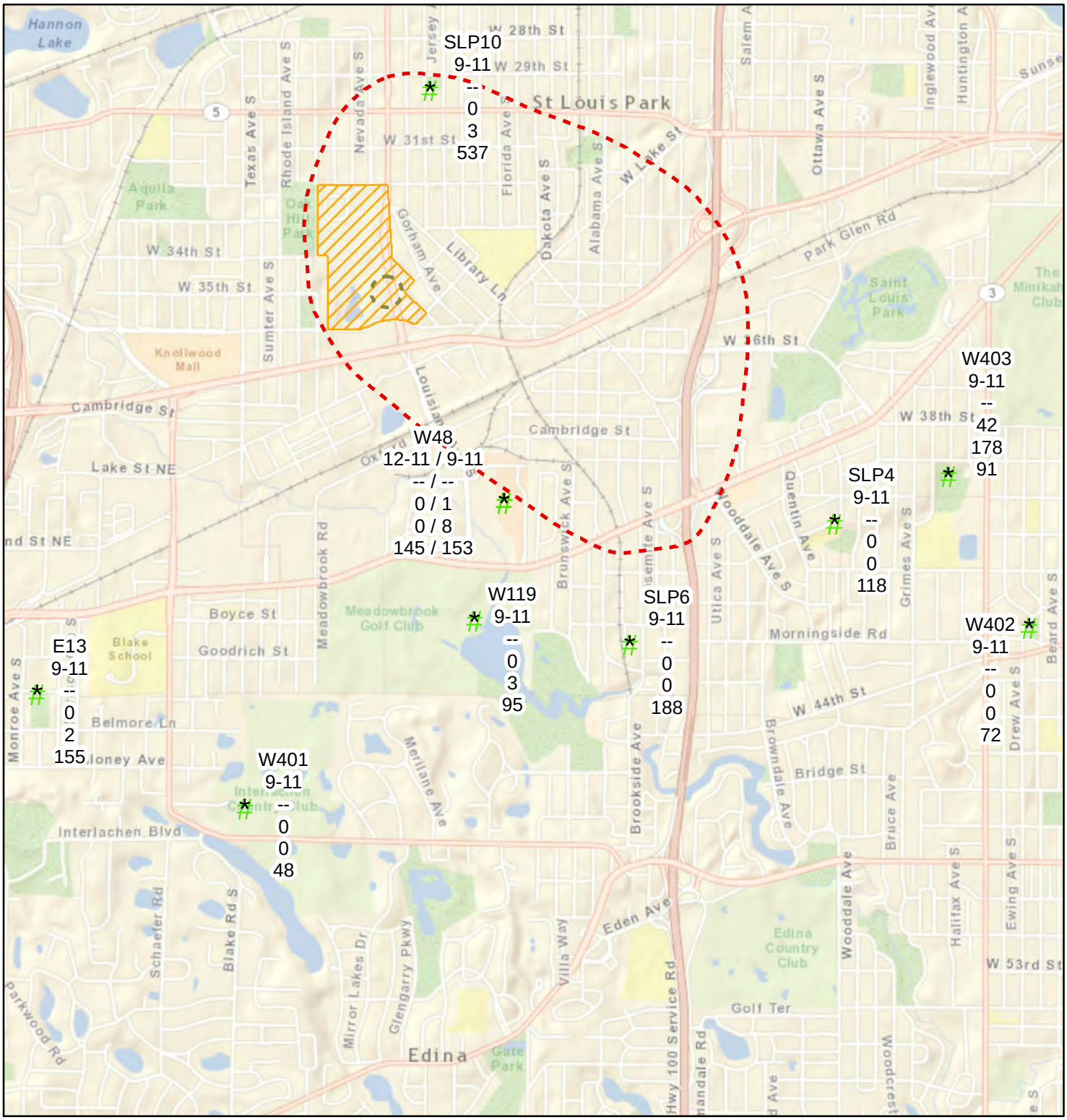
1 inch = 3,000 feet

Summary of Groundwater Monitroing Results For the Prairie Du Chien–Jordan Aquifer - First Half, 2011
2011 Annual Report
Reilly Site, City of St. Louis Park, Minnesota

Summit Envirosolutions

Figure 2

File: Fig2_OPCJ_1stHalf
Summit Proj. No.: 0987-0009
Plot Date: 03-09-12
Arc Operator: PRB
Reviewed by: WMG



Map adapted from U.S. and Canada Detailed Streets (2008), Tele Atlas North America, Inc., ESRI.

Explanation

REILLY SITE

Well Location

Inferred area where PAH concentrations exceed:

MDH criteria

CD-RAP criteria

SLP11 Well Name
9-11 Date
-- Water Level (ft)
-- Sum of Benzo(a)pyrene and Dibenzo(a,h)anthracene (ng/L)
-- Sum of Carconogenic PAH parameters (ng/L)
-- Sum of Other PAH parameters (ng/L)
0 = Not Detected
-- = Not Sampled/Not Available


Site Location

0 2,500 Feet
1 inch = 2,500 feet

Summary of Groundwater Monitroing Results For the Prairie Du Chien–Jordan Aquifer - Second Half, 2011
2011 Annual Report
Reilly Site, City of St. Louis Park, Minnesota

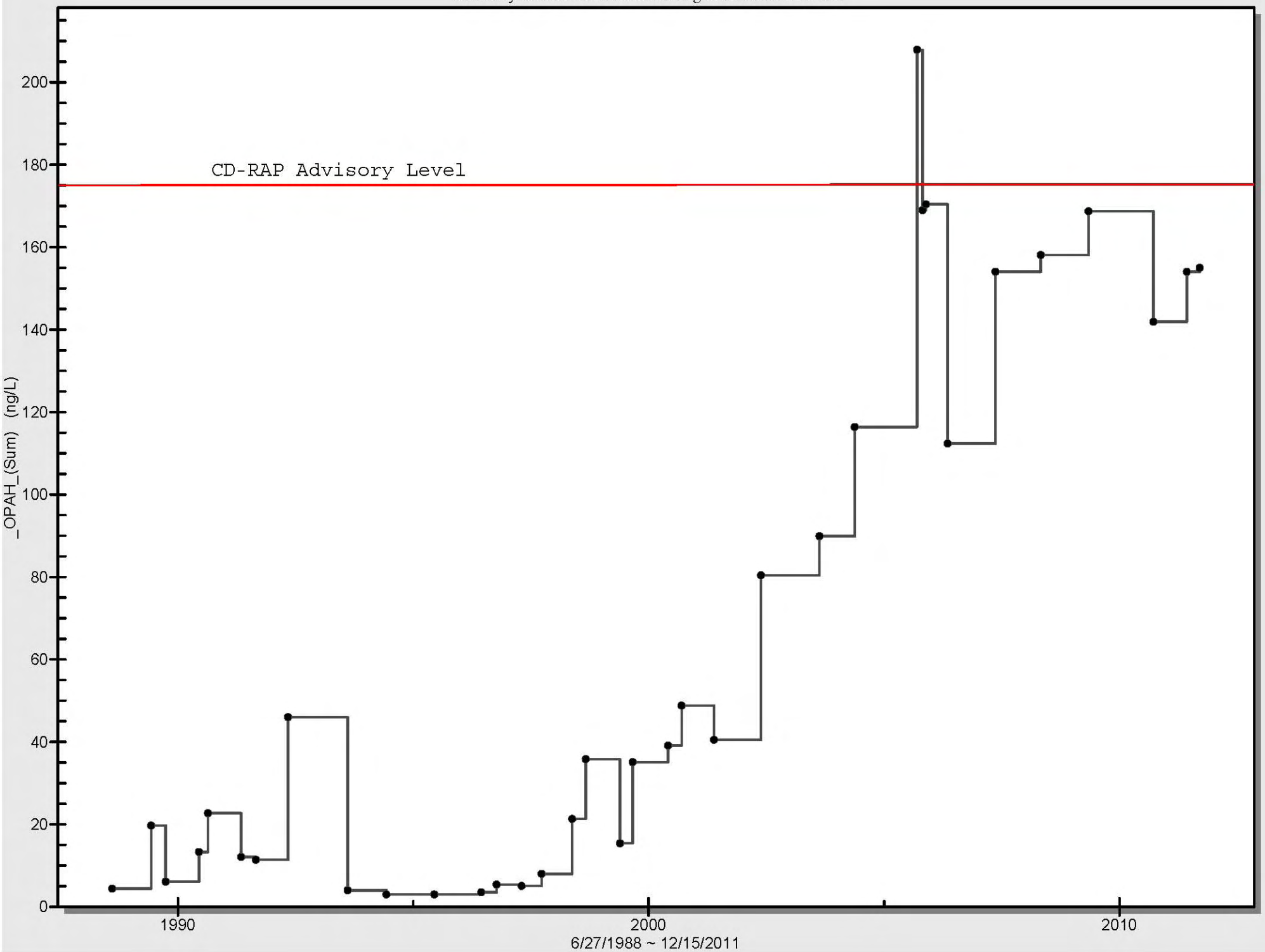
Summit Envirosolutions

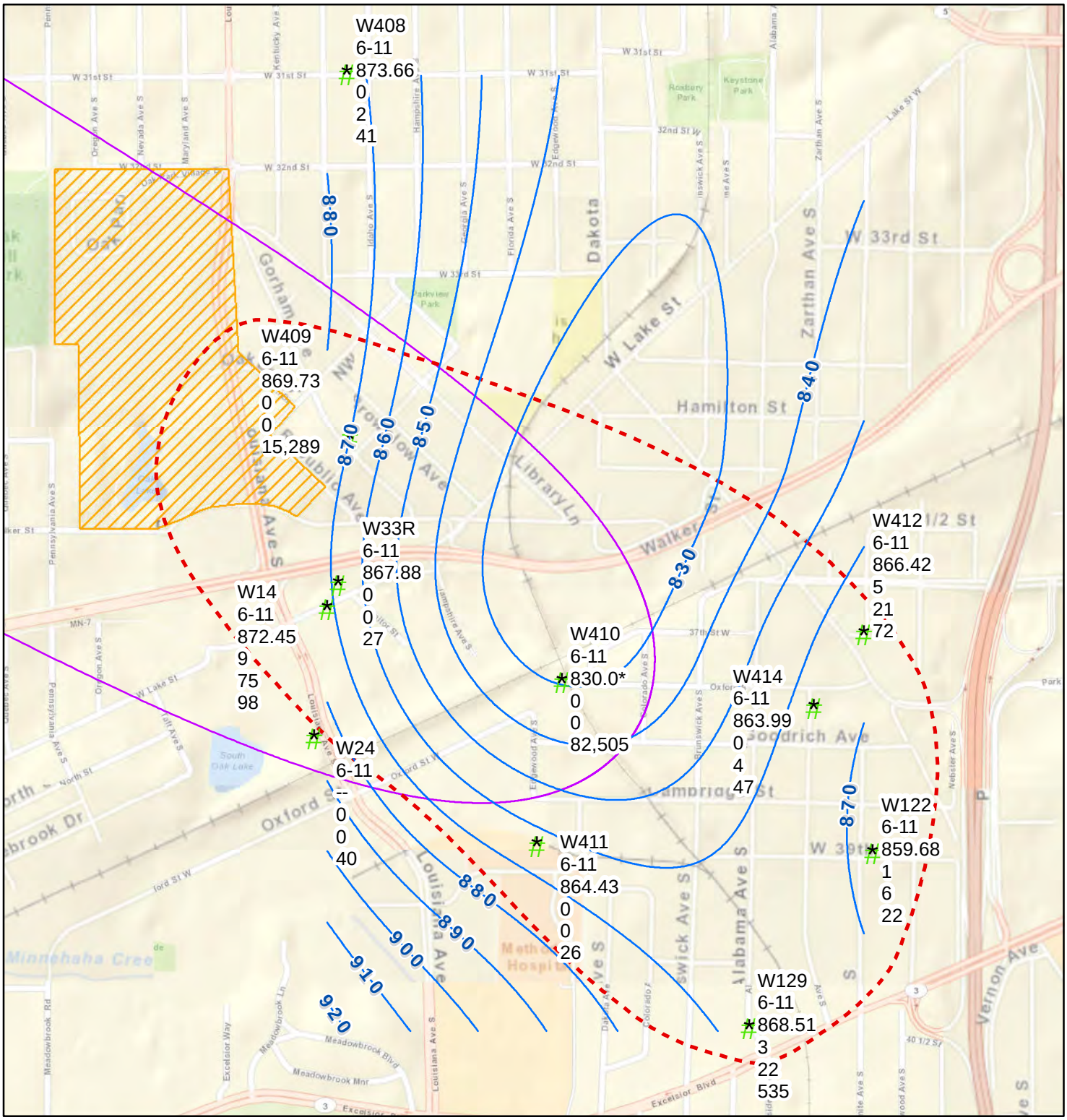
Figure 3

File: Fig3_OPCJ_2ndHalf
Summit Proj. No.: 0987-0009
Plot Date: 03-07-12
Arc Operator: PRB
Reviewed by: WMG

Figure 4

Summary of Groundwater Monitoring Results For Well E13





Map adapted from U.S. and Canada Detailed Streets (2008), Tele Atlas North America, Inc., ESRI.

Explanation

Inferred area where PAH concentrations exceed:

- REILLY SITE
- CD-RAP criteria
- Capture Zone: W410 (Based on historical flow direction)
- Groundwater Elevation Contour (CI = 10)
- Well Location

SLP11 Well Name
6-11 Date
-- Water Level (ft)
-- Sum of Benzo(a)pyrene and Dibenzo(a,h)anthracene (ng/L)
-- Sum of Carconogenic PAH parameters (ng/L)
-- Sum of Other PAH parameters (ng/L)

* = Groundwater elevation is a maximum value (level was below the pressure transducer)
0 = Not Detected
-- = Not Sampled/Not Available

Site Location

0 1,000 Feet

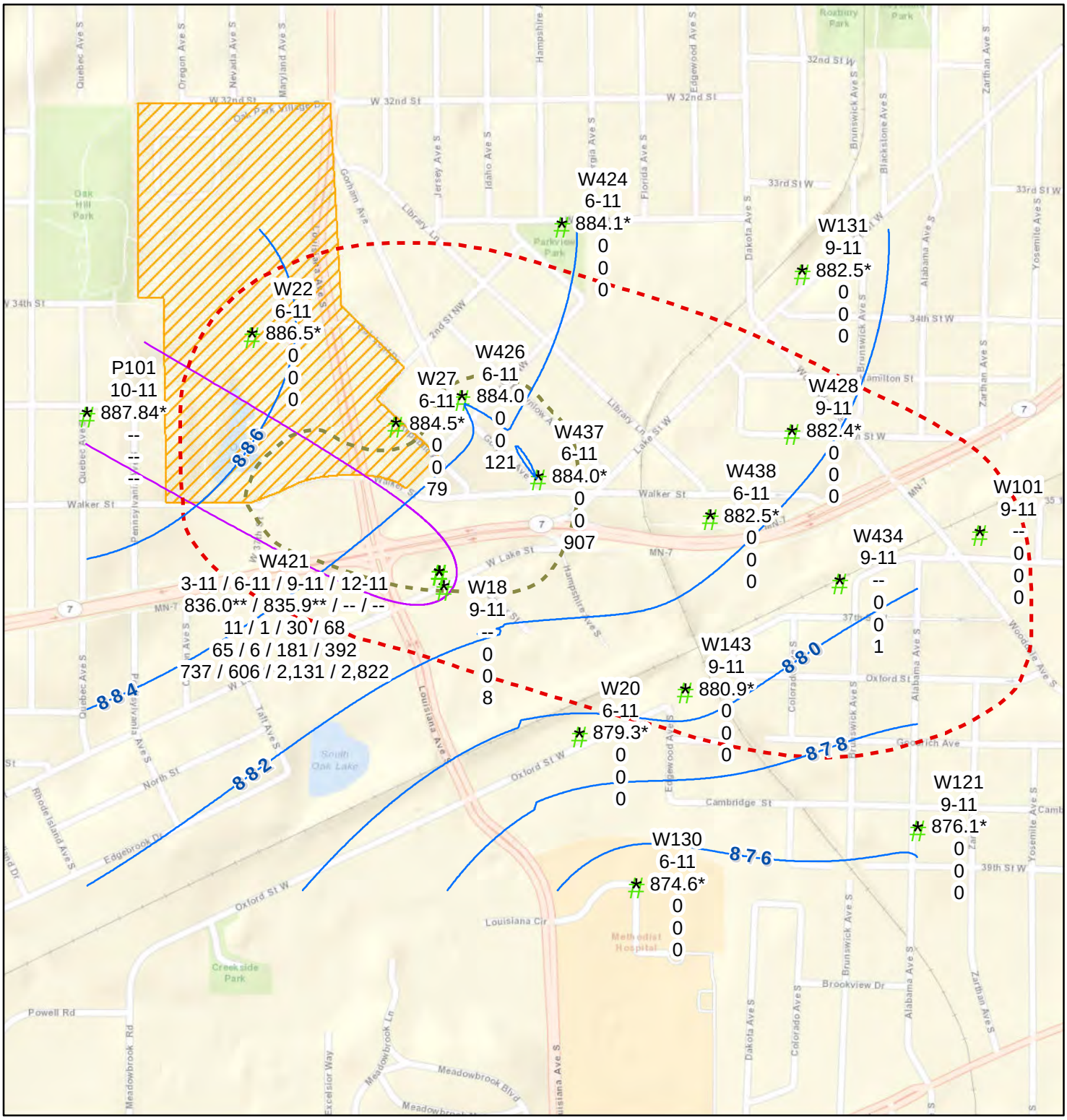
1 inch = 1,000 feet

Summary of Groundwater Monitroing Results For the St. Peter Aquifer - 2011
2011 Annual Report
Reilly Site, City of St. Louis Park, Minnesota

Summit Envirosolutions

Figure 5

File: Fig5_OSTP
Summit Proj. No.: 0987-0009
Plot Date: 03-09-12
Arc Operator: PRB
Reviewed by: WMG



Map adapted from U.S. and Canada Detailed Streets (2008), Tele Atlas North America, Inc., ESRI.

REILLY SITE

Capture Zone: W420/W421
(Based on historical flow direction)

Groundwater Elevation Contour (CI = 2)

Well Location

Inferred area where PAH concentrations exceed:
MDH criteria
CD-RAP criteria

SLP11 Well Name
6-11 Date
-- Water Level (ft)
-- Sum of Benzo(a)pyrene and Dibenzo(a,h)anthracene (ug/L)
-- Sum of Carconogenic PAH parameters (ug/L)
-- Sum of Other PAH parameters (ug/L)

* = Denotes groundwater elevation from 10-11
** = W421 groundwater elevation was approximately 30 feet lower than shown in contours (Data not used for contouring).
0 = Not Detected
-- = Not Sampled/Not Available


Site Location

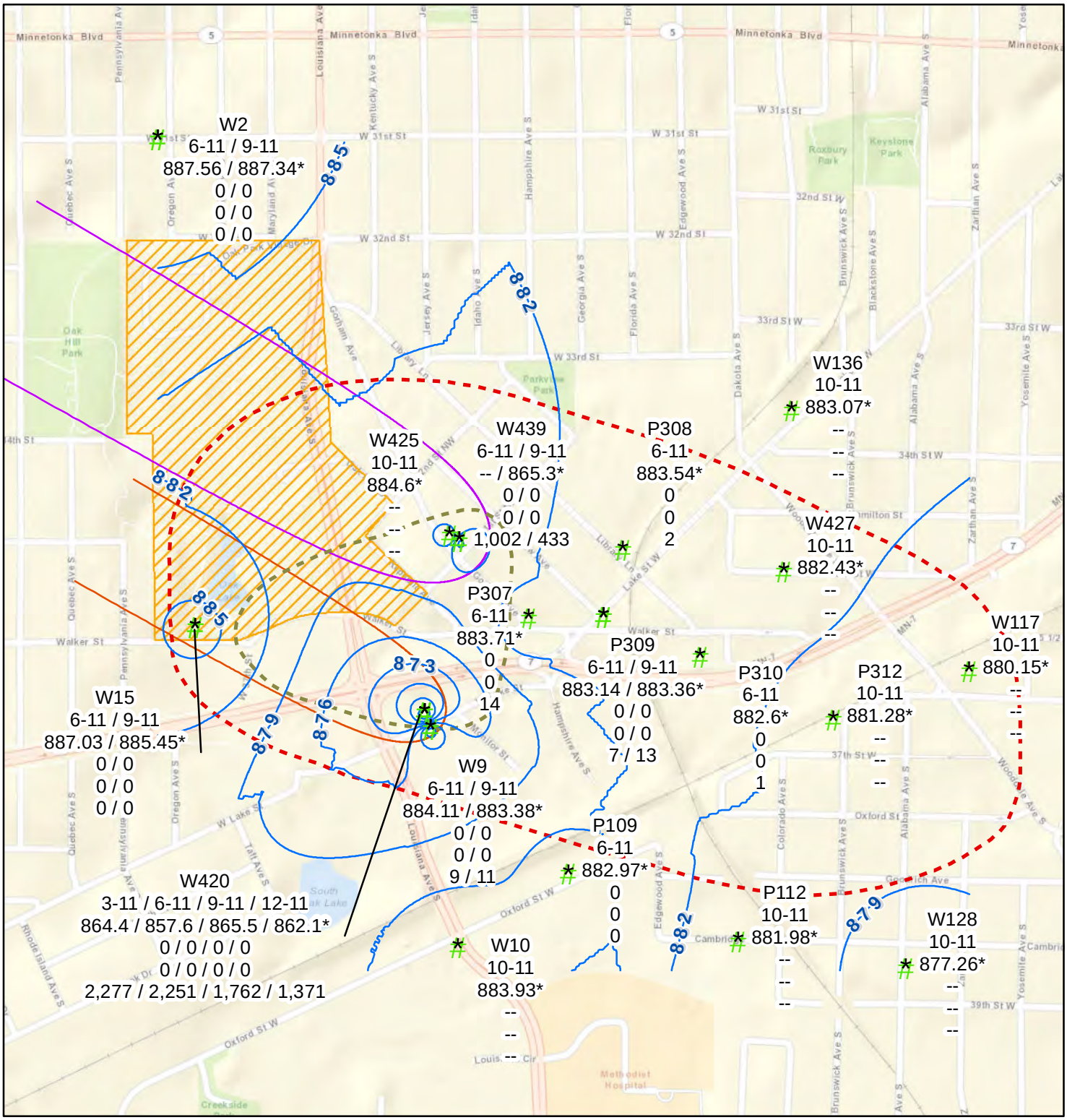
0 900 Feet

Summary of Groundwater Monitroing Results For the Platteville Aquifer - 2011
2011 Annual Report
Reilly Site, City of St. Louis Park, Minnesota

Summit Envirosolutions

Figure 6

File: Fig6_OPVL
Summit Proj. No.: 0987-0009
Plot Date: 03-09-12
Arc Operator: PRB
Reviewed by: WMG



Map adapted from U.S. and Canada Detailed Streets (2008), Tele Atlas North America, Inc., ESRI.

REILLY SITE
Capture Zone: W420
Capture Zone: W439
Groundwater Elevation Contour (CI = 3)
Well Location

Inferred area where PAH concentrations exceed:
MDH criteria
CD-RAP criteria

Site Location

SLP11 Well Name
6-11 Date
-- Water Level (ft) *
-- Sum of Benzo(a)pyrene and Dibenzo(a,h)anthracene (ug/L)
-- Sum of Carconogenic PAH parameters (ug/L)
-- Sum of Other PAH parameters (ug/L)
* = Denotes groundwater elevation from 10-11
0 = Not Detected
-- = Not Sampled/Not Available

0 900 Feet

Summary of Groundwater Monitroing Results For the Drift Aquifer - 2011
2011 Annual Report
Reilly Site, City of St. Louis Park, Minnesota

Summit Envirosolutions

Figure 7

File: Fig7_Drift
Summit Proj. No.: 0987-0009
Plot Date: 03-09-12
Arc Operator: PRB
Reviewed by: WMG

GUIDE TO APPENDED LABORATORY RESULTS FOR ALL 2011 SAMPLES

Well Name	Analysis	1st Quarter	Appendix ID	2nd Quarter	Appendix ID	3rd Quarter	Appendix ID	4th Quarter	Appendix ID
Mount Simon Hinckley Aquifer									
SLP 11	PPT					13-Sep	I		
SLP 12	PPT					13-Sep	I		
SLP 13	PPT	Not sampled in 2012							
SLP 17	PPT	Not sampled in 2012							
Prairie du Chien-Iordan Aquifer									
E2	PPT			7-Jun	C				
E3	PPT			7-Jun	C				
E7	PPT	Not sampled in 2012							
E13	PPT			7-Jun	C	15-Sep	K		
E15	PPT			7-Jun	C				
SLP4	PPT					13-Sep	I		
SLP6	PPT	30-Mar	A	9-Jun	E	13-Sep	I	Not sampled in Q4	
SLP10	PPT					13-Sep	I		
SLP10 FEED	PPT			7-Jun	C				
SLP10T	PPT	30-Mar	A	9-Jun	E	9/13, 10/20, 10/25/2011	I, L, M	13-Dec	N
SLP10TExtended	PPT					13-Sep	I		
SLP10TExtended	25CPAH					15-Sep	J		
SLP10TAcid	PPT					13-Sep	I		
W23	PPT			7-Jun	C				
W29	PPT	Not sampled in 2012							
W48	PPT	30-Mar	A	14-Jun	H	13-Sep	I	13-Dec	N
W119	PPT	Not sampled in Q1		9-Jun	E	13-Sep	I	Not sampled in Q4	
W401	PPT					14-Sep	I		
W402	PPT					14-Sep	I		
W403	PPT					14-Sep	I		

GUIDE TO APPENDED LABORATORY RESULTS FOR ALL 2011 SAMPLES

Well Name	Analysis	1st Quarter	Appendix ID	2nd Quarter	Appendix ID	3rd Quarter	Appendix ID	4th Quarter	Appendix ID
St. Peter Aquifer									
W14	PPT			14-Jun	H				
W 24	PPT			9-Jun	E				
W 33R	PPT			14-Jun	H				
W 122	PPT			16-Jun	H				
W 129	PPT			14-Jun	H				
W 408	PPT			16-Jun	H				
W 409	PPT			15-Jun	H				
W 410	PPT			9-Jun	E				
W 411	PPT			15-Jun	H				
W 412	PPT			15-Jun	H				
W 414	PPT			14-Jun	H				
Platteville Aquifer									
W18	PPB					15-Sep	J		
W20	PPB			8-Jun	D				
W22	PPB			8-Jun	D	Not sampled in Q3 or Q4			
W27	PPB			10-Jun	F				
W101	PPB					14-Sep	J		
W121	PPB					15-Sep	J		
W130	PPB			13-Jun	G				
W131	PPB					14-Sep	J		
W143	PPB					15-Sep	J		
W 421	PPB	30-Mar	B	8-Jun	D	14-Sep	J	13-Dec	O
W424	PPB			13-Jun	G				
W426	PPB			10-Jun	F				
W428	PPB					15-Sep	J		
W434	PPB					14-Sep	J		
W437	PPB			8-Jun	D				
W438	PPB			8-Jun	D				
Drift Aquifer									
P109	PPB			8-Jun	D				
P307	PPB			8-Jun	D				
P308	PPB			8-Jun	D				
P309	PPB			10-Jun	F	15-Sep	J		
P310	PPB			8-Jun	D				
W2	PPB			10-Jun	F	15-Sep	J		
W9	PPB			10-Jun	F	15-Sep	J		
W15	PPB			10-Jun	F	15-Sep	J		
W420	PPB	30-Mar	B	8-Jun	D	14-Sep	J	13-Dec	O
W422	PPB	Not sampled in 2012							
W439	PPB			10-Jun	F	15-Sep	J		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-14092-1
Client Project/Site: CSLP - Reilly Tar & Chemical
Revision: 1

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, Minnesota 55426

Attn: Scott Anderson

Authorized for release by:
12/7/2011 4:27:23 PM

Lisa Uriell
Project Manager II
lisa.uriell@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 280-14092-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-14092-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
Six samples were received under chain of custody on March 31, 2011. The samples were received at temperatures of 3.4°C, 3.6° C, 3.6°C, 2.4°C, 1.4°C and 2.6°C. All sample containers were received in acceptable condition.

No anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Low levels of Pyrene are present in the method blank associated with prep batch 280-60492. Because the concentration in the method blank is not present at a level greater than one half the reporting limit, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”. Usability of the sample data is not compromised.

The LCS associated with prep batch 280-60492 exhibited the percent recovery below the QC control limits for Acridine at 11 % (limits 30-150%). The LCS was re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is.

The MS/MSD associated with prep batch 280-60492 was performed using sample SLP10T-033011 (280-14092-1), as requested. MS/MSD exhibited 10 of the 33 Matrix Spike compound recoveries outside the control limits. MS/MSD exhibited 10 of the 33 Matrix Spike Duplicate compound recoveries outside the control limits. The MS/MSD exhibited percent recoveries outside the control limits for the compounds listed below. Details of the specific analyte recoveries can found in the Matrix Spike Sample Recovery and Data Reports.

3-Methylcholanthrene	Acridine	Benzo[a]pyrene
Benzo[e]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene
Benzo[ghi]perylene	Dibenz(a,h)anthracene	Indeno[1,2,3-cd]pyrene
Perylene		

No other anomalies were noted.

Revision
This report has been revised to correct the reporting limits and method detection limits in the method blank and LCS, as the limits were not calculated correctly in the original submission due to an omitted initial volume.

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION
JOB: 280-14092-1
ANALYSIS: SW846-8270C SIM

QC Parameter	Data Planned	Valid Data Obtained
Method Blank	33	33
MB Surrogates	3	3
LCS	7	7
LCS Surrogates	3	3
FB/FBD	66	66
MS	7	6
MS Surrogates	3	3
MSD	7	6
MSD Surrogates	3	3
MS/MSD RPD	7	7
Sample/Dup. RPD	33	33
Sample Surrogates	18	18
Samples and QC Internal Standard Area	30	30
TOTAL	**220**	**218**
% Completeness	**99.1%**	

Sample Duplicate Calculation for Method 8270C SIM

Sample Duplicate RPD					
JOB 280-14092-1					
Sample: SPL10T-033011		**DUP: SPL10TD-033011**			
Compound	**Result**	**Compound**	**Result**	**RPD**	**RPD>50%**
Acenaphthene	1.2	Acenaphthene	1.1	8.7	
Acenaphthylene	ND	Acenaphthylene	ND	0.0	
Acridine	ND	Acridine	ND	0.0	
Anthracene	ND	Anthracene	ND	0.0	
Benzo(a)anthracene	ND	Benzo(a)anthracene	ND	0.0	
Benzo(b)fluoranthene	ND	Benzo(b)fluoranthene	ND	0.0	
Benzo(k)fluoranthene	ND	Benzo(k)fluoranthene	ND	0.0	
2,3-Benzofuran	ND	2,3-Benzofuran	ND	0.0	
Benzo(ghi)perylene	ND	Benzo(ghi)perylene	ND	0.0	
Benzo(a)pyrene	ND	Benzo(a)pyrene	ND	0.0	
Benzo(e)pyrene	ND	Benzo(e)pyrene	ND	0.0	
Benzo(b)thiophene	ND	Benzo(b)thiophene	ND	0.0	
Biphenyl	ND	Biphenyl	ND	0.0	
Carbazole	ND	Carbazole	ND	0.0	
Chrysene	ND	Chrysene	ND	0.0	
Dibenz(a,h)anthracene	ND	Dibenz(a,h)anthracene	ND	0.0	
Dibenzofuran	ND	Dibenzofuran	ND	0.0	
Dibenzothiophene	ND	Dibenzothiophene	ND	0.0	
2,3-Dihydroindene	3.1	2,3-Dihydroindene	3.6	14.9	
Fluoranthene	ND	Fluoranthene	ND	0.0	
Fluorene	ND	Fluorene	ND	0.0	
Indene	ND	Indene	ND	0.0	
Indeno(1,2,3-cd)pyrene	ND	Indeno(1,2,3-cd)pyrene	ND	0.0	
Indole	ND	Indole	ND	0.0	
2-Methylnaphthalene	ND	2-Methylnaphthalene	ND	0.0	
1-Methylnaphthalene	ND	1-Methylnaphthalene	ND	0.0	
Naphthalene	ND	Naphthalene	ND	0.0	
Perylene	ND	Perylene	ND	0.0	
Phenanthrene	ND	Phenanthrene	ND	0.0	
Pyrene	1.0	Pyrene	ND	NC	
Quinoline	ND	Quinoline	ND	0.0	

RPD = Relative Percent Difference
ND = Compound not detected in the sample
p = RPD is outside of control limits
*NC = RPD not calculated, one positive result and one ND.
Considered acceptable if the positive result is less than 4x the RL.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Client Sample ID: SLP10T-033011 — Lab Sample ID: 280-14092-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	3.1	J	4.8	0.67	ng/L	1		8270C	Total/NA
Acenaphthene	1.2	J	5.4	0.48	ng/L	1		8270C	Total/NA
Pyrene	1.0	J B	4.0	0.94	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TD-033011 — Lab Sample ID: 280-14092-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	3.6	J	5.3	0.74	ng/L	1		8270C	Total/NA
Acenaphthene	1.1	J	6.0	0.53	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFB-033011 — Lab Sample ID: 280-14092-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	0.96	J	5.4	0.75	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.2	J	6.0	0.96	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	3.5	J	6.4	1.1	ng/L	1		8270C	Total/NA
Naphthalene	5.5	J	9.3	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFBD-033011 — Lab Sample ID: 280-14092-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	1.0	J	5.0	0.70	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.4	J	5.6	0.89	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	3.4	J	5.9	0.98	ng/L	1		8270C	Total/NA
Naphthalene	6.2	J	8.6	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP6-033011 — Lab Sample ID: 280-14092-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	0.72	J	5.5	0.69	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	54		5.0	0.71	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.7	J	5.7	0.90	ng/L	1		8270C	Total/NA
Acenaphthene	74		5.8	0.50	ng/L	1		8270C	Total/NA
Acenaphthylene	8.6		4.8	0.78	ng/L	1		8270C	Total/NA
Acridine	8.3	*	6.6	6.6	ng/L	1		8270C	Total/NA
Anthracene	2.5	J	4.2	0.81	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	10		5.2	0.76	ng/L	1		8270C	Total/NA
Carbazole	2.4	J	3.8	0.73	ng/L	1		8270C	Total/NA
Dibenzothiophene	1.7	J	4.1	0.99	ng/L	1		8270C	Total/NA
Fluoranthene	4.3	J	4.6	1.7	ng/L	1		8270C	Total/NA
Indene	6.3		4.7	3.3	ng/L	1		8270C	Total/NA
Naphthalene	3.6	J	8.7	1.2	ng/L	1		8270C	Total/NA
Pyrene	4.9	B	4.2	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: W48-033011 — Lab Sample ID: 280-14092-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	0.96	J	5.4	0.69	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	3.7	J	5.0	0.71	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.5	J	5.6	0.90	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.6	J	5.9	0.99	ng/L	1		8270C	Total/NA
Acenaphthene	76		5.7	0.50	ng/L	1		8270C	Total/NA
Acenaphthylene	1.7	J	4.8	0.78	ng/L	1		8270C	Total/NA
Acridine	10	*	6.6	6.6	ng/L	1		8270C	Total/NA

Client Sample ID: W48-033011 (Continued)

Lab Sample ID: 280-14092-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	4.3		4.2	0.81	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	6.2		5.2	0.76	ng/L	1		8270C	Total/NA
Carbazole	1.6	J	3.8	0.73	ng/L	1		8270C	Total/NA
Indene	22		4.7	3.3	ng/L	1		8270C	Total/NA
Naphthalene	3.2	J	8.7	1.1	ng/L	1		8270C	Total/NA
Pyrene	4.1	J B	4.2	1.0	ng/L	1		8270C	Total/NA
Quinoline	6.3	J	9.1	5.7	ng/L	1		8270C	Total/NA

Method Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compound (GC/MS SIM LL)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-14092-1	SLP10T-033011	Water	03/30/11 08:30	03/31/11 09:00
280-14092-2	SLP10TD-033011	Water	03/30/11 08:35	03/31/11 09:00
280-14092-3	SLP10TFB-033011	Water	03/30/11 08:20	03/31/11 09:00
280-14092-4	SLP10TFBD-033011	Water	03/30/11 08:25	03/31/11 09:00
280-14092-5	SLP6-033011	Water	03/30/11 09:50	03/31/11 09:00
280-14092-6	W48-033011	Water	03/30/11 11:00	03/31/11 09:00

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Client Sample ID: SLP10T-033011
Date Collected: 03/30/11 08:30
Date Received: 03/31/11 09:00

Lab Sample ID: 280-14092-1
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		04/02/11 13:45	04/12/11 19:06	1
2,3-Dihydroindene	**3.1**	**J**	4.8	0.67	ng/L		04/02/11 13:45	04/12/11 19:06	1
1-Methylnaphthalene	ND		5.3	0.85	ng/L		04/02/11 13:45	04/12/11 19:06	1
2-Methylnaphthalene	ND		5.6	0.93	ng/L		04/02/11 13:45	04/12/11 19:06	1
Acenaphthene	**1.2**	**J**	5.4	0.48	ng/L		04/02/11 13:45	04/12/11 19:06	1
Acenaphthylene	ND		4.6	0.73	ng/L		04/02/11 13:45	04/12/11 19:06	1
Acridine	ND	*	6.2	6.2	ng/L		04/02/11 13:45	04/12/11 19:06	1
Anthracene	ND		4.0	0.76	ng/L		04/02/11 13:45	04/12/11 19:06	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		04/02/11 13:45	04/12/11 19:06	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		04/02/11 13:45	04/12/11 19:06	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		04/02/11 13:45	04/12/11 19:06	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		04/02/11 13:45	04/12/11 19:06	1
Benzo(b)thiophene	ND		5.0	0.71	ng/L		04/02/11 13:45	04/12/11 19:06	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		04/02/11 13:45	04/12/11 19:06	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		04/02/11 13:45	04/12/11 19:06	1
Carbazole	ND		3.6	0.69	ng/L		04/02/11 13:45	04/12/11 19:06	1
Chrysene	ND		5.3	1.2	ng/L		04/02/11 13:45	04/12/11 19:06	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		04/02/11 13:45	04/12/11 19:06	1
Dibenzofuran	ND		5.4	0.94	ng/L		04/02/11 13:45	04/12/11 19:06	1
Dibenzothiophene	ND		3.9	0.93	ng/L		04/02/11 13:45	04/12/11 19:06	1
Fluoranthene	ND		4.4	1.6	ng/L		04/02/11 13:45	04/12/11 19:06	1
Fluorene	ND		3.9	0.81	ng/L		04/02/11 13:45	04/12/11 19:06	1
Indene	ND		4.5	3.1	ng/L		04/02/11 13:45	04/12/11 19:06	1
Indole	ND		4.5	1.6	ng/L		04/02/11 13:45	04/12/11 19:06	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		04/02/11 13:45	04/12/11 19:06	1
Naphthalene	ND		8.2	1.1	ng/L		04/02/11 13:45	04/12/11 19:06	1
Perylene	ND		3.6	3.6	ng/L		04/02/11 13:45	04/12/11 19:06	1
Phenanthrene	ND		6.0	3.1	ng/L		04/02/11 13:45	04/12/11 19:06	1
Pyrene	**1.0**	**J B**	4.0	0.94	ng/L		04/02/11 13:45	04/12/11 19:06	1
Quinoline	ND		8.6	5.4	ng/L		04/02/11 13:45	04/12/11 19:06	1
Biphenyl	ND		5.3	1.0	ng/L		04/02/11 13:45	04/12/11 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*64*		*23 - 84*	*04/02/11 13:45*	*04/12/11 19:06*	*1*
Chrysene-d12 (Surr)	*31*		*28 - 101*	*04/02/11 13:45*	*04/12/11 19:06*	*1*
Naphthalene-d8 (Surr)	*72*		*22 - 97*	*04/02/11 13:45*	*04/12/11 19:06*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Client Sample ID: SLP10TD-033011
Date Collected: 03/30/11 08:35
Date Received: 03/31/11 09:00

Lab Sample ID: 280-14092-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.7	0.72	ng/L		04/02/11 13:45	04/12/11 20:49	1
2,3-Dihydroindene	**3.6**	**J**	5.3	0.74	ng/L		04/02/11 13:45	04/12/11 20:49	1
1-Methylnaphthalene	ND		5.9	0.94	ng/L		04/02/11 13:45	04/12/11 20:49	1
2-Methylnaphthalene	ND		6.2	1.0	ng/L		04/02/11 13:45	04/12/11 20:49	1
Acenaphthene	**1.1**	**J**	6.0	0.53	ng/L		04/02/11 13:45	04/12/11 20:49	1
Acenaphthylene	ND		5.1	0.81	ng/L		04/02/11 13:45	04/12/11 20:49	1
Acridine	ND	*	6.9	6.9	ng/L		04/02/11 13:45	04/12/11 20:49	1
Anthracene	ND		4.4	0.85	ng/L		04/02/11 13:45	04/12/11 20:49	1
Benzo[a]anthracene	ND		4.5	0.97	ng/L		04/02/11 13:45	04/12/11 20:49	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		04/02/11 13:45	04/12/11 20:49	1
Benzo[e]pyrene	ND		4.5	1.2	ng/L		04/02/11 13:45	04/12/11 20:49	1
Benzo[b]fluoranthene	ND		5.0	1.5	ng/L		04/02/11 13:45	04/12/11 20:49	1
Benzo(b)thiophene	ND		5.5	0.79	ng/L		04/02/11 13:45	04/12/11 20:49	1
Benzo[k]fluoranthene	ND		4.3	1.3	ng/L		04/02/11 13:45	04/12/11 20:49	1
Benzo[g,h,i]perylene	ND		6.6	1.2	ng/L		04/02/11 13:45	04/12/11 20:49	1
Carbazole	ND		4.0	0.76	ng/L		04/02/11 13:45	04/12/11 20:49	1
Chrysene	ND		5.9	1.3	ng/L		04/02/11 13:45	04/12/11 20:49	1
Dibenz(a,h)anthracene	ND		6.2	1.1	ng/L		04/02/11 13:45	04/12/11 20:49	1
Dibenzofuran	ND		6.0	1.0	ng/L		04/02/11 13:45	04/12/11 20:49	1
Dibenzothiophene	ND		4.3	1.0	ng/L		04/02/11 13:45	04/12/11 20:49	1
Fluoranthene	ND		4.9	1.8	ng/L		04/02/11 13:45	04/12/11 20:49	1
Fluorene	ND		4.3	0.90	ng/L		04/02/11 13:45	04/12/11 20:49	1
Indene	ND		5.0	3.5	ng/L		04/02/11 13:45	04/12/11 20:49	1
Indole	ND		5.0	1.8	ng/L		04/02/11 13:45	04/12/11 20:49	1
Indeno[1,2,3-cd]pyrene	ND		5.7	1.3	ng/L		04/02/11 13:45	04/12/11 20:49	1
Naphthalene	ND		9.1	1.2	ng/L		04/02/11 13:45	04/12/11 20:49	1
Perylene	ND		4.0	4.0	ng/L		04/02/11 13:45	04/12/11 20:49	1
Phenanthrene	ND		6.7	3.4	ng/L		04/02/11 13:45	04/12/11 20:49	1
Pyrene	ND		4.4	1.0	ng/L		04/02/11 13:45	04/12/11 20:49	1
Quinoline	ND		9.5	6.0	ng/L		04/02/11 13:45	04/12/11 20:49	1
Biphenyl	ND		5.9	1.1	ng/L		04/02/11 13:45	04/12/11 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*74*		*23 - 84*	*04/02/11 13:45*	*04/12/11 20:49*	*1*
Chrysene-d12 (Surr)	*44*		*28 - 101*	*04/02/11 13:45*	*04/12/11 20:49*	*1*
Naphthalene-d8 (Surr)	*80*		*22 - 97*	*04/02/11 13:45*	*04/12/11 20:49*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Client Sample ID: SLP10TFB-033011
Date Collected: 03/30/11 08:20
Date Received: 03/31/11 09:00

Lab Sample ID: 280-14092-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.8	0.73	ng/L		04/02/11 13:45	04/12/11 21:23	1
2,3-Dihydroindene	**0.96**	**J**	5.4	0.75	ng/L		04/02/11 13:45	04/12/11 21:23	1
1-Methylnaphthalene	**1.2**	**J**	6.0	0.96	ng/L		04/02/11 13:45	04/12/11 21:23	1
2-Methylnaphthalene	**3.5**	**J**	6.4	1.1	ng/L		04/02/11 13:45	04/12/11 21:23	1
Acenaphthene	ND		6.1	0.54	ng/L		04/02/11 13:45	04/12/11 21:23	1
Acenaphthylene	ND		5.2	0.83	ng/L		04/02/11 13:45	04/12/11 21:23	1
Acridine	ND	*	7.0	7.0	ng/L		04/02/11 13:45	04/12/11 21:23	1
Anthracene	ND		4.5	0.86	ng/L		04/02/11 13:45	04/12/11 21:23	1
Benzo[a]anthracene	ND		4.6	0.99	ng/L		04/02/11 13:45	04/12/11 21:23	1
Benzo[a]pyrene	ND		2.7	1.3	ng/L		04/02/11 13:45	04/12/11 21:23	1
Benzo[e]pyrene	ND		4.6	1.2	ng/L		04/02/11 13:45	04/12/11 21:23	1
Benzo[b]fluoranthene	ND		5.1	1.5	ng/L		04/02/11 13:45	04/12/11 21:23	1
Benzo(b)thiophene	ND		5.6	0.81	ng/L		04/02/11 13:45	04/12/11 21:23	1
Benzo[k]fluoranthene	ND		4.4	1.3	ng/L		04/02/11 13:45	04/12/11 21:23	1
Benzo[g,h,i]perylene	ND		6.7	1.3	ng/L		04/02/11 13:45	04/12/11 21:23	1
Carbazole	ND		4.1	0.78	ng/L		04/02/11 13:45	04/12/11 21:23	1
Chrysene	ND		6.0	1.3	ng/L		04/02/11 13:45	04/12/11 21:23	1
Dibenz(a,h)anthracene	ND		6.4	1.1	ng/L		04/02/11 13:45	04/12/11 21:23	1
Dibenzofuran	ND		6.1	1.1	ng/L		04/02/11 13:45	04/12/11 21:23	1
Dibenzothiophene	ND		4.4	1.1	ng/L		04/02/11 13:45	04/12/11 21:23	1
Fluoranthene	ND		5.0	1.8	ng/L		04/02/11 13:45	04/12/11 21:23	1
Fluorene	ND		4.4	0.92	ng/L		04/02/11 13:45	04/12/11 21:23	1
Indene	ND		5.1	3.5	ng/L		04/02/11 13:45	04/12/11 21:23	1
Indole	ND		5.1	1.9	ng/L		04/02/11 13:45	04/12/11 21:23	1
Indeno[1,2,3-cd]pyrene	ND		5.8	1.4	ng/L		04/02/11 13:45	04/12/11 21:23	1
Naphthalene	**5.5**	**J**	9.3	1.2	ng/L		04/02/11 13:45	04/12/11 21:23	1
Perylene	ND		4.1	4.1	ng/L		04/02/11 13:45	04/12/11 21:23	1
Phenanthrene	ND		6.8	3.5	ng/L		04/02/11 13:45	04/12/11 21:23	1
Pyrene	ND		4.5	1.1	ng/L		04/02/11 13:45	04/12/11 21:23	1
Quinoline	ND		9.7	6.1	ng/L		04/02/11 13:45	04/12/11 21:23	1
Biphenyl	ND		6.0	1.1	ng/L		04/02/11 13:45	04/12/11 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*72*		*23 - 84*	*04/02/11 13:45*	*04/12/11 21:23*	*1*
Chrysene-d12 (Surr)	*77*		*28 - 101*	*04/02/11 13:45*	*04/12/11 21:23*	*1*
Naphthalene-d8 (Surr)	*78*		*22 - 97*	*04/02/11 13:45*	*04/12/11 21:23*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Client Sample ID: SLP10TFBD-033011
Date Collected: 03/30/11 08:25
Date Received: 03/31/11 09:00

Lab Sample ID: 280-14092-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		04/02/11 13:45	04/13/11 10:03	1
2,3-Dihydroindene	**1.0**	**J**	5.0	0.70	ng/L		04/02/11 13:45	04/13/11 10:03	1
1-Methylnaphthalene	**1.4**	**J**	5.6	0.89	ng/L		04/02/11 13:45	04/13/11 10:03	1
2-Methylnaphthalene	**3.4**	**J**	5.9	0.98	ng/L		04/02/11 13:45	04/13/11 10:03	1
Acenaphthene	ND		5.7	0.50	ng/L		04/02/11 13:45	04/13/11 10:03	1
Acenaphthylene	ND		4.8	0.77	ng/L		04/02/11 13:45	04/13/11 10:03	1
Acridine	ND	*	6.5	6.5	ng/L		04/02/11 13:45	04/13/11 10:03	1
Anthracene	ND		4.2	0.80	ng/L		04/02/11 13:45	04/13/11 10:03	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		04/02/11 13:45	04/13/11 10:03	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		04/02/11 13:45	04/13/11 10:03	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		04/02/11 13:45	04/13/11 10:03	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		04/02/11 13:45	04/13/11 10:03	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		04/02/11 13:45	04/13/11 10:03	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		04/02/11 13:45	04/13/11 10:03	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		04/02/11 13:45	04/13/11 10:03	1
Carbazole	ND		3.8	0.72	ng/L		04/02/11 13:45	04/13/11 10:03	1
Chrysene	ND		5.6	1.2	ng/L		04/02/11 13:45	04/13/11 10:03	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		04/02/11 13:45	04/13/11 10:03	1
Dibenzofuran	ND		5.7	0.99	ng/L		04/02/11 13:45	04/13/11 10:03	1
Dibenzothiophene	ND		4.1	0.98	ng/L		04/02/11 13:45	04/13/11 10:03	1
Fluoranthene	ND		4.6	1.7	ng/L		04/02/11 13:45	04/13/11 10:03	1
Fluorene	ND		4.1	0.85	ng/L		04/02/11 13:45	04/13/11 10:03	1
Indene	ND		4.7	3.3	ng/L		04/02/11 13:45	04/13/11 10:03	1
Indole	ND		4.7	1.7	ng/L		04/02/11 13:45	04/13/11 10:03	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		04/02/11 13:45	04/13/11 10:03	1
Naphthalene	**6.2**	**J**	8.6	1.1	ng/L		04/02/11 13:45	04/13/11 10:03	1
Perylene	ND		3.8	3.8	ng/L		04/02/11 13:45	04/13/11 10:03	1
Phenanthrene	ND		6.3	3.2	ng/L		04/02/11 13:45	04/13/11 10:03	1
Pyrene	ND		4.2	0.99	ng/L		04/02/11 13:45	04/13/11 10:03	1
Quinoline	ND		9.0	5.7	ng/L		04/02/11 13:45	04/13/11 10:03	1
Biphenyl	ND		5.6	1.1	ng/L		04/02/11 13:45	04/13/11 10:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*76*		*23 - 84*	*04/02/11 13:45*	*04/13/11 10:03*	*1*
Chrysene-d12 (Surr)	*76*		*28 - 101*	*04/02/11 13:45*	*04/13/11 10:03*	*1*
Naphthalene-d8 (Surr)	*80*		*22 - 97*	*04/02/11 13:45*	*04/13/11 10:03*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Client Sample ID: SLP6-033011
Date Collected: 03/30/11 09:50
Date Received: 03/31/11 09:00

Lab Sample ID: 280-14092-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**0.72**	**J**	5.5	0.69	ng/L		04/02/11 13:45	04/13/11 08:55	1
2,3-Dihydroindene	**54**		5.0	0.71	ng/L		04/02/11 13:45	04/13/11 08:55	1
1-Methylnaphthalene	**1.7**	**J**	5.7	0.90	ng/L		04/02/11 13:45	04/13/11 08:55	1
2-Methylnaphthalene	ND		6.0	0.99	ng/L		04/02/11 13:45	04/13/11 08:55	1
Acenaphthene	**74**		5.8	0.50	ng/L		04/02/11 13:45	04/13/11 08:55	1
Acenaphthylene	**8.6**		4.8	0.78	ng/L		04/02/11 13:45	04/13/11 08:55	1
Acridine	**8.3**	*****	6.6	6.6	ng/L		04/02/11 13:45	04/13/11 08:55	1
Anthracene	**2.5**	**J**	4.2	0.81	ng/L		04/02/11 13:45	04/13/11 08:55	1
Benzo[a]anthracene	ND		4.3	0.93	ng/L		04/02/11 13:45	04/13/11 08:55	1
Benzo[a]pyrene	ND		2.5	1.3	ng/L		04/02/11 13:45	04/13/11 08:55	1
Benzo[e]pyrene	ND		4.3	1.2	ng/L		04/02/11 13:45	04/13/11 08:55	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		04/02/11 13:45	04/13/11 08:55	1
Benzo(b)thiophene	**10**		5.2	0.76	ng/L		04/02/11 13:45	04/13/11 08:55	1
Benzo[k]fluoranthene	ND		4.1	1.3	ng/L		04/02/11 13:45	04/13/11 08:55	1
Benzo[g,h,i]perylene	ND		6.3	1.2	ng/L		04/02/11 13:45	04/13/11 08:55	1
Carbazole	**2.4**	**J**	3.8	0.73	ng/L		04/02/11 13:45	04/13/11 08:55	1
Chrysene	ND		5.7	1.3	ng/L		04/02/11 13:45	04/13/11 08:55	1
Dibenz(a,h)anthracene	ND		6.0	1.0	ng/L		04/02/11 13:45	04/13/11 08:55	1
Dibenzofuran	ND		5.8	1.0	ng/L		04/02/11 13:45	04/13/11 08:55	1
Dibenzothiophene	**1.7**	**J**	4.1	0.99	ng/L		04/02/11 13:45	04/13/11 08:55	1
Fluoranthene	**4.3**	**J**	4.6	1.7	ng/L		04/02/11 13:45	04/13/11 08:55	1
Fluorene	ND		4.1	0.86	ng/L		04/02/11 13:45	04/13/11 08:55	1
Indene	**6.3**		4.7	3.3	ng/L		04/02/11 13:45	04/13/11 08:55	1
Indole	ND		4.7	1.7	ng/L		04/02/11 13:45	04/13/11 08:55	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		04/02/11 13:45	04/13/11 08:55	1
Naphthalene	**3.6**	**J**	8.7	1.2	ng/L		04/02/11 13:45	04/13/11 08:55	1
Perylene	ND		3.8	3.8	ng/L		04/02/11 13:45	04/13/11 08:55	1
Phenanthrene	ND		6.4	3.2	ng/L		04/02/11 13:45	04/13/11 08:55	1
Pyrene	**4.9**	**B**	4.2	1.0	ng/L		04/02/11 13:45	04/13/11 08:55	1
Quinoline	ND		9.1	5.7	ng/L		04/02/11 13:45	04/13/11 08:55	1
Biphenyl	ND		5.7	1.1	ng/L		04/02/11 13:45	04/13/11 08:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*69*		*23 - 84*	*04/02/11 13:45*	*04/13/11 08:55*	*1*
Chrysene-d12 (Surr)	*38*		*28 - 101*	*04/02/11 13:45*	*04/13/11 08:55*	*1*
Naphthalene-d8 (Surr)	*69*		*22 - 97*	*04/02/11 13:45*	*04/13/11 08:55*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Client Sample ID: W48-033011
Date Collected: 03/30/11 11:00
Date Received: 03/31/11 09:00

Lab Sample ID: 280-14092-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	0.96	J	5.4	0.69	ng/L		04/02/11 13:45	04/13/11 09:29	1
2,3-Dihydroindene	3.7	J	5.0	0.71	ng/L		04/02/11 13:45	04/13/11 09:29	1
1-Methylnaphthalene	1.5	J	5.6	0.90	ng/L		04/02/11 13:45	04/13/11 09:29	1
2-Methylnaphthalene	1.6	J	5.9	0.99	ng/L		04/02/11 13:45	04/13/11 09:29	1
Acenaphthene	76		5.7	0.50	ng/L		04/02/11 13:45	04/13/11 09:29	1
Acenaphthylene	1.7	J	4.8	0.78	ng/L		04/02/11 13:45	04/13/11 09:29	1
Acridine	10	*	6.6	6.6	ng/L		04/02/11 13:45	04/13/11 09:29	1
Anthracene	4.3		4.2	0.81	ng/L		04/02/11 13:45	04/13/11 09:29	1
Benzo[a]anthracene	ND		4.3	0.93	ng/L		04/02/11 13:45	04/13/11 09:29	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		04/02/11 13:45	04/13/11 09:29	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		04/02/11 13:45	04/13/11 09:29	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		04/02/11 13:45	04/13/11 09:29	1
Benzo(b)thiophene	6.2		5.2	0.76	ng/L		04/02/11 13:45	04/13/11 09:29	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		04/02/11 13:45	04/13/11 09:29	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		04/02/11 13:45	04/13/11 09:29	1
Carbazole	1.6	J	3.8	0.73	ng/L		04/02/11 13:45	04/13/11 09:29	1
Chrysene	ND		5.6	1.2	ng/L		04/02/11 13:45	04/13/11 09:29	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		04/02/11 13:45	04/13/11 09:29	1
Dibenzofuran	ND		5.7	1.0	ng/L		04/02/11 13:45	04/13/11 09:29	1
Dibenzothiophene	ND		4.1	0.99	ng/L		04/02/11 13:45	04/13/11 09:29	1
Fluoranthene	ND		4.6	1.7	ng/L		04/02/11 13:45	04/13/11 09:29	1
Fluorene	ND		4.1	0.86	ng/L		04/02/11 13:45	04/13/11 09:29	1
Indene	22		4.7	3.3	ng/L		04/02/11 13:45	04/13/11 09:29	1
Indole	ND		4.7	1.7	ng/L		04/02/11 13:45	04/13/11 09:29	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		04/02/11 13:45	04/13/11 09:29	1
Naphthalene	3.2	J	8.7	1.1	ng/L		04/02/11 13:45	04/13/11 09:29	1
Perylene	ND		3.8	3.8	ng/L		04/02/11 13:45	04/13/11 09:29	1
Phenanthrene	ND		6.4	3.2	ng/L		04/02/11 13:45	04/13/11 09:29	1
Pyrene	4.1	J B	4.2	1.0	ng/L		04/02/11 13:45	04/13/11 09:29	1
Quinoline	6.3	J	9.1	5.7	ng/L		04/02/11 13:45	04/13/11 09:29	1
Biphenyl	ND		5.6	1.1	ng/L		04/02/11 13:45	04/13/11 09:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*70*		*23 - 84*	*04/02/11 13:45*	*04/13/11 09:29*	*1*
Chrysene-d12 (Surr)	*37*		*28 - 101*	*04/02/11 13:45*	*04/13/11 09:29*	*1*
Naphthalene-d8 (Surr)	*71*		*22 - 97*	*04/02/11 13:45*	*04/13/11 09:29*	*1*

Surrogate Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		FD10	sene-d12 (S	thalene-d8						
Lab Sample ID	Client Sample ID	(23-84)	(28-101)	(22-97)						
280-14092-1	SLP10T-033011	64	31	72						
280-14092-1 MS	SLP10T-033011	70	35	77						
280-14092-1 MSD	SLP10T-033011	73	43	79						
280-14092-2	SLP10TD-033011	74	44	80						
280-14092-3	SLP10TFB-033011	72	77	78						
280-14092-4	SLP10TFBD-033011	76	76	80						
280-14092-5	SLP6-033011	69	38	69						
280-14092-6	W48-033011	70	37	71						
LCS 280-60492/2-A	Lab Control Sample	76	86	82						
MB 280-60492/1-A	Method Blank	61	77	74						

Surrogate Legend

FD10 = Fluorene-d10 (Surr)

Chrysene-d12 (Surr) = Chrysene-d12 (Surr)

Naphthalene-d8 (Surr) = Naphthalene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Lab Sample ID: MB 280-60492/1-A
Matrix: Water
Analysis Batch: 62006

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60492

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		04/02/11 13:45	04/12/11 17:22	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		04/02/11 13:45	04/12/11 17:22	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		04/02/11 13:45	04/12/11 17:22	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		04/02/11 13:45	04/12/11 17:22	1
Acenaphthene	ND		5.7	0.50	ng/L		04/02/11 13:45	04/12/11 17:22	1
Acenaphthylene	ND		4.8	0.77	ng/L		04/02/11 13:45	04/12/11 17:22	1
Acridine	ND		6.5	6.5	ng/L		04/02/11 13:45	04/12/11 17:22	1
Anthracene	ND		4.2	0.80	ng/L		04/02/11 13:45	04/12/11 17:22	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		04/02/11 13:45	04/12/11 17:22	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		04/02/11 13:45	04/12/11 17:22	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		04/02/11 13:45	04/12/11 17:22	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		04/02/11 13:45	04/12/11 17:22	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		04/02/11 13:45	04/12/11 17:22	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		04/02/11 13:45	04/12/11 17:22	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		04/02/11 13:45	04/12/11 17:22	1
Carbazole	ND		3.8	0.72	ng/L		04/02/11 13:45	04/12/11 17:22	1
Chrysene	ND		5.6	1.2	ng/L		04/02/11 13:45	04/12/11 17:22	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		04/02/11 13:45	04/12/11 17:22	1
Dibenzofuran	ND		5.7	0.99	ng/L		04/02/11 13:45	04/12/11 17:22	1
Dibenzothiophene	ND		4.1	0.98	ng/L		04/02/11 13:45	04/12/11 17:22	1
Fluoranthene	ND		4.6	1.7	ng/L		04/02/11 13:45	04/12/11 17:22	1
Fluorene	ND		4.1	0.85	ng/L		04/02/11 13:45	04/12/11 17:22	1
Indene	ND		4.7	3.3	ng/L		04/02/11 13:45	04/12/11 17:22	1
Indole	ND		4.7	1.7	ng/L		04/02/11 13:45	04/12/11 17:22	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		04/02/11 13:45	04/12/11 17:22	1
Naphthalene	ND		8.6	1.1	ng/L		04/02/11 13:45	04/12/11 17:22	1
Perylene	ND		3.8	3.8	ng/L		04/02/11 13:45	04/12/11 17:22	1
Phenanthrene	ND		6.3	3.2	ng/L		04/02/11 13:45	04/12/11 17:22	1
Pyrene	1.04	J	4.2	0.99	ng/L		04/02/11 13:45	04/12/11 17:22	1
Quinoline	ND		9.0	5.7	ng/L		04/02/11 13:45	04/12/11 17:22	1
Biphenyl	ND		5.6	1.1	ng/L		04/02/11 13:45	04/12/11 17:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*61*		*23 - 84*	*04/02/11 13:45*	*04/12/11 17:22*	*1*
Chrysene-d12 (Surr)	*77*		*28 - 101*	*04/02/11 13:45*	*04/12/11 17:22*	*1*
Naphthalene-d8 (Surr)	*74*		*22 - 97*	*04/02/11 13:45*	*04/12/11 17:22*	*1*

Lab Sample ID: LCS 280-60492/2-A
Matrix: Water
Analysis Batch: 62006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	75.0	64.1		ng/L		85	30 - 150
2,3-Dihydroindene	75.0	55.8		ng/L		74	30 - 150
1-Methylnaphthalene	75.0	63.5		ng/L		85	30 - 150
2-Methylnaphthalene	75.0	61.7		ng/L		82	25 - 95
3-Methylcholanthrene	75.0	54.8		ng/L		73	30 - 150
Acenaphthene	75.0	58.2		ng/L		78	30 - 150
Acenaphthylene	75.0	56.0		ng/L		75	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-60492/2-A
Matrix: Water
Analysis Batch: 62006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acridine	75.0	7.95	*	ng/L		11	30 - 150
Anthracene	75.0	65.1		ng/L		87	30 - 150
Benzo[a]anthracene	75.0	57.5		ng/L		77	30 - 150
Benzo[a]pyrene	75.0	65.7		ng/L		88	30 - 150
Benzo[e]pyrene	75.0	69.4		ng/L		93	37 - 105
Benzo[b]fluoranthene	75.0	65.8		ng/L		88	30 - 150
Benzo(b)thiophene	75.0	60.8		ng/L		81	30 - 150
Benzo[k]fluoranthene	75.0	72.9		ng/L		97	30 - 150
Benzo[g,h,i]perylene	75.0	68.0		ng/L		91	30 - 150
Carbazole	75.0	59.5		ng/L		79	30 - 150
Chrysene	75.0	71.4		ng/L		95	20 - 136
Dibenz(a,h)anthracene	75.0	62.7		ng/L		84	30 - 150
Dibenzofuran	75.0	57.0		ng/L		76	30 - 150
Dibenzothiophene	75.0	61.0		ng/L		81	30 - 150
Fluoranthene	75.0	55.6		ng/L		74	30 - 150
Fluorene	75.0	59.3		ng/L		79	34 - 96
Indene	75.0	61.4		ng/L		82	22 - 86
Indole	75.0	55.6		ng/L		74	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	67.3		ng/L		90	30 - 150
Naphthalene	75.0	64.1		ng/L		85	27 - 95
Perylene	75.0	63.2		ng/L		84	30 - 150
Phenanthrene	75.0	59.3		ng/L		79	30 - 150
Pyrene	75.0	58.9		ng/L		79	30 - 150
Quinoline	75.0	42.8		ng/L		57	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	61.5		ng/L		82	30 - 150
Biphenyl	75.0	60.2		ng/L		80	30 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*76*		*23 - 84*
Chrysene-d12 (Surr)	*86*		*28 - 101*
Naphthalene-d8 (Surr)	*82*		*22 - 97*

Lab Sample ID: 280-14092-1 MS
Matrix: Water
Analysis Batch: 62006

Client Sample ID: SLP10T-033011
Prep Type: Total/NA
Prep Batch: 60492

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	ND		77.9	62.2		ng/L		80	30 - 150
2,3-Dihydroindene	3.1	J	77.9	57.9		ng/L		70	30 - 150
1-Methylnaphthalene	ND		77.9	63.7		ng/L		82	30 - 150
2-Methylnaphthalene	ND		77.9	60.3		ng/L		77	25 - 95
3-Methylcholanthrene	ND		77.9	5.65	F	ng/L		7	30 - 150
Acenaphthene	1.2	J	77.9	57.7		ng/L		73	30 - 150
Acenaphthylene	ND		77.9	59.9		ng/L		77	30 - 150
Acridine	ND	*	77.9	11.0	F	ng/L		14	30 - 150
Anthracene	ND		77.9	61.7		ng/L		79	30 - 150
Benzo[a]anthracene	ND		77.9	24.8		ng/L		32	30 - 150
Benzo[a]pyrene	ND		77.9	4.75	F	ng/L		6	30 - 150
Benzo[e]pyrene	ND		77.9	6.27	F	ng/L		8	37 - 105

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-14092-1 MS
Matrix: Water
Analysis Batch: 62006

Client Sample ID: SLP10T-033011
Prep Type: Total/NA
Prep Batch: 60492

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	ND		77.9	7.32	F	ng/L		9	30 - 150
Benzo(b)thiophene	ND		77.9	59.8		ng/L		77	30 - 150
Benzo[k]fluoranthene	ND		77.9	6.73	F	ng/L		9	30 - 150
Benzo[g,h,i]perylene	ND		77.9	2.63	J F	ng/L		3	30 - 150
Carbazole	ND		77.9	63.5		ng/L		81	30 - 150
Chrysene	ND		77.9	30.3		ng/L		39	20 - 136
Dibenz(a,h)anthracene	ND		77.9	2.55	J F	ng/L		3	30 - 150
Dibenzofuran	ND		77.9	55.6		ng/L		71	30 - 150
Dibenzothiophene	ND		77.9	59.5		ng/L		76	30 - 150
Fluoranthene	ND		77.9	53.4		ng/L		69	30 - 150
Fluorene	ND		77.9	58.2		ng/L		75	34 - 96
Indene	ND		77.9	60.9		ng/L		78	22 - 86
Indole	ND		77.9	57.7		ng/L		74	30 - 150
Indeno[1,2,3-cd]pyrene	ND		77.9	2.68	J F	ng/L		3	30 - 150
Naphthalene	ND		77.9	63.5		ng/L		82	27 - 95
Perylene	ND		77.9	6.29	F	ng/L		8	30 - 150
Phenanthrene	ND		77.9	56.7		ng/L		73	30 - 150
Pyrene	1.0	J B	77.9	56.0		ng/L		71	30 - 150
Quinoline	ND		77.9	47.1		ng/L		60	20 - 112
7,12-Dimethylbenz(a)anthracene	ND		77.9	52.5		ng/L		67	30 - 150
Biphenyl	ND		77.9	57.5		ng/L		74	30 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*70*		*23 - 84*
Chrysene-d12 (Surr)	*35*		*28 - 101*
Naphthalene-d8 (Surr)	*77*		*22 - 97*

Lab Sample ID: 280-14092-1 MSD
Matrix: Water
Analysis Batch: 62006

Client Sample ID: SLP10T-033011
Prep Type: Total/NA
Prep Batch: 60492

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	ND		80.8	66.1		ng/L		82	30 - 150	6	50
2,3-Dihydroindene	3.1	J	80.8	61.4		ng/L		72	30 - 150	6	50
1-Methylnaphthalene	ND		80.8	68.0		ng/L		84	30 - 150	6	50
2-Methylnaphthalene	ND		80.8	63.3		ng/L		78	25 - 95	5	50
3-Methylcholanthrene	ND		80.8	6.24	F	ng/L		8	30 - 150	10	50
Acenaphthene	1.2	J	80.8	61.0		ng/L		74	30 - 150	6	50
Acenaphthylene	ND		80.8	61.4		ng/L		76	30 - 150	3	50
Acridine	ND	*	80.8	ND	F	ng/L		0	30 - 150	NC	50
Anthracene	ND		80.8	66.8		ng/L		83	30 - 150	8	50
Benzo[a]anthracene	ND		80.8	32.7		ng/L		40	30 - 150	27	50
Benzo[a]pyrene	ND		80.8	6.69	F	ng/L		8	30 - 150	34	50
Benzo[e]pyrene	ND		80.8	7.84	F	ng/L		10	37 - 105	22	50
Benzo[b]fluoranthene	ND		80.8	8.64	F	ng/L		11	30 - 150	17	50
Benzo(b)thiophene	ND		80.8	62.1		ng/L		77	30 - 150	4	50
Benzo[k]fluoranthene	ND		80.8	8.27	F	ng/L		10	30 - 150	21	50
Benzo[g,h,i]perylene	ND		80.8	2.96	J F	ng/L		4	30 - 150	12	50
Carbazole	ND		80.8	63.2		ng/L		78	30 - 150	1	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-14092-1 MSD
Matrix: Water
Analysis Batch: 62006

Client Sample ID: SLP10T-033011
Prep Type: Total/NA
Prep Batch: 60492

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	ND		80.8	36.9		ng/L		46	20 - 136	20	50
Dibenz(a,h)anthracene	ND		80.8	2.51	J F	ng/L		3	30 - 150	2	50
Dibenzofuran	ND		80.8	58.3		ng/L		72	30 - 150	5	50
Dibenzothiophene	ND		80.8	62.5		ng/L		77	30 - 150	5	50
Fluoranthene	ND		80.8	56.0		ng/L		69	30 - 150	5	50
Fluorene	ND		80.8	60.6		ng/L		75	34 - 96	4	50
Indene	ND		80.8	64.2		ng/L		79	22 - 86	5	50
Indole	ND		80.8	59.3		ng/L		73	30 - 150	3	50
Indeno[1,2,3-cd]pyrene	ND		80.8	2.79	J F	ng/L		3	30 - 150	4	50
Naphthalene	ND		80.8	65.4		ng/L		81	27 - 95	3	50
Perylene	ND		80.8	7.85	F	ng/L		10	30 - 150	22	50
Phenanthrene	ND		80.8	59.0		ng/L		73	30 - 150	4	50
Pyrene	1.0	J B	80.8	59.0		ng/L		72	30 - 150	5	50
Quinoline	ND		80.8	38.9		ng/L		48	20 - 112	19	50
7,12-Dimethylbenz(a)anthracene	ND		80.8	52.6		ng/L		65	30 - 150	0	50
Biphenyl	ND		80.8	61.1		ng/L		76	30 - 150	6	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*73*		*23 - 84*
Chrysene-d12 (Surr)	*43*		*28 - 101*
Naphthalene-d8 (Surr)	*79*		*22 - 97*

QC Association Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

GC/MS Semi VOA

Prep Batch: 60492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-14092-1	SLP10T-033011	Total/NA	Water	3520C	
280-14092-1 MS	SLP10T-033011	Total/NA	Water	3520C	
280-14092-1 MSD	SLP10T-033011	Total/NA	Water	3520C	
280-14092-2	SLP10TD-033011	Total/NA	Water	3520C	
280-14092-3	SLP10TFB-033011	Total/NA	Water	3520C	
280-14092-4	SLP10TFBD-033011	Total/NA	Water	3520C	
280-14092-5	SLP6-033011	Total/NA	Water	3520C	
280-14092-6	W48-033011	Total/NA	Water	3520C	
LCS 280-60492/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-60492/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 62006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-14092-1	SLP10T-033011	Total/NA	Water	8270C	60492
280-14092-1 MS	SLP10T-033011	Total/NA	Water	8270C	60492
280-14092-1 MSD	SLP10T-033011	Total/NA	Water	8270C	60492
280-14092-2	SLP10TD-033011	Total/NA	Water	8270C	60492
280-14092-3	SLP10TFB-033011	Total/NA	Water	8270C	60492
LCS 280-60492/2-A	Lab Control Sample	Total/NA	Water	8270C	60492
MB 280-60492/1-A	Method Blank	Total/NA	Water	8270C	60492

Analysis Batch: 62069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-14092-4	SLP10TFBD-033011	Total/NA	Water	8270C	60492
280-14092-5	SLP6-033011	Total/NA	Water	8270C	60492
280-14092-6	W48-033011	Total/NA	Water	8270C	60492

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Client Sample ID: SLP10T-033011
Lab Sample ID: 280-14092-1
Date Collected: 03/30/11 08:30
Matrix: Water
Date Received: 03/31/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4199.0	1000 uL	60492	04/02/11 13:45	TJA	TAL DEN
Total/NA	Analysis	8270C		1			62006	04/12/11 19:06	DPI	TAL DEN

Client Sample ID: SLP10TD-033011
Lab Sample ID: 280-14092-2
Date Collected: 03/30/11 08:35
Matrix: Water
Date Received: 03/31/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3784.1	1000 uL	60492	04/02/11 13:45	TJA	TAL DEN
Total/NA	Analysis	8270C		1			62006	04/12/11 20:49	DPI	TAL DEN

Client Sample ID: SLP10TFB-033011
Lab Sample ID: 280-14092-3
Date Collected: 03/30/11 08:20
Matrix: Water
Date Received: 03/31/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3714.0	1000 uL	60492	04/02/11 13:45	TJA	TAL DEN
Total/NA	Analysis	8270C		1			62006	04/12/11 21:23	DPI	TAL DEN

Client Sample ID: SLP10TFBD-033011
Lab Sample ID: 280-14092-4
Date Collected: 03/30/11 08:25
Matrix: Water
Date Received: 03/31/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3989.9	1000 uL	60492	04/02/11 13:45	TJA	TAL DEN
Total/NA	Analysis	8270C		1			62069	04/13/11 10:03	DPI	TAL DEN

Client Sample ID: SLP6-033011
Lab Sample ID: 280-14092-5
Date Collected: 03/30/11 09:50
Matrix: Water
Date Received: 03/31/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3962.8	1000 uL	60492	04/02/11 13:45	TJA	TAL DEN
Total/NA	Analysis	8270C		1			62069	04/13/11 08:55	DPI	TAL DEN

Client Sample ID: W48-033011
Lab Sample ID: 280-14092-6
Date Collected: 03/30/11 11:00
Matrix: Water
Date Received: 03/31/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3968.2	1000 uL	60492	04/02/11 13:45	TJA	TAL DEN
Total/NA	Analysis	8270C		1			62069	04/13/11 09:29	DPI	TAL DEN

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	40730
TestAmerica Denver	Alaska	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAC	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAC	7	E-10166
TestAmerica Denver	Louisiana	NELAC	6	30785
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAC	1	205310
TestAmerica Denver	New Jersey	NELAC	2	CO004
TestAmerica Denver	New Mexico	State Program	6	N/A
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina	North Carolina DENR	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Tennessee	State Program	4	TN02944
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

3.4, 3.6, 3.8, 2.1
1.4, 2.6 FP
NP 3/31

Sampler ID _____
Temperature on Receipt _____
Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client	Project Manager	Date	Chain of Custody Number
City of St. Louis Park	Scott Anderson	3/30/11	139425
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
7305 Oxford	952-924-2557		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
St. Louis Park / MN / 55426	Dan Phelps	Lisa U.	
Project Name and Location (State)	**Carrier/Waybill Number**		
Reilly Site / MN	FedEx		
Contract/Purchase Order/Quote No.			
60145681			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PAH PPL-S
SLP10T-033011	3/30/11	0830		X			6						X
SLP10TD-033011		0835											
SLP10TFB-033011		0820											
SLP10TFBD-033011		0825											
SLP10TMS-033011		0840											
SLP10TMSD-033011		0845											
SLP6-033011		0950											
W48-033011		1100											

Special Instructions/ Conditions of Receipt

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5DD

QC Requirements (Specify)

	Date	Time
1. Relinquished By	3/30/11	1500
2. Relinquished By		
3. Relinquished By		

	Date	Time
1. Received By	3/31/11	0900
2. Received By		
3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-14092-1

Login Number: 14092

List Source: TestAmerica Denver

List Number: 1

Creator: Paulsen, Lindsay T

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Detection Limit Exceptions Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-14092-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8270C	Water	2,3-Benzofuran	ng/L	5.4	20
8270C	Water	2,3-Dihydroindene	ng/L	5.0	20
8270C	Water	1-Methylnaphthalene	ng/L	5.6	20
8270C	Water	2-Methylnaphthalene	ng/L	5.9	20
8270C	Water	Acenaphthene	ng/L	5.7	20
8270C	Water	Acenaphthylene	ng/L	4.8	20
8270C	Water	Acridine	ng/L	6.5	20
8270C	Water	Anthracene	ng/L	4.2	20
8270C	Water	Benzo[a]anthracene	ng/L	4.3	20
8270C	Water	Benzo[a]pyrene	ng/L	2.5	20
8270C	Water	Benzo[e]pyrene	ng/L	4.3	20
8270C	Water	Benzo[b]fluoranthene	ng/L	4.7	20
8270C	Water	Benzo(b)thiophene	ng/L	5.2	20
8270C	Water	Benzo[k]fluoranthene	ng/L	4.1	20
8270C	Water	Benzo[g,h,i]perylene	ng/L	6.2	20
8270C	Water	Carbazole	ng/L	3.8	20
8270C	Water	Chrysene	ng/L	5.6	20
8270C	Water	Dibenz(a,h)anthracene	ng/L	5.9	20
8270C	Water	Dibenzofuran	ng/L	5.7	20
8270C	Water	Dibenzothiophene	ng/L	4.1	20
8270C	Water	Fluoranthene	ng/L	4.6	20
8270C	Water	Fluorene	ng/L	4.1	20
8270C	Water	Indene	ng/L	4.7	20
8270C	Water	Indole	ng/L	4.7	20
8270C	Water	Indeno[1,2,3-cd]pyrene	ng/L	5.4	20
8270C	Water	Naphthalene	ng/L	8.6	20
8270C	Water	Perylene	ng/L	3.8	20
8270C	Water	Phenanthrene	ng/L	6.3	20
8270C	Water	Pyrene	ng/L	4.2	20
8270C	Water	Quinoline	ng/L	9.0	20
8270C	Water	Biphenyl	ng/L	5.6	20

DATA VALIDATION

FOR

GROUNDWATER and GAC TREATMENT SYSTEM MONITORING
REILLY N.P.L. SITE
SAINT LOUIS PARK, MINNESOTTA

ORGANIC ANALYSIS DATA
PAHs in Water
Laboratory Job No. 280-14092-1

Analyses Performed

By:

Test America Denver
Arvada, Colorado

For:

Summit Envirosolutions, Inc.
1217 Bandana Boulevard North
St. Paul, Minnesota 55108

Data Validation By:

ddms, inc.
St. Paul, Minnesota

March 14, 2012

EXECUTIVE SUMMARY

Validation of the semivolatile organics analysis data prepared by Test America for four aqueous samples and two field blanks from the Reilly N.P.L. Site has been completed by ddms, inc. (ddms). The data were reported by the laboratory under Job No. 280-14092-1 in a single data package. The following samples were reported:

SLP10T-033011	SLP10TD-033011	SLP10TFB-033011
SLP10TFBD-033011	SLP6-033011	W48-033011

Based on the validation effort, all results were determined to be valid as reported, with the following exceptions:

- Results for acridine, benzo[a]pyrene, benzo[e]pyrene, benzo[b]fluoranthene benzo[k]fluoranthene, benzo[g,h,i]perylene, dibenz[a,h]anthracene, indeno[1,2,3-cd]pyrene, and perylene in all field samples were qualified as estimated low (L) for detects and rejected (R) for non-detects.

- Results for pyrene in samples SLP10T-033011, SLP6-033011, and W48-033011, 2,3-dihydroindene in samples SLP10T-033011, SLP10TD-033011, and W48-033011, 1-methylnaphthalene in samples SLP6-033011 and W48-033011, and 2-methylnaphthalene and naphthalene in sample W48-033011 were qualified as not detected (U) at the reporting limit or reported concentration, whichever is greater.

- Results for acridine in all samples are qualified as estimated low (L, UJ).

Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report. Brief explanations of the reasons for the actions taken above can be found in Section XIII.

Documentation issues are discussed in Section XII.

This report should be considered part of the data package for all future distributions of the semivolatiles data.

INTRODUCTION

Analyses were performed in accordance with USEPA Method 8270C SIM. This methodology does not stipulate a reporting format, however, upon request the laboratory provided a "CLP-type" data package. ddms' review was performed in accordance with the EPA's Region 5 Document "Standard Operating Procedure For Data Review Of Semivolatile Organic Compound Analysis By Gas Chromatography/Mass Spectrometry (GC/MS); CRL Method GEN010 / Version 9.0" and the Quality Assurance Project Plan (QAPP) for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly N.P.L. Site, St. Louis Park, Minnesota" June 2010. Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the referenced methods. An initial assumption is that the data package is presented in accordance with the CLP requirements (or "CLP-like," as in this case). It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the EPA Region 5 document as follows:

U = The compound was analyzed for, but was not detected above the reported sample quantitation limit.

J = The compound was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

K = The identification of the compound is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value.

L = The identification of the compound is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.

MI = This flag applies when an compound has matrix interferences.

N = The analysis indicates the presence of an compound for which there is presumptive evidence to make a “tentative identification”.

NJ= The analysis indicates the presence of an compound that has been “tentatively identified” and the associated numerical value represent its approximate concentration.

UJ= The compound was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the compound in the sample.

R= The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence of absence of the compound cannot be verified.

Two facts should be noted by all data users. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the compound is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, **no concentration is guaranteed to be accurate even if all associated quality control is acceptable.** Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation and Sample Integrity

A copy of the applicable chain of custody (COC) record was included in the data package, documenting a sample collection date of March 30, 2011. The samples were shipped via Federal Express and received by the laboratory on March 31, 2011. The temperature of the coolers on receipt at the laboratory was noted on the COC and was acceptable (1.4 to 3.6^{o} C; criteria 4^{o} C $\pm$ 2^{o} C). All samples were extracted on April 2, 2011 which is within the 7 day holding time for aqueous samples. All sample extracts were analyzed on April 12 and 13, 2011, which is within the 40-day holding time for sample extracts.

II. GC/MS Instrument Performance Check

The samples were analyzed on one GC/MS system, identified as "MSS_X4". Two perfluorotributylamine (FC-43) instrument performance checks were run in association with these samples, representing each 12-hour period during which the samples or associated standards were analyzed. Both of the performance checks were documented and were acceptable.

III. Calibration

There were significantly more compounds in the standards than target compounds. Only the data supporting those compounds reported in the Form Is were reviewed by the validator. Documentation was provided for all of the compounds on which manual integration was performed. All manual integration appeared to have been appropriately performed.

A. Initial Calibration (IC)

One 7-point IC was performed on April 12, 2011 for all of the target compounds with the exception of pyrene with a 6-point IC. Documentation of all individual IC standards was provided by the laboratory and relative response factors (RRFs) as well as percent relative standard deviation (%RSD) values were correctly calculated and accurately reported. All reported RRF values were greater than the method-specific minimum acceptance criterion of 0.05, and all %RSD values were below the maximum acceptance limit of 30 percent as defined in the QAPP. An initial calibration verification standard was analyzed immediately after the IC. All percent difference (%D) values and RRFs were acceptable. It should be noted that the ICV contained only 21 of the 31 target compounds. No data were qualified on this basis.

B. Continuing Calibration (CC)

One CC standard was run on April 13, 2011 in support of all the target compounds. All %D results were within the acceptance limits (35%) as defined in the QAPP.

IV. Blanks

One laboratory method blank and two field blanks were analyzed in support of these samples. Pyrene was detected at (1.04 ng/L) in the method blank. 2,3-Dihydroindene, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene were detected in both field blanks at 0.96/1.0, 1.2/1.4, 3.5/3.4, and 5.5/6.2 ng/L respectively. Results for pyrene in samples SLP10T-033011, SLP6-033011, and W48-033011, 2,3-dihydroindene in samples SLP10T-033011, SLP10TD-033011, and W48-033011, 1-methylnaphthalene in samples SLP6-033011 and W48-033011, and 2-methylnaphthalene and naphthalene in sample W48-033011 were qualified as not detected (U) at the reporting limit or reported concentration, whichever is greater, due to sample concentrations detected within five-times the concentration found in the blank. No other target analytes were detected in the blanks.

V. Surrogate Compound Recovery

Recoveries of all of the surrogate compounds were correctly calculated, accurately reported, and within acceptance limits.

VI. Spike Analysis

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed on sample SLP10T-033011. Percent recoveries (%R) and RPD values were acceptable except as summarized below:

Compound	MS %R	MSD %R	RPD*	QC limits %R (RPD)	Action (Detects/Non-detects)
Acridine	14	0	NC	30-150 (25)	L/R
Benzo[a]pyrene	6	8	30	30-150 (25)	L/R
Benzo[e]pyrene	8	10	18	37-105 (25)	L/R
Benzo[b]fluoranthene	9	11	13	30-150 (25)	L/R
Benzo[k]fluoranthene	9	10	17	30-150 (25)	L/R
Benzo[g,h,i]perylene	3	4	8	30-150 (25)	L/R
Dibenz[a,h]anthracene	3	3	5	30-150 (25)	L/R
Indeno[1,2,3-cd]pyrene	3	3	0	30-150 (25)	L/R

Perylene	8	10	18	30-150 (25)	L/R

*based on amount recovered.

Results for acridine, benzo[a]pyrene, benzo[e]pyrene, benzo[b]fluoranthene benzo[k]fluoranthene, benzo[g,h,i]perylene, dibenz[a,h]anthracene, indeno[1,2,3-cd]pyrene, and perylene, in all field samples, were qualified as estimated low (L) for detects and rejected (R) for non-detects due to unacceptable MS/MSD recovery.

B. Laboratory Control Sample (LCS)

Results for one LCS were provided in the data package. All recoveries were acceptable with the exception of acridine (11% R; criteria 30-150 %R). Results for acridine in all samples are qualified as estimated low (L, UJ) due to unacceptable LCS recovery.

VII. Field Duplicate

Sample SLP10TD-033011 was collected as a field duplicate of sample SLP10T-033011 and sample SLP10TFBD-033011 was collected as a field duplicate of sample SLP10TFB-033011. All RPDs were within quality control limits (≤ 25% if both samples are >5X RL) for both field duplicate pairs.

VIII. Internal Standard Performance

All internal standard areas and retention times were within quality control limits for the applicable analyses.

IX. Target Compound Identification

Acceptable ion chromatograms were provided for each of the compounds detected in these samples.

X. Compound Quantitation and Reporting Limits (RL)

Target compound concentrations and reporting limits were correctly calculated and accurately reported for all samples with the exception of the reporting limit for pyrene. The reporting limit was equivalent to the concentration of the lowest calibration standard from the IC. The laboratory eliminated the low level standard from the IC for pyrene but did not adjust the reporting limit on the organic analysis report sheets. The actual reporting limit was calculated by the validator and replaced on the report sheets. The laboratory appropriately applied “J” qualifiers to concentrations that were less than

the reporting limit but greater than the method detection limit (MDL). All laboratory-reported MDLs were less than the project RL goals with the exception of acridine and perylene with the project RL goal at 6.2 and 3.3ng/L and the MDL at 6.5 and 3.8ng/L respectively.

XI. System Performance

The analytical system appears to have been working satisfactorily at the time of these analyses, based on evaluation of the available raw data.

XII. Documentation

The chain-of-custody record was present and accurately completed for the samples reported in this data package. The following documentation issues were observed:

- RPDs for could not be reproduced for the MS/MSD data,
- The RL for pyrene was reported incorrectly (section X).

The laboratory was contacted on February 29, 2012, regarding the MS/MSD RPD results. The issue was unresolved and the RPD results were recalculated by the validator. This will not affect the reported data but may become a problem at litigation.

XIII. Overall Assessment

Based on the validation effort, all results were determined to be valid as reported, with the following exceptions:

- Results for acridine, benzo[a]pyrene, benzo[e]pyrene, benzo[b]fluoranthene benzo[k]fluoranthene, benzo[g,h,i]perylene, dibenz[a,h]anthracene, indeno[1,2,3-cd]pyrene, and perylene in all field samples were qualified as estimated low (L) for detects and rejected (R) for non-detects due to unacceptable MS/MSD recovery.
- Results for pyrene in samples SLP10T-033011, SLP6-033011, and W48-033011, 2,3-dihydroindene in samples SLP10T-033011, SLP10TD-

033011, and W48-033011, 1-methylnaphthalene in samples SLP6-033011 and W48-033011, and 2-methylnaphthalene and naphthalene in sample W48-033011 were qualified as not detected (U) at the reporting limit or reported concentration, whichever is greater, due to sample concentrations detected within five-times the concentration found in the blank.

- Results for acridine in all samples were qualified as estimated low (L, UJ) due to unacceptable LCS recovery.

Documentation issues observed in the data package are described in Section XII.

This validation report should be considered part of the data package for all future distributions of the semivolatiles data.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

April 15, 2011

Bill Gregg
AECOM
First National Bank Building
332 Minnesota St, Suite E1000
Saint Paul, MN 55101

RE: Project: SLP Reilly
Pace Project No.: 10153123

Dear Bill Gregg:
Enclosed are the analytical results for sample(s) received by the laboratory on March 30, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Carol Davy

carol.davy@pacelabs.com
Project Manager

Enclosures

cc: Andrew Tarara, AECOM

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: SLP Reilly
Pace Project No.: 10153123

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Idaho Certification #: MN00064
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New Mexico Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: D9921
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Washington Certification #: C754
Wisconsin Certification #: 999407970

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: SLP Reilly
Pace Project No.: 10153123

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10153123001	**W420-033011**	Water	03/30/11 10:20	03/30/11 12:12
10153123002	**W420D-033011**	Water	03/30/11 10:25	03/30/11 12:12
10153123005	**W420FB-033011**	Water	03/30/11 10:10	03/30/11 12:12
10153123006	**W420FBD-033011**	Water	03/30/11 10:15	03/30/11 12:12
10153123007	**W421-033011**	Water	03/30/11 10:40	03/30/11 12:12

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: SLP Reilly
Pace Project No.: 10153123

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10153123001	**W420-033011**	EPA 8270 by SIM	DRE	18
10153123002	**W420D-033011**	EPA 8270 by SIM	DRE	18
10153123005	**W420FB-033011**	EPA 8270 by SIM	DRE	18
10153123006	**W420FBD-033011**	EPA 8270 by SIM	DRE	18
10153123007	**W421-033011**	EPA 8270 by SIM	DRE	18

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: SLP Reilly
Pace Project No.: 10153123

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: April 15, 2011

General Information:
5 samples were analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/15164

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10153123001,10153287001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 951695)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Fluoranthene
  - Fluorene
  - Naphthalene
  - Phenanthrene
- MSD (Lab ID: 951696)
  - Acenaphthene
  - Acenaphthylene

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: SLP Reilly
Pace Project No.: 10153123

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: April 15, 2011

QC Batch: OEXT/15164

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10153123001,10153287001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- Fluoranthene
- Fluorene
- Naphthalene
- Phenanthrene
- Pyrene

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/15164

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 951695)
  - Naphthalene
- MSD (Lab ID: 951696)
  - Naphthalene

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10153123

Sample: W420-033011 **Lab ID: 10153123001** Collected: 03/30/11 10:20 Received: 03/30/11 12:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**120**	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	83-32-9	M6
Acenaphthylene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	208-96-8	M6
Anthracene	**2.7J**	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	120-12-7	M6
Benzo(a)anthracene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	56-55-3	
Benzo(a)pyrene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	207-08-9	
Chrysene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	53-70-3	
Fluoranthene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	206-44-0	M6
Fluorene	**43.3**	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	86-73-7	M6
Indeno(1,2,3-cd)pyrene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	193-39-5	
Naphthalene	**2080**	ug/L	20.3	10.2	500	04/01/11 09:07	04/15/11 11:33	91-20-3	M6
Phenanthrene	**31.0**	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	85-01-8	M6
Pyrene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:37	129-00-0	M6
2-Fluorobiphenyl (S)	78	%	56-125		100	04/01/11 09:07	04/14/11 16:37	321-60-8	
Terphenyl-d14 (S)	77	%	58-125		100	04/01/11 09:07	04/14/11 16:37	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10153123

Sample: W420D-033011 **Lab ID: 10153123002** Collected: 03/30/11 10:25 Received: 03/30/11 12:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**117**	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	83-32-9	
Acenaphthylene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	208-96-8	
Anthracene	**2.4J**	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	120-12-7	
Benzo(a)anthracene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	56-55-3	
Benzo(a)pyrene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	207-08-9	
Chrysene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	53-70-3	
Fluoranthene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	206-44-0	
Fluorene	**42.8**	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	193-39-5	
Naphthalene	**1790**	ug/L	20.4	10.2	500	04/01/11 09:07	04/15/11 11:14	91-20-3	
Phenanthrene	**31.0**	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	85-01-8	
Pyrene	ND	ug/L	4.1	2.0	100	04/01/11 09:07	04/14/11 16:56	129-00-0	
2-Fluorobiphenyl (S)	76	%	56-125		100	04/01/11 09:07	04/14/11 16:56	321-60-8	
Terphenyl-d14 (S)	80	%	58-125		100	04/01/11 09:07	04/14/11 16:56	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10153123

Sample: W420FB-033011 **Lab ID: 10153123005** Collected: 03/30/11 10:10 Received: 03/30/11 12:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	208-96-8	
Anthracene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	207-08-9	
Chrysene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	53-70-3	
Fluoranthene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	206-44-0	
Fluorene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	193-39-5	
Naphthalene	**0.031J**	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	85-01-8	
Pyrene	ND	ug/L	0.041	0.021	1	04/01/11 09:07	04/13/11 15:07	129-00-0	
2-Fluorobiphenyl (S)	74	%	56-125		1	04/01/11 09:07	04/13/11 15:07	321-60-8	
Terphenyl-d14 (S)	93	%	58-125		1	04/01/11 09:07	04/13/11 15:07	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10153123

Sample: W420FBD-033011 **Lab ID: 10153123006** Collected: 03/30/11 10:15 Received: 03/30/11 12:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	04/01/11 09:07	04/13/11 14:47	129-00-0	
2-Fluorobiphenyl (S)	79	%	56-125		1	04/01/11 09:07	04/13/11 14:47	321-60-8	
Terphenyl-d14 (S)	90	%	58-125		1	04/01/11 09:07	04/13/11 14:47	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10153123

Sample: W421-033011 **Lab ID: 10153123007** Collected: 03/30/11 10:40 Received: 03/30/11 12:12 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**118**	ug/L	4.1	2.0	100	04/01/11 09:07	04/15/11 16:26	83-32-9	
Acenaphthylene	**1.6**	ug/L	0.041	0.020	1	04/01/11 09:07	04/13/11 14:28	208-96-8	
Anthracene	**19.5**	ug/L	0.41	0.20	10	04/01/11 09:07	04/15/11 15:27	120-12-7	
Benzo(a)anthracene	**15.6**	ug/L	0.41	0.20	10	04/01/11 09:07	04/15/11 15:27	56-55-3	
Benzo(a)pyrene	**9.6**	ug/L	0.41	0.20	10	04/01/11 09:07	04/15/11 15:27	50-32-8	
Benzo(b)fluoranthene	**14.1**	ug/L	0.41	0.20	10	04/01/11 09:07	04/15/11 15:27	205-99-2	
Benzo(g,h,i)perylene	**4.5**	ug/L	0.041	0.020	1	04/01/11 09:07	04/13/11 14:28	191-24-2	
Benzo(k)fluoranthene	**4.9**	ug/L	0.041	0.020	1	04/01/11 09:07	04/13/11 14:28	207-08-9	
Chrysene	**10.8**	ug/L	0.41	0.20	10	04/01/11 09:07	04/15/11 15:27	218-01-9	
Dibenz(a,h)anthracene	**1.6**	ug/L	0.041	0.020	1	04/01/11 09:07	04/13/11 14:28	53-70-3	
Fluoranthene	**68.5**	ug/L	0.41	0.20	10	04/01/11 09:07	04/15/11 15:27	206-44-0	
Fluorene	**74.8**	ug/L	0.41	0.20	10	04/01/11 09:07	04/15/11 15:27	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.1**	ug/L	0.041	0.020	1	04/01/11 09:07	04/13/11 14:28	193-39-5	
Naphthalene	**260**	ug/L	4.1	2.0	100	04/01/11 09:07	04/15/11 16:26	91-20-3	
Phenanthrene	**140**	ug/L	4.1	2.0	100	04/01/11 09:07	04/15/11 16:26	85-01-8	
Pyrene	**50.1**	ug/L	0.41	0.20	10	04/01/11 09:07	04/15/11 15:27	129-00-0	
2-Fluorobiphenyl (S)	77	%	56-125		1	04/01/11 09:07	04/13/11 14:28	321-60-8	
Terphenyl-d14 (S)	76	%	58-125		1	04/01/11 09:07	04/13/11 14:28	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: SLP Reilly
Pace Project No.: 10153123

QC Batch: OEXT/15164 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10153123001, 10153123002, 10153123005, 10153123006, 10153123007

METHOD BLANK: 951691 Matrix: Water
Associated Lab Samples: 10153123001, 10153123002, 10153123005, 10153123006, 10153123007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	04/04/11 16:22	
Acenaphthylene	ug/L	ND	0.040	04/04/11 16:22	
Anthracene	ug/L	ND	0.040	04/04/11 16:22	
Benzo(a)anthracene	ug/L	ND	0.040	04/04/11 16:22	
Benzo(a)pyrene	ug/L	ND	0.040	04/04/11 16:22	
Benzo(b)fluoranthene	ug/L	ND	0.040	04/04/11 16:22	
Benzo(g,h,i)perylene	ug/L	ND	0.040	04/04/11 16:22	
Benzo(k)fluoranthene	ug/L	ND	0.040	04/04/11 16:22	
Chrysene	ug/L	ND	0.040	04/04/11 16:22	
Dibenz(a,h)anthracene	ug/L	ND	0.040	04/04/11 16:22	
Fluoranthene	ug/L	ND	0.040	04/04/11 16:22	
Fluorene	ug/L	ND	0.040	04/04/11 16:22	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	04/04/11 16:22	
Naphthalene	ug/L	ND	0.040	04/04/11 16:22	
Phenanthrene	ug/L	ND	0.040	04/04/11 16:22	
Pyrene	ug/L	ND	0.040	04/04/11 16:22	
2-Fluorobiphenyl (S)	%	94	56-125	04/04/11 16:22	
Terphenyl-d14 (S)	%	93	58-125	04/04/11 16:22	

LABORATORY CONTROL SAMPLE: 951692

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.68	68	56-125	
Acenaphthylene	ug/L	1	0.64	64	55-125	
Anthracene	ug/L	1	0.78	78	62-125	
Benzo(a)anthracene	ug/L	1	0.78	78	56-125	
Benzo(a)pyrene	ug/L	1	0.85	85	64-125	
Benzo(b)fluoranthene	ug/L	1	0.90	90	53-125	
Benzo(g,h,i)perylene	ug/L	1	0.82	82	38-125	
Benzo(k)fluoranthene	ug/L	1	0.77	77	59-125	
Chrysene	ug/L	1	0.77	77	64-125	
Dibenz(a,h)anthracene	ug/L	1	0.79	79	40-125	
Fluoranthene	ug/L	1	0.78	78	60-125	
Fluorene	ug/L	1	0.71	71	59-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.80	80	42-125	
Naphthalene	ug/L	1	0.77	77	52-125	
Phenanthrene	ug/L	1	0.76	76	54-125	
Pyrene	ug/L	1	0.80	80	66-125	
2-Fluorobiphenyl (S)	%			75	56-125	
Terphenyl-d14 (S)	%			90	58-125	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: SLP Reilly
Pace Project No.: 10153123

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 951695 951696

Parameter	Units	10153123001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	120	1	1	112	129	-773	941	46-125	14	30	M6
Acenaphthylene	ug/L	ND	1	1	ND	ND	145	156	46-125		30	M6
Anthracene	ug/L	2.7J	1	1	2.8J	3.3J	7	62	48-125		30	M6
Benzo(a)anthracene	ug/L	ND	1	1	ND	ND	113	122	47-125		30	
Benzo(a)pyrene	ug/L	ND	1	1	ND	ND	76	83	59-125		30	
Benzo(b)fluoranthene	ug/L	ND	1	1	ND	ND	62	86	40-125		30	
Benzo(g,h,i)perylene	ug/L	ND	1	1	ND	ND	68	87	38-125		30	
Benzo(k)fluoranthene	ug/L	ND	1	1	ND	ND	77	77	46-125		30	
Chrysene	ug/L	ND	1	1	ND	ND	79	88	56-125		30	
Dibenz(a,h)anthracene	ug/L	ND	1	1	ND	ND	71	76	30-125		30	
Fluoranthene	ug/L	ND	1	1	ND	2.0J	162	196	46-125		30	M6
Fluorene	ug/L	43.3	1	1	42.1	48.7	-118	540	48-125	15	30	M6
Indeno(1,2,3-cd)pyrene	ug/L	ND	1	1	ND	ND	68	77	32-125		30	
Naphthalene	ug/L	2080	1	1	1610	1870	-46200	-20300	44-125	15	30	E,M6
Phenanthrene	ug/L	31.0	1	1	29.8	33.7	-113	272	47-125	12	30	M6
Pyrene	ug/L	ND	1	1	ND	ND	114	133	55-125		30	M6
2-Fluorobiphenyl (S)	%						77	84	56-125			
Terphenyl-d14 (S)	%						74	81	58-125			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 951915 951916

Parameter	Units	10153287001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	1	1	0.73	0.78	72	76	46-125	6	30	
Acenaphthylene	ug/L	ND	1	1	0.72	0.76	71	73	46-125	5	30	
Anthracene	ug/L	ND	1	1	0.75	0.77	73	74	48-125	2	30	
Benzo(a)anthracene	ug/L	ND	1	1	0.77	0.83	75	80	47-125	7	30	
Benzo(a)pyrene	ug/L	ND	1	1	0.86	0.91	84	88	59-125	6	30	
Benzo(b)fluoranthene	ug/L	ND	1	1	0.88	0.95	86	92	40-125	8	30	
Benzo(g,h,i)perylene	ug/L	ND	1	1	0.80	0.85	78	82	38-125	6	30	
Benzo(k)fluoranthene	ug/L	ND	1	1	0.70	0.83	69	80	46-125	16	30	
Chrysene	ug/L	ND	1	1	0.78	0.84	76	81	56-125	8	30	
Dibenz(a,h)anthracene	ug/L	ND	1	1	0.79	0.84	78	81	30-125	6	30	
Fluoranthene	ug/L	ND	1	1	0.76	0.82	75	79	46-125	7	30	
Fluorene	ug/L	ND	1	1	0.75	0.80	74	78	48-125	6	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	1	1	0.79	0.85	77	82	32-125	7	30	
Naphthalene	ug/L	ND	1	1	0.73	0.78	71	76	44-125	7	30	
Phenanthrene	ug/L	ND	1	1	0.73	0.78	72	75	47-125	6	30	
Pyrene	ug/L	ND	1	1	0.78	0.83	77	81	55-125	6	30	
2-Fluorobiphenyl (S)	%						87	89	56-125			
Terphenyl-d14 (S)	%						90	94	58-125			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: SLP Reilly
Pace Project No.: 10153123

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

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.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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 NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

WORKORDER QUALIFIERS

WO: 10153123

[1]	Samples were received outside of the recommended temperature range of 0-6 degrees Celsius. The samples were received from the field on ice, indicating the cool down process had begun.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SLP Reilly
Pace Project No.: 10153123

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10153123001	**W420-033011**	EPA 3510	OEXT/15164	EPA 8270 by SIM	MSSV/6448
10153123002	**W420D-033011**	EPA 3510	OEXT/15164	EPA 8270 by SIM	MSSV/6448
10153123005	**W420FB-033011**	EPA 3510	OEXT/15164	EPA 8270 by SIM	MSSV/6448
10153123006	**W420FBD-033011**	EPA 3510	OEXT/15164	EPA 8270 by SIM	MSSV/6448
10153123007	**W421-033011**	EPA 3510	OEXT/15164	EPA 8270 by SIM	MSSV/6448

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10153123

Page: 1 of 1

1444560

Section A Required Client Information:

Company: AECOM
Address: 332 Minnesota Street
St. Paul MN
Email To: bill.gregg@aecom.com
Phone: 651-367-2308 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Bill Gregg
Copy To: Drew Tarara
Purchase Order No.:
Project Name: SLP Reilly
Project Number:

Section C Invoice Information:

Attention: Bill Gregg
Company Name: AECOM
Address:
Pace Quote Reference:
Pace Project Manager: Carol Davy
Pace Profile #: 22562

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MN

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: PAH SIM*	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	W420-033011	WT	G			3/30/11	1020		2	2									X		001
2	W420D-033011	"	"			"	1025		"	"									"		002
3	W420MS-033011	"	"			"	1030		"	"									"		003
4	W420MSD-033011	"	"			"	1035		"	"									"		004
5	W420FB-033011	"	"			"	1010		"	"									"		005
6	W420FBD-033011	"	"			"	1015		"	"									"		006
7	W421-033011	"	"			"	1040		"	"									"		007
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
* 16 Compound list	AECOM	3/30/11	1212		3/30/11	1202	5.4	y	N	y
AECOM Equis EDD Needed							9.6			
Email to: sulborski@aecom.com										

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dan Phelps
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 3/30/11

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Sample Condition Upon Receipt

Pace Analytical

Client Name: AECOM **Project #** _____

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals Intact: ☐ yes ☒ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____ Temp Blank: Yes ☒ No _____

Thermometer Used 80344042 or 179425 **Type of Ice:** Wet Blue None ☒ Samples on ice, cooling process has begun

Cooler Temperature 5.4 ; 9.6 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and initials of person examining contents: 3-30-11 WS

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: WT		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl Samp #
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☒No	Initial when completed / 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: _____ **Date:** 3-30-11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR.

Pace Analytical Services, Inc.
1700 Elm Street SE, Suite 200, Minneapolis, MN 55414

Data Quality Assessment Memorandum

Date: December 7, 2011

To: Bill Gregg

From: Drew Tarara

Subject: Data Quality Assessment
Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 10153123
Appendix B

Distribution: File 60145681 File

SUMMARY

A data quality assessment (DQA) was performed on the data for the analysis of three aqueous samples and two field blanks for Low Level part per billion (ppb) polynuclear aromatic hydrocarbons (PAHs) by SW-846 method 8270C by Select Ion Monitoring (SIM). The samples were collected on March 30, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to Pace Analytical Services (Pace) in Minneapolis, MN for analysis. Pace processed and reported the results under lot number 10153123.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes. No data were rejected.

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
W420-033011	W420FBD-033011
W420D-033011	W421-033011
W420FB-033011	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

The two cooler temperatures (5.4 and 9.6°C) as measured upon sample receipt exceeded the acceptance criteria of 4± 2°C. The samples were delivered to the lab from the field on ice and had begun the cool down process. No actions were taken.

Laboratory Blanks/Field Blanks

Target compounds were not detected in the laboratory method blank or in the field blank duplicate (W420FBD-033011)

The following compounds were detected in the aqueous field blanks. No validation actions were necessary since these results were for informational purposes only.

W420FB-033011	
Compound	**Concentration (µg/L)**
Naphthalene	.031

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on sample W420MS-033011 and W420MSD-033011 from this data set. All target analytes were spiked. All percent recoveries (%Rs) and relative percent differences (RPDs) were within the QAPP QC acceptance criteria except for 8 compounds. The recoveries for these compounds were not evaluated due to the dilutions required to run the samples. No actions were taken.

LCS Results

All target analytes were spiked. The %Rs were within the QAPP QC acceptance criteria for the LCS analyses.

Field Duplicate Results

Samples W420-033011 and W420D-033011 was the field duplicate pair analyzed with this data set.

The results for the detected compounds in samples W420-033011 and W420D-033011 and their RPDs are tabulated below.

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

Compound	W420-033011 (µg/L)	W420D-033011 (µg/L)	RPD
Acenaphthene	120	117	2.5
Anthracene	2.7	2.4	11.8
Fluorene	43.3	42.8	1.2
Naphthalene	2080	1790	15.0
Phenanthrene	31	31	0
Criteria: Aqueous RPD ≤ 30, if both sample and duplicate results are > 5x SQL. The RPD criterion is doubled if both sample and duplicate results are <5x SQL.			

Sample Quantitation/Detection Limit Results

Sample calculations were spot checked. No discrepancies were noted.

The following samples were analyzed at dilutions due to the concentration of target analytes in the undiluted analyses.

Sample ID	Dilution	Reason
W420-033011	100x and 500x	100x for all compounds and 500x for naphthalene
W420D-033011	100x and 500x	100x for all compounds and 500x for naphthalene
W421-033011	Undiluted,10x, and 100x	10x for 8 compounds and 100x for acenaphthene, naphthalene, and phenanthrene.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-16691-1
Client Project/Site: CSLP - Reilly Tar & Chemical

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, Minnesota 55426

Attn: Scott Anderson

Authorized for release by:
07/01/2011 01:57:09 PM

Lisa Uriell
Project Manager I
lisa.uriell@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Table of Contents

Job ID: 280-16691-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-16691-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
Nine samples were received under chain of custody on June 8, 2011. The samples were received at temperatures of 2.6°C, 3.0°C, 1.6°C, 2.2°C, 2.4°C, 2.8°C, 1.2°C and 4.0°C. All sample containers were received in acceptable condition.

No anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Samples SLP10FEED-060711 (280-16691-8) and W23-060711 (280-16691-9) were analyzed at two different dilutions to obtain all target analytes within the linear calibration range. Reporting limits were adjusted accordingly. Surrogate recoveries could not be calculated for the analysis performed at a dilution, because the extracts were diluted beyond the ability to quantitate recoveries.

Surrogate Chrysene-d12 was recovered below the QC control limits (28-101%) in the following samples as detailed below. Matrix interference was not obvious. Upon re-aliquoting and reanalyzing, the surrogate recovery outlier was still present. Re-extraction was not possible due to insufficient remaining sample volume; therefore, the data is reported as is.

E2-060711 (280-16691-1) recovered Chrysene-d12 at 16%
E15-060711 (280-16691-7) recovered Chrysene-d12 at 19%
W23-060711 (280-16691-9) recovered Chrysene-d12 at 16%

Low levels of 1-Methylnaphthalene, 2-Methylnaphthalene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[g,h,i]perylene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Indeno[1,2,3-cd]pyrene, Naphthalene and Pyrene are present in the method blank associated with prep batch 280-71519. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”. Usability of the sample data is not compromised.

Surrogate Fluorene-d10 was recovered slightly below the QC control limits (23-84%) in the method blank associated with prep batch 280-71519 at 22%. All associated samples recovered surrogate Fluorene-d10 100% in control. Re-extraction was not possible due to insufficient remaining sample volume; therefore, the data is reported as is.

The LCS associated with prep batch 280-71519 exhibited the percent recovery below the QC control limits for Acridine at 19% (limits 30-150%). The LCS was re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have

Job ID: 280-16691-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

been flagged with "*".

The MS/MSD associated with prep batch 280-71519 was performed using sample E13-060711 (280-16691-3), as requested. MS/MSD exhibited 9 of the 33 Matrix Spike compound recoveries outside the control limits. MS/MSD exhibited 12 of the 33 Matrix Spike Duplicate compound recoveries outside the control limits. The MS/MSD exhibited 5 of the 33 Relative Percent Difference (RPD) data outside the control limits. The MS/MSD exhibited percent recoveries and/or RPD data outside the control limits for the compounds listed below. Details of the specific analyte recoveries can found in the Matrix Spike Sample Recovery and Data Reports.

1-Methylnaphthalene	2-Methylnaphthalene	Acridine
Benzo[a]pyrene	Benzo[e]pyrene	Benzo[b]fluoranthene
Benzo[k]fluoranthene	Benzo[ghi]perylene	Dibenzo(a,h)pyrene
Indeno[1,2,3-cd]pyrene	Naphthalene	Perylene
Biphenyl		

No other anomalies were noted.

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION
JOB: 280-16691-1
ANALYSIS: SW846-8270C SIM

QC Parameter	Data Planned	Valid Data Obtained
Method Blank	31	31
MB Surrogates	3	2
LCS	7	7
LCS Surrogates	3	3
FB/FBD	62	62
MS	7	6
MS Surrogates	3	3
MSD	7	4
MSD Surrogates	3	3
MS/MSD RPD	7	5
Sample/Dup. RPD	31	31
Sample Surrogates	27	24
Samples and QC Internal Standard Area	39	39
TOTAL	**230**	**220**
% Completeness	**95.7%**	

Sample Duplicate Calculation for Method 8270C SIM

Sample Duplicate RPD					
JOB 280-16691-1					
Sample: E13-060711		**DUP: E13D-060711**			
Compound	**Result**	**Compound**	**Result**	**RPD**	**RPD>50%**
Acenaphthene	120	Acenaphthene	110	8.7	
Acenaphthylene	9.6	Acenaphthylene	9.2	4.3	
Acridine	ND	Acridine	ND	0.0	
Anthracene	ND	Anthracene	ND	0.0	
Benzo(a)anthracene	ND	Benzo(a)anthracene	ND	0.0	
Benzo(b)fluoranthene	ND	Benzo(b)fluoranthene	ND	0.0	
Benzo(k)fluoranthene	ND	Benzo(k)fluoranthene	ND	0.0	
2,3-Benzofuran	ND	2,3-Benzofuran	ND	0.0	
Benzo(ghi)perylene	ND	Benzo(ghi)perylene	ND	0.0	
Benzo(a)pyrene	ND	Benzo(a)pyrene	ND	0.0	
Benzo(e)pyrene	ND	Benzo(e)pyrene	ND	0.0	
Benzo(b)thiophene	ND	Benzo(b)thiophene	ND	0.0	
Biphenyl	ND	Biphenyl	ND	0.0	
Carbazole	ND	Carbazole	ND	0.0	
Chrysene	ND	Chrysene	ND	0.0	
Dibenz(a,h)anthracene	ND	Dibenz(a,h)anthracene	ND	0.0	
Dibenzofuran	ND	Dibenzofuran	ND	0.0	
Dibenzothiophene	3.0	Dibenzothiophene	2.8	6.9	
2,3-Dihydroindene	6.7	2,3-Dihydroindene	6.3	6.2	
Fluoranthene	2.4	Fluoranthene	2.0	18.2	
Fluorene	ND	Fluorene	ND	0.0	
Indene	ND	Indene	ND	0.0	
Indeno(1,2,3-cd)pyrene	ND	Indeno(1,2,3-cd)pyrene	ND	0.0	
Indole	ND	Indole	ND	0.0	
2-Methylnaphthalene	ND	2-Methylnaphthalene	ND	0.0	
1-Methylnaphthalene	ND	1-Methylnaphthalene	ND	0.0	
Naphthalene	2.3	Naphthalene	1.7	30.0	
Perylene	ND	Perylene	ND	0.0	
Phenanthrene	ND	Phenanthrene	ND	0.0	
Pyrene	10	Pyrene	9.3	7.3	
Quinoline	ND	Quinoline	ND	0.0	

RPD = Relative Percent Difference
ND = Compound not detected in the sample
p = RPD is outside of control limits
*NC = RPD not calculated, one positive result and one ND.
Considered acceptable if the positive result is less than 4x the RL.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
E	Result exceeded calibration range.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Detection Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E2-060711 — Lab Sample ID: 280-16691-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	1.1	J	4.8	0.67	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.5	J B	5.6	0.93	ng/L	1		8270C	Total/NA
Acenaphthene	0.74	J	5.4	0.48	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	0.84	J	5.0	0.71	ng/L	1		8270C	Total/NA
Naphthalene	2.8	J B	8.2	1.1	ng/L	1		8270C	Total/NA
Pyrene	2.2	J B	4.0	0.94	ng/L	1		8270C	Total/NA

Client Sample ID: E3-060711 — Lab Sample ID: 280-16691-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.1	J B	8.2	1.1	ng/L	1		8270C	Total/NA
Pyrene	1.4	J B	4.0	0.95	ng/L	1		8270C	Total/NA

Client Sample ID: E13-060711 — Lab Sample ID: 280-16691-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	6.7		4.8	0.67	ng/L	1		8270C	Total/NA
Acenaphthene	120		5.4	0.48	ng/L	1		8270C	Total/NA
Acenaphthylene	9.6		4.6	0.73	ng/L	1		8270C	Total/NA
Dibenzothiophene	3.0	J	3.9	0.93	ng/L	1		8270C	Total/NA
Fluoranthene	2.4	J B	4.4	1.6	ng/L	1		8270C	Total/NA
Naphthalene	2.3	J B	8.2	1.1	ng/L	1		8270C	Total/NA
Pyrene	10	B	4.0	0.94	ng/L	1		8270C	Total/NA

Client Sample ID: E13D-060711 — Lab Sample ID: 280-16691-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	6.3		4.8	0.67	ng/L	1		8270C	Total/NA
Acenaphthene	110		5.4	0.48	ng/L	1		8270C	Total/NA
Acenaphthylene	9.2		4.6	0.73	ng/L	1		8270C	Total/NA
Dibenzothiophene	2.8	J	3.9	0.93	ng/L	1		8270C	Total/NA
Fluoranthene	2.0	J B	4.4	1.6	ng/L	1		8270C	Total/NA
Naphthalene	1.7	J B	8.2	1.1	ng/L	1		8270C	Total/NA
Pyrene	9.3	B	4.0	0.94	ng/L	1		8270C	Total/NA

Client Sample ID: E13FB-060711 — Lab Sample ID: 280-16691-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.3	J B	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: E13FBD-060711 — Lab Sample ID: 280-16691-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.4	J B	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: E15-060711 — Lab Sample ID: 280-16691-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	0.69	J	4.8	0.67	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.4	J B	5.3	0.85	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	2.0	J B	5.6	0.94	ng/L	1		8270C	Total/NA
Acenaphthene	1.6	J	5.4	0.48	ng/L	1		8270C	Total/NA
Naphthalene	2.3	J B	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10FEED-060711 — Lab Sample ID: 280-16691-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	240		4.7	0.66	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	120	B	5.3	0.84	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.9	J B	5.6	0.93	ng/L	1		8270C	Total/NA
Acenaphthylene	20		4.5	0.73	ng/L	1		8270C	Total/NA
Anthracene	1.2	J	4.0	0.76	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	57		4.9	0.71	ng/L	1		8270C	Total/NA
Carbazole	19		3.6	0.68	ng/L	1		8270C	Total/NA
Dibenzofuran	25		5.4	0.94	ng/L	1		8270C	Total/NA
Dibenzothiophene	27		3.9	0.93	ng/L	1		8270C	Total/NA
Fluoranthene	53	B	4.4	1.6	ng/L	1		8270C	Total/NA
Fluorene	160		3.9	0.81	ng/L	1		8270C	Total/NA
Indene	41		4.5	3.1	ng/L	1		8270C	Total/NA
Naphthalene	6.2	J B	8.2	1.1	ng/L	1		8270C	Total/NA
Phenanthrene	9.7		6.0	3.0	ng/L	1		8270C	Total/NA
Pyrene	41	B	4.0	0.94	ng/L	1		8270C	Total/NA
Biphenyl	4.5	J	5.3	1.0	ng/L	1		8270C	Total/NA
Acenaphthene - DL	450		27	2.4	ng/L	5		8270C	Total/NA

Client Sample ID: W23-060711 — Lab Sample ID: 280-16691-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	2.1	J	5.1	0.65	ng/L	1		8270C	Total/NA
Acenaphthylene	120		4.6	0.73	ng/L	1		8270C	Total/NA
Acridine	200	*	6.2	6.2	ng/L	1		8270C	Total/NA
Anthracene	160		4.0	0.76	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	59	B	4.1	0.87	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	8.3		2.4	1.2	ng/L	1		8270C	Total/NA
Benzo[e]pyrene	5.0		4.1	1.1	ng/L	1		8270C	Total/NA
Benzo[b]fluoranthene	17	B	4.5	1.3	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	73		4.9	0.71	ng/L	1		8270C	Total/NA
Benzo[k]fluoranthene	17	B	3.9	1.2	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	1.8	J B	5.9	1.1	ng/L	1		8270C	Total/NA
Carbazole	130		3.6	0.68	ng/L	1		8270C	Total/NA
Chrysene	40	B	5.3	1.2	ng/L	1		8270C	Total/NA
Indene	43		4.5	3.1	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	1.3	J B	5.1	1.2	ng/L	1		8270C	Total/NA
2,3-Dihydroindene - DL	380		95	13	ng/L	20		8270C	Total/NA
1-Methylnaphthalene - DL	960	B	110	17	ng/L	20		8270C	Total/NA
2-Methylnaphthalene - DL	520	B	110	19	ng/L	20		8270C	Total/NA
Acenaphthene - DL	2600		110	9.5	ng/L	20		8270C	Total/NA
Dibenzofuran - DL	780		110	19	ng/L	20		8270C	Total/NA
Dibenzothiophene - DL	300		78	19	ng/L	20		8270C	Total/NA
Fluoranthene - DL	1000	B	87	32	ng/L	20		8270C	Total/NA
Fluorene - DL	1900		78	16	ng/L	20		8270C	Total/NA
Naphthalene - DL	1400	B	160	22	ng/L	20		8270C	Total/NA
Phenanthrene - DL	970		120	61	ng/L	20		8270C	Total/NA
Pyrene - DL	880	B	80	19	ng/L	20		8270C	Total/NA
Biphenyl - DL	390		110	20	ng/L	20		8270C	Total/NA

Method Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compound (GC/MS SIM LL)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-16691-1	E2-060711	Water	06/07/11 10:25	06/08/11 09:30
280-16691-2	E3-060711	Water	06/07/11 10:35	06/08/11 09:30
280-16691-3	E13-060711	Water	06/07/11 09:30	06/08/11 09:30
280-16691-4	E13D-060711	Water	06/07/11 09:35	06/08/11 09:30
280-16691-5	E13FB-060711	Water	06/07/11 09:20	06/08/11 09:30
280-16691-6	E13FBD-060711	Water	06/07/11 09:25	06/08/11 09:30
280-16691-7	E15-060711	Water	06/07/11 10:10	06/08/11 09:30
280-16691-8	SLP10FEED-060711	Water	06/07/11 08:30	06/08/11 09:30
280-16691-9	W23-060711	Water	06/07/11 11:45	06/08/11 09:30

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E2-060711
Date Collected: 06/07/11 10:25
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-1
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		06/11/11 13:30	06/14/11 12:33	1
2,3-Dihydroindene	**1.1**	**J**	4.8	0.67	ng/L		06/11/11 13:30	06/14/11 12:33	1
1-Methylnaphthalene	ND		5.3	0.85	ng/L		06/11/11 13:30	06/14/11 12:33	1
2-Methylnaphthalene	**1.5**	**J B**	5.6	0.93	ng/L		06/11/11 13:30	06/14/11 12:33	1
Acenaphthene	**0.74**	**J**	5.4	0.48	ng/L		06/11/11 13:30	06/14/11 12:33	1
Acenaphthylene	ND		4.6	0.73	ng/L		06/11/11 13:30	06/14/11 12:33	1
Acridine	ND	*	6.2	6.2	ng/L		06/11/11 13:30	06/14/11 12:33	1
Anthracene	ND		4.0	0.76	ng/L		06/11/11 13:30	06/14/11 12:33	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/11/11 13:30	06/14/11 12:33	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/11/11 13:30	06/14/11 12:33	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/11/11 13:30	06/14/11 12:33	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/11/11 13:30	06/14/11 12:33	1
Benzo(b)thiophene	**0.84**	**J**	5.0	0.71	ng/L		06/11/11 13:30	06/14/11 12:33	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/11/11 13:30	06/14/11 12:33	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/11/11 13:30	06/14/11 12:33	1
Carbazole	ND		3.6	0.69	ng/L		06/11/11 13:30	06/14/11 12:33	1
Chrysene	ND		5.3	1.2	ng/L		06/11/11 13:30	06/14/11 12:33	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/14/11 12:33	1
Dibenzofuran	ND		5.4	0.94	ng/L		06/11/11 13:30	06/14/11 12:33	1
Dibenzothiophene	ND		3.9	0.93	ng/L		06/11/11 13:30	06/14/11 12:33	1
Fluoranthene	ND		4.4	1.6	ng/L		06/11/11 13:30	06/14/11 12:33	1
Fluorene	ND		3.9	0.81	ng/L		06/11/11 13:30	06/14/11 12:33	1
Indene	ND		4.5	3.1	ng/L		06/11/11 13:30	06/14/11 12:33	1
Indole	ND		4.5	1.6	ng/L		06/11/11 13:30	06/14/11 12:33	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		06/11/11 13:30	06/14/11 12:33	1
Naphthalene	**2.8**	**J B**	8.2	1.1	ng/L		06/11/11 13:30	06/14/11 12:33	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/14/11 12:33	1
Phenanthrene	ND		6.0	3.1	ng/L		06/11/11 13:30	06/14/11 12:33	1
Pyrene	**2.2**	**J B**	4.0	0.94	ng/L		06/11/11 13:30	06/14/11 12:33	1
Quinoline	ND		8.6	5.4	ng/L		06/11/11 13:30	06/14/11 12:33	1
Biphenyl	ND		5.3	1.0	ng/L		06/11/11 13:30	06/14/11 12:33	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*59*		*23 - 84*	*06/11/11 13:30*	*06/14/11 12:33*	*1*
Chrysene-d12 (Surr)	*16*	*X*	*28 - 101*	*06/11/11 13:30*	*06/14/11 12:33*	*1*
Naphthalene-d8 (Surr)	*60*		*22 - 97*	*06/11/11 13:30*	*06/14/11 12:33*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E3-060711
Date Collected: 06/07/11 10:35
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.2	0.65	ng/L		06/11/11 13:30	06/14/11 13:10	1
2,3-Dihydroindene	ND		4.8	0.67	ng/L		06/11/11 13:30	06/14/11 13:10	1
1-Methylnaphthalene	ND		5.3	0.85	ng/L		06/11/11 13:30	06/14/11 13:10	1
2-Methylnaphthalene	ND		5.6	0.94	ng/L		06/11/11 13:30	06/14/11 13:10	1
Acenaphthene	ND		5.4	0.48	ng/L		06/11/11 13:30	06/14/11 13:10	1
Acenaphthylene	ND		4.6	0.74	ng/L		06/11/11 13:30	06/14/11 13:10	1
Acridine	ND	*	6.2	6.2	ng/L		06/11/11 13:30	06/14/11 13:10	1
Anthracene	ND		4.0	0.76	ng/L		06/11/11 13:30	06/14/11 13:10	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/11/11 13:30	06/14/11 13:10	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/11/11 13:30	06/14/11 13:10	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/11/11 13:30	06/14/11 13:10	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/11/11 13:30	06/14/11 13:10	1
Benzo(b)thiophene	ND		5.0	0.72	ng/L		06/11/11 13:30	06/14/11 13:10	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/11/11 13:30	06/14/11 13:10	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/11/11 13:30	06/14/11 13:10	1
Carbazole	ND		3.6	0.69	ng/L		06/11/11 13:30	06/14/11 13:10	1
Chrysene	ND		5.3	1.2	ng/L		06/11/11 13:30	06/14/11 13:10	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/14/11 13:10	1
Dibenzofuran	ND		5.4	0.95	ng/L		06/11/11 13:30	06/14/11 13:10	1
Dibenzothiophene	ND		3.9	0.94	ng/L		06/11/11 13:30	06/14/11 13:10	1
Fluoranthene	ND		4.4	1.6	ng/L		06/11/11 13:30	06/14/11 13:10	1
Fluorene	ND		3.9	0.81	ng/L		06/11/11 13:30	06/14/11 13:10	1
Indene	ND		4.5	3.1	ng/L		06/11/11 13:30	06/14/11 13:10	1
Indole	ND		4.5	1.7	ng/L		06/11/11 13:30	06/14/11 13:10	1
Indeno[1,2,3-cd]pyrene	ND		5.2	1.2	ng/L		06/11/11 13:30	06/14/11 13:10	1
Naphthalene	**1.1**	**J B**	8.2	1.1	ng/L		06/11/11 13:30	06/14/11 13:10	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/14/11 13:10	1
Phenanthrene	ND		6.0	3.1	ng/L		06/11/11 13:30	06/14/11 13:10	1
Pyrene	**1.4**	**J B**	4.0	0.95	ng/L		06/11/11 13:30	06/14/11 13:10	1
Quinoline	ND		8.6	5.4	ng/L		06/11/11 13:30	06/14/11 13:10	1
Biphenyl	ND		5.3	1.0	ng/L		06/11/11 13:30	06/14/11 13:10	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*75*		*23 - 84*	*06/11/11 13:30*	*06/14/11 13:10*	*1*
Chrysene-d12 (Surr)	*43*		*28 - 101*	*06/11/11 13:30*	*06/14/11 13:10*	*1*
Naphthalene-d8 (Surr)	*76*		*22 - 97*	*06/11/11 13:30*	*06/14/11 13:10*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E13-060711
Date Collected: 06/07/11 09:30
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		06/11/11 13:30	06/14/11 14:25	1
2,3-Dihydroindene	**6.7**		4.8	0.67	ng/L		06/11/11 13:30	06/14/11 14:25	1
1-Methylnaphthalene	ND		5.3	0.85	ng/L		06/11/11 13:30	06/14/11 14:25	1
2-Methylnaphthalene	ND		5.6	0.93	ng/L		06/11/11 13:30	06/14/11 14:25	1
Acenaphthene	**120**		5.4	0.48	ng/L		06/11/11 13:30	06/14/11 14:25	1
Acenaphthylene	**9.6**		4.6	0.73	ng/L		06/11/11 13:30	06/14/11 14:25	1
Acridine	ND	*	6.2	6.2	ng/L		06/11/11 13:30	06/14/11 14:25	1
Anthracene	ND		4.0	0.76	ng/L		06/11/11 13:30	06/14/11 14:25	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/11/11 13:30	06/14/11 14:25	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/11/11 13:30	06/14/11 14:25	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/11/11 13:30	06/14/11 14:25	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/11/11 13:30	06/14/11 14:25	1
Benzo(b)thiophene	ND		5.0	0.71	ng/L		06/11/11 13:30	06/14/11 14:25	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/11/11 13:30	06/14/11 14:25	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/11/11 13:30	06/14/11 14:25	1
Carbazole	ND		3.6	0.69	ng/L		06/11/11 13:30	06/14/11 14:25	1
Chrysene	ND		5.3	1.2	ng/L		06/11/11 13:30	06/14/11 14:25	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/14/11 14:25	1
Dibenzofuran	ND		5.4	0.94	ng/L		06/11/11 13:30	06/14/11 14:25	1
Dibenzothiophene	**3.0**	**J**	3.9	0.93	ng/L		06/11/11 13:30	06/14/11 14:25	1
Fluoranthene	**2.4**	**J B**	4.4	1.6	ng/L		06/11/11 13:30	06/14/11 14:25	1
Fluorene	ND		3.9	0.81	ng/L		06/11/11 13:30	06/14/11 14:25	1
Indene	ND		4.5	3.1	ng/L		06/11/11 13:30	06/14/11 14:25	1
Indole	ND		4.5	1.6	ng/L		06/11/11 13:30	06/14/11 14:25	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		06/11/11 13:30	06/14/11 14:25	1
Naphthalene	**2.3**	**J B**	8.2	1.1	ng/L		06/11/11 13:30	06/14/11 14:25	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/14/11 14:25	1
Phenanthrene	ND		6.0	3.1	ng/L		06/11/11 13:30	06/14/11 14:25	1
Pyrene	**10**	**B**	4.0	0.94	ng/L		06/11/11 13:30	06/14/11 14:25	1
Quinoline	ND		8.6	5.4	ng/L		06/11/11 13:30	06/14/11 14:25	1
Biphenyl	ND		5.3	1.0	ng/L		06/11/11 13:30	06/14/11 14:25	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*79*		*23 - 84*	*06/11/11 13:30*	*06/14/11 14:25*	*1*
Chrysene-d12 (Surr)	*46*		*28 - 101*	*06/11/11 13:30*	*06/14/11 14:25*	*1*
Naphthalene-d8 (Surr)	*81*		*22 - 97*	*06/11/11 13:30*	*06/14/11 14:25*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E13D-060711
Date Collected: 06/07/11 09:35
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		06/11/11 13:30	06/14/11 16:18	1
2,3-Dihydroindene	**6.3**		4.8	0.67	ng/L		06/11/11 13:30	06/14/11 16:18	1
1-Methylnaphthalene	ND		5.3	0.85	ng/L		06/11/11 13:30	06/14/11 16:18	1
2-Methylnaphthalene	ND		5.6	0.93	ng/L		06/11/11 13:30	06/14/11 16:18	1
Acenaphthene	**110**		5.4	0.48	ng/L		06/11/11 13:30	06/14/11 16:18	1
Acenaphthylene	**9.2**		4.6	0.73	ng/L		06/11/11 13:30	06/14/11 16:18	1
Acridine	ND	*	6.2	6.2	ng/L		06/11/11 13:30	06/14/11 16:18	1
Anthracene	ND		4.0	0.76	ng/L		06/11/11 13:30	06/14/11 16:18	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/11/11 13:30	06/14/11 16:18	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/11/11 13:30	06/14/11 16:18	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/11/11 13:30	06/14/11 16:18	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/11/11 13:30	06/14/11 16:18	1
Benzo(b)thiophene	ND		5.0	0.71	ng/L		06/11/11 13:30	06/14/11 16:18	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/11/11 13:30	06/14/11 16:18	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/11/11 13:30	06/14/11 16:18	1
Carbazole	ND		3.6	0.69	ng/L		06/11/11 13:30	06/14/11 16:18	1
Chrysene	ND		5.3	1.2	ng/L		06/11/11 13:30	06/14/11 16:18	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/14/11 16:18	1
Dibenzofuran	ND		5.4	0.94	ng/L		06/11/11 13:30	06/14/11 16:18	1
Dibenzothiophene	**2.8**	**J**	3.9	0.93	ng/L		06/11/11 13:30	06/14/11 16:18	1
Fluoranthene	**2.0**	**J B**	4.4	1.6	ng/L		06/11/11 13:30	06/14/11 16:18	1
Fluorene	ND		3.9	0.81	ng/L		06/11/11 13:30	06/14/11 16:18	1
Indene	ND		4.5	3.1	ng/L		06/11/11 13:30	06/14/11 16:18	1
Indole	ND		4.5	1.6	ng/L		06/11/11 13:30	06/14/11 16:18	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		06/11/11 13:30	06/14/11 16:18	1
Naphthalene	**1.7**	**J B**	8.2	1.1	ng/L		06/11/11 13:30	06/14/11 16:18	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/14/11 16:18	1
Phenanthrene	ND		6.0	3.1	ng/L		06/11/11 13:30	06/14/11 16:18	1
Pyrene	**9.3**	**B**	4.0	0.94	ng/L		06/11/11 13:30	06/14/11 16:18	1
Quinoline	ND		8.6	5.4	ng/L		06/11/11 13:30	06/14/11 16:18	1
Biphenyl	ND		5.3	1.0	ng/L		06/11/11 13:30	06/14/11 16:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*71*		*23 - 84*	*06/11/11 13:30*	*06/14/11 16:18*	*1*
Chrysene-d12 (Surr)	*29*		*28 - 101*	*06/11/11 13:30*	*06/14/11 16:18*	*1*
Naphthalene-d8 (Surr)	*75*		*22 - 97*	*06/11/11 13:30*	*06/14/11 16:18*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E13FB-060711
Date Collected: 06/07/11 09:20
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.2	0.65	ng/L		06/11/11 13:30	06/14/11 16:55	1
2,3-Dihydroindene	ND		4.8	0.67	ng/L		06/11/11 13:30	06/14/11 16:55	1
1-Methylnaphthalene	ND		5.3	0.85	ng/L		06/11/11 13:30	06/14/11 16:55	1
2-Methylnaphthalene	ND		5.6	0.94	ng/L		06/11/11 13:30	06/14/11 16:55	1
Acenaphthene	ND		5.4	0.48	ng/L		06/11/11 13:30	06/14/11 16:55	1
Acenaphthylene	ND		4.6	0.73	ng/L		06/11/11 13:30	06/14/11 16:55	1
Acridine	ND	*	6.2	6.2	ng/L		06/11/11 13:30	06/14/11 16:55	1
Anthracene	ND		4.0	0.76	ng/L		06/11/11 13:30	06/14/11 16:55	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/11/11 13:30	06/14/11 16:55	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/11/11 13:30	06/14/11 16:55	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/11/11 13:30	06/14/11 16:55	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/11/11 13:30	06/14/11 16:55	1
Benzo(b)thiophene	ND		5.0	0.72	ng/L		06/11/11 13:30	06/14/11 16:55	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/11/11 13:30	06/14/11 16:55	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/11/11 13:30	06/14/11 16:55	1
Carbazole	ND		3.6	0.69	ng/L		06/11/11 13:30	06/14/11 16:55	1
Chrysene	ND		5.3	1.2	ng/L		06/11/11 13:30	06/14/11 16:55	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/14/11 16:55	1
Dibenzofuran	ND		5.4	0.94	ng/L		06/11/11 13:30	06/14/11 16:55	1
Dibenzothiophene	ND		3.9	0.94	ng/L		06/11/11 13:30	06/14/11 16:55	1
Fluoranthene	ND		4.4	1.6	ng/L		06/11/11 13:30	06/14/11 16:55	1
Fluorene	ND		3.9	0.81	ng/L		06/11/11 13:30	06/14/11 16:55	1
Indene	ND		4.5	3.1	ng/L		06/11/11 13:30	06/14/11 16:55	1
Indole	ND		4.5	1.7	ng/L		06/11/11 13:30	06/14/11 16:55	1
Indeno[1,2,3-cd]pyrene	ND		5.2	1.2	ng/L		06/11/11 13:30	06/14/11 16:55	1
Naphthalene	**1.3**	**J B**	8.2	1.1	ng/L		06/11/11 13:30	06/14/11 16:55	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/14/11 16:55	1
Phenanthrene	ND		6.0	3.1	ng/L		06/11/11 13:30	06/14/11 16:55	1
Pyrene	ND		4.0	0.94	ng/L		06/11/11 13:30	06/14/11 16:55	1
Quinoline	ND		8.6	5.4	ng/L		06/11/11 13:30	06/14/11 16:55	1
Biphenyl	ND		5.3	1.0	ng/L		06/11/11 13:30	06/14/11 16:55	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*66*		*23 - 84*	*06/11/11 13:30*	*06/14/11 16:55*	*1*
Chrysene-d12 (Surr)	*90*		*28 - 101*	*06/11/11 13:30*	*06/14/11 16:55*	*1*
Naphthalene-d8 (Surr)	*67*		*22 - 97*	*06/11/11 13:30*	*06/14/11 16:55*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E13FBD-060711
Date Collected: 06/07/11 09:25
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		06/11/11 13:30	06/14/11 17:33	1
2,3-Dihydroindene	ND		4.8	0.67	ng/L		06/11/11 13:30	06/14/11 17:33	1
1-Methylnaphthalene	ND		5.3	0.85	ng/L		06/11/11 13:30	06/14/11 17:33	1
2-Methylnaphthalene	ND		5.6	0.93	ng/L		06/11/11 13:30	06/14/11 17:33	1
Acenaphthene	ND		5.4	0.48	ng/L		06/11/11 13:30	06/14/11 17:33	1
Acenaphthylene	ND		4.6	0.73	ng/L		06/11/11 13:30	06/14/11 17:33	1
Acridine	ND	*	6.2	6.2	ng/L		06/11/11 13:30	06/14/11 17:33	1
Anthracene	ND		4.0	0.76	ng/L		06/11/11 13:30	06/14/11 17:33	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/11/11 13:30	06/14/11 17:33	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/11/11 13:30	06/14/11 17:33	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/11/11 13:30	06/14/11 17:33	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/11/11 13:30	06/14/11 17:33	1
Benzo(b)thiophene	ND		5.0	0.71	ng/L		06/11/11 13:30	06/14/11 17:33	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/11/11 13:30	06/14/11 17:33	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/11/11 13:30	06/14/11 17:33	1
Carbazole	ND		3.6	0.69	ng/L		06/11/11 13:30	06/14/11 17:33	1
Chrysene	ND		5.3	1.2	ng/L		06/11/11 13:30	06/14/11 17:33	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/14/11 17:33	1
Dibenzofuran	ND		5.4	0.94	ng/L		06/11/11 13:30	06/14/11 17:33	1
Dibenzothiophene	ND		3.9	0.93	ng/L		06/11/11 13:30	06/14/11 17:33	1
Fluoranthene	ND		4.4	1.6	ng/L		06/11/11 13:30	06/14/11 17:33	1
Fluorene	ND		3.9	0.81	ng/L		06/11/11 13:30	06/14/11 17:33	1
Indene	ND		4.5	3.1	ng/L		06/11/11 13:30	06/14/11 17:33	1
Indole	ND		4.5	1.6	ng/L		06/11/11 13:30	06/14/11 17:33	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		06/11/11 13:30	06/14/11 17:33	1
Naphthalene	**1.4**	**J B**	8.2	1.1	ng/L		06/11/11 13:30	06/14/11 17:33	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/14/11 17:33	1
Phenanthrene	ND		6.0	3.1	ng/L		06/11/11 13:30	06/14/11 17:33	1
Pyrene	ND		4.0	0.94	ng/L		06/11/11 13:30	06/14/11 17:33	1
Quinoline	ND		8.6	5.4	ng/L		06/11/11 13:30	06/14/11 17:33	1
Biphenyl	ND		5.3	1.0	ng/L		06/11/11 13:30	06/14/11 17:33	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*67*		*23 - 84*	*06/11/11 13:30*	*06/14/11 17:33*	*1*
Chrysene-d12 (Surr)	*84*		*28 - 101*	*06/11/11 13:30*	*06/14/11 17:33*	*1*
Naphthalene-d8 (Surr)	*64*		*22 - 97*	*06/11/11 13:30*	*06/14/11 17:33*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E15-060711
Date Collected: 06/07/11 10:10
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.2	0.65	ng/L		06/11/11 13:30	06/14/11 18:10	1
2,3-Dihydroindene	**0.69**	**J**	4.8	0.67	ng/L		06/11/11 13:30	06/14/11 18:10	1
1-Methylnaphthalene	**1.4**	**J B**	5.3	0.85	ng/L		06/11/11 13:30	06/14/11 18:10	1
2-Methylnaphthalene	**2.0**	**J B**	5.6	0.94	ng/L		06/11/11 13:30	06/14/11 18:10	1
Acenaphthene	**1.6**	**J**	5.4	0.48	ng/L		06/11/11 13:30	06/14/11 18:10	1
Acenaphthylene	ND		4.6	0.74	ng/L		06/11/11 13:30	06/14/11 18:10	1
Acridine	ND	*	6.2	6.2	ng/L		06/11/11 13:30	06/14/11 18:10	1
Anthracene	ND		4.0	0.76	ng/L		06/11/11 13:30	06/14/11 18:10	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/11/11 13:30	06/14/11 18:10	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/11/11 13:30	06/14/11 18:10	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/11/11 13:30	06/14/11 18:10	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/11/11 13:30	06/14/11 18:10	1
Benzo(b)thiophene	ND		5.0	0.72	ng/L		06/11/11 13:30	06/14/11 18:10	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/11/11 13:30	06/14/11 18:10	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/11/11 13:30	06/14/11 18:10	1
Carbazole	ND		3.6	0.69	ng/L		06/11/11 13:30	06/14/11 18:10	1
Chrysene	ND		5.3	1.2	ng/L		06/11/11 13:30	06/14/11 18:10	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/14/11 18:10	1
Dibenzofuran	ND		5.4	0.95	ng/L		06/11/11 13:30	06/14/11 18:10	1
Dibenzothiophene	ND		3.9	0.94	ng/L		06/11/11 13:30	06/14/11 18:10	1
Fluoranthene	ND		4.4	1.6	ng/L		06/11/11 13:30	06/14/11 18:10	1
Fluorene	ND		3.9	0.81	ng/L		06/11/11 13:30	06/14/11 18:10	1
Indene	ND		4.5	3.1	ng/L		06/11/11 13:30	06/14/11 18:10	1
Indole	ND		4.5	1.7	ng/L		06/11/11 13:30	06/14/11 18:10	1
Indeno[1,2,3-cd]pyrene	ND		5.2	1.2	ng/L		06/11/11 13:30	06/14/11 18:10	1
Naphthalene	**2.3**	**J B**	8.2	1.1	ng/L		06/11/11 13:30	06/14/11 18:10	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/14/11 18:10	1
Phenanthrene	ND		6.0	3.1	ng/L		06/11/11 13:30	06/14/11 18:10	1
Pyrene	ND		4.0	0.95	ng/L		06/11/11 13:30	06/14/11 18:10	1
Quinoline	ND		8.6	5.4	ng/L		06/11/11 13:30	06/14/11 18:10	1
Biphenyl	ND		5.3	1.0	ng/L		06/11/11 13:30	06/14/11 18:10	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*64*		*23 - 84*	*06/11/11 13:30*	*06/14/11 18:10*	*1*
Chrysene-d12 (Surr)	*19*	*X*	*28 - 101*	*06/11/11 13:30*	*06/14/11 18:10*	*1*
Naphthalene-d8 (Surr)	*64*		*22 - 97*	*06/11/11 13:30*	*06/14/11 18:10*	*1*

Client Sample ID: SLP10FEED-060711
Date Collected: 06/07/11 08:30
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-8
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.64	ng/L		06/11/11 13:30	06/14/11 18:48	1
2,3-Dihydroindene	**240**		4.7	0.66	ng/L		06/11/11 13:30	06/14/11 18:48	1
1-Methylnaphthalene	**120**	**B**	5.3	0.84	ng/L		06/11/11 13:30	06/14/11 18:48	1
2-Methylnaphthalene	**1.9**	**J B**	5.6	0.93	ng/L		06/11/11 13:30	06/14/11 18:48	1
Acenaphthylene	**20**		4.5	0.73	ng/L		06/11/11 13:30	06/14/11 18:48	1
Acridine	ND	*	6.2	6.2	ng/L		06/11/11 13:30	06/14/11 18:48	1
Anthracene	**1.2**	**J**	4.0	0.76	ng/L		06/11/11 13:30	06/14/11 18:48	1
Benzo[a]anthracene	ND		4.1	0.87	ng/L		06/11/11 13:30	06/14/11 18:48	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/11/11 13:30	06/14/11 18:48	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/11/11 13:30	06/14/11 18:48	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/11/11 13:30	06/14/11 18:48	1
Benzo(b)thiophene	**57**		4.9	0.71	ng/L		06/11/11 13:30	06/14/11 18:48	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/11/11 13:30	06/14/11 18:48	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/11/11 13:30	06/14/11 18:48	1
Carbazole	**19**		3.6	0.68	ng/L		06/11/11 13:30	06/14/11 18:48	1
Chrysene	ND		5.3	1.2	ng/L		06/11/11 13:30	06/14/11 18:48	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/14/11 18:48	1
Dibenzofuran	**25**		5.4	0.94	ng/L		06/11/11 13:30	06/14/11 18:48	1
Dibenzothiophene	**27**		3.9	0.93	ng/L		06/11/11 13:30	06/14/11 18:48	1
Fluoranthene	**53**	**B**	4.4	1.6	ng/L		06/11/11 13:30	06/14/11 18:48	1
Fluorene	**160**		3.9	0.81	ng/L		06/11/11 13:30	06/14/11 18:48	1
Indene	**41**		4.5	3.1	ng/L		06/11/11 13:30	06/14/11 18:48	1
Indole	ND		4.5	1.6	ng/L		06/11/11 13:30	06/14/11 18:48	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		06/11/11 13:30	06/14/11 18:48	1
Naphthalene	**6.2**	**J B**	8.2	1.1	ng/L		06/11/11 13:30	06/14/11 18:48	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/14/11 18:48	1
Phenanthrene	**9.7**		6.0	3.0	ng/L		06/11/11 13:30	06/14/11 18:48	1
Pyrene	**41**	**B**	4.0	0.94	ng/L		06/11/11 13:30	06/14/11 18:48	1
Quinoline	ND		8.5	5.4	ng/L		06/11/11 13:30	06/14/11 18:48	1
Biphenyl	**4.5**	**J**	5.3	1.0	ng/L		06/11/11 13:30	06/14/11 18:48	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*70*		*23 - 84*	*06/11/11 13:30*	*06/14/11 18:48*	*1*
Chrysene-d12 (Surr)	*32*		*28 - 101*	*06/11/11 13:30*	*06/14/11 18:48*	*1*
Naphthalene-d8 (Surr)	*71*		*22 - 97*	*06/11/11 13:30*	*06/14/11 18:48*	*1*

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**450**		27	2.4	ng/L		06/11/11 13:30	06/29/11 20:01	5

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*66*	*D*	*23 - 84*	*06/11/11 13:30*	*06/29/11 20:01*	*5*
Chrysene-d12 (Surr)	*24*	*D*	*28 - 101*	*06/11/11 13:30*	*06/29/11 20:01*	*5*
Naphthalene-d8 (Surr)	*64*	*D*	*22 - 97*	*06/11/11 13:30*	*06/29/11 20:01*	*5*

Client Sample ID: W23-060711
Date Collected: 06/07/11 11:45
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-9
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	2.1	J	5.1	0.65	ng/L		06/11/11 13:30	06/29/11 16:52	1
Acenaphthylene	120		4.6	0.73	ng/L		06/11/11 13:30	06/29/11 16:52	1
Acridine	200	*	6.2	6.2	ng/L		06/11/11 13:30	06/29/11 16:52	1
Anthracene	160		4.0	0.76	ng/L		06/11/11 13:30	06/29/11 16:52	1
Benzo[a]anthracene	59	B	4.1	0.87	ng/L		06/11/11 13:30	06/29/11 16:52	1
Benzo[a]pyrene	8.3		2.4	1.2	ng/L		06/11/11 13:30	06/29/11 16:52	1
Benzo[e]pyrene	5.0		4.1	1.1	ng/L		06/11/11 13:30	06/29/11 16:52	1
Benzo[b]fluoranthene	17	B	4.5	1.3	ng/L		06/11/11 13:30	06/29/11 16:52	1
Benzo(b)thiophene	73		4.9	0.71	ng/L		06/11/11 13:30	06/29/11 16:52	1
Benzo[k]fluoranthene	17	B	3.9	1.2	ng/L		06/11/11 13:30	06/29/11 16:52	1
Benzo[g,h,i]perylene	1.8	J B	5.9	1.1	ng/L		06/11/11 13:30	06/29/11 16:52	1
Carbazole	130		3.6	0.68	ng/L		06/11/11 13:30	06/29/11 16:52	1
Chrysene	40	B	5.3	1.2	ng/L		06/11/11 13:30	06/29/11 16:52	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/11/11 13:30	06/29/11 16:52	1
Indene	43		4.5	3.1	ng/L		06/11/11 13:30	06/29/11 16:52	1
Indole	ND		4.5	1.6	ng/L		06/11/11 13:30	06/29/11 16:52	1
Indeno[1,2,3-cd]pyrene	1.3	J B	5.1	1.2	ng/L		06/11/11 13:30	06/29/11 16:52	1
Perylene	ND		3.6	3.6	ng/L		06/11/11 13:30	06/29/11 16:52	1
Quinoline	ND		8.6	5.4	ng/L		06/11/11 13:30	06/29/11 16:52	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*70*		*23 - 84*	*06/11/11 13:30*	*06/29/11 16:52*	*1*
Chrysene-d12 (Surr)	*16*	*X*	*28 - 101*	*06/11/11 13:30*	*06/29/11 16:52*	*1*
Naphthalene-d8 (Surr)	*63*		*22 - 97*	*06/11/11 13:30*	*06/29/11 16:52*	*1*

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dihydroindene	380		95	13	ng/L		06/11/11 13:30	06/29/11 17:30	20
1-Methylnaphthalene	960	B	110	17	ng/L		06/11/11 13:30	06/29/11 17:30	20
2-Methylnaphthalene	520	B	110	19	ng/L		06/11/11 13:30	06/29/11 17:30	20
Acenaphthene	2600		110	9.5	ng/L		06/11/11 13:30	06/29/11 17:30	20
Dibenzofuran	780		110	19	ng/L		06/11/11 13:30	06/29/11 17:30	20
Dibenzothiophene	300		78	19	ng/L		06/11/11 13:30	06/29/11 17:30	20
Fluoranthene	1000	B	87	32	ng/L		06/11/11 13:30	06/29/11 17:30	20
Fluorene	1900		78	16	ng/L		06/11/11 13:30	06/29/11 17:30	20
Naphthalene	1400	B	160	22	ng/L		06/11/11 13:30	06/29/11 17:30	20
Phenanthrene	970		120	61	ng/L		06/11/11 13:30	06/29/11 17:30	20
Pyrene	880	B	80	19	ng/L		06/11/11 13:30	06/29/11 17:30	20
Biphenyl	390		110	20	ng/L		06/11/11 13:30	06/29/11 17:30	20

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*71*	*D*	*23 - 84*	*06/11/11 13:30*	*06/29/11 17:30*	*20*
Chrysene-d12 (Surr)	*16*	*D*	*28 - 101*	*06/11/11 13:30*	*06/29/11 17:30*	*20*
Naphthalene-d8 (Surr)	*64*	*D*	*22 - 97*	*06/11/11 13:30*	*06/29/11 17:30*	*20*

Surrogate Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FD10	sene-d12 (S	thalene-d8
Lab Sample ID	Client Sample ID	(23-84)	(28-101)	(22-97)
280-16691-1	E2-060711	59	16 X	60
280-16691-2	E3-060711	75	43	76
280-16691-3	E13-060711	79	46	81
280-16691-3 MS	E13-060711	74	31	75
280-16691-3 MSD	E13-060711	81	47	81
280-16691-4	E13D-060711	71	29	75
280-16691-5	E13FB-060711	66	90	67
280-16691-6	E13FBD-060711	67	84	64
280-16691-7	E15-060711	64	19 X	64
280-16691-8	SLP10FEED-060711	70	32	71
280-16691-8 - DL	SLP10FEED-060711	66 D	24 D	64 D
280-16691-9	W23-060711	70	16 X	63
280-16691-9 - DL	W23-060711	71 D	16 D	64 D
LCS 280-71519/2-A	Lab Control Sample	73	83	75
MB 280-71519/1-A	Method Blank	22 X	31	23

Surrogate Legend

FD10 = Fluorene-d10 (Surr)

Chrysene-d12 (Surr) = Chrysene-d12 (Surr)

Naphthalene-d8 (Surr) = Naphthalene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Lab Sample ID: MB 280-71519/1-A
Matrix: Water
Analysis Batch: 72077

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 71519

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		06/11/11 13:30	06/14/11 13:48	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		06/11/11 13:30	06/14/11 13:48	1
1-Methylnaphthalene	4.09	J	5.6	0.89	ng/L		06/11/11 13:30	06/14/11 13:48	1
2-Methylnaphthalene	5.62	J	5.9	0.98	ng/L		06/11/11 13:30	06/14/11 13:48	1
3-Methylcholanthrene	ND		5.0	5.0	ng/L		06/11/11 13:30	06/14/11 13:48	1
Acenaphthene	ND		5.7	0.50	ng/L		06/11/11 13:30	06/14/11 13:48	1
Acenaphthylene	ND		4.8	0.77	ng/L		06/11/11 13:30	06/14/11 13:48	1
Acridine	ND		6.5	6.5	ng/L		06/11/11 13:30	06/14/11 13:48	1
Anthracene	ND		4.2	0.80	ng/L		06/11/11 13:30	06/14/11 13:48	1
Benzo[a]anthracene	1.19	J	4.3	0.92	ng/L		06/11/11 13:30	06/14/11 13:48	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/11/11 13:30	06/14/11 13:48	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/11/11 13:30	06/14/11 13:48	1
Benzo[b]fluoranthene	2.38	J	4.7	1.4	ng/L		06/11/11 13:30	06/14/11 13:48	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		06/11/11 13:30	06/14/11 13:48	1
Benzo[k]fluoranthene	1.81	J	4.1	1.2	ng/L		06/11/11 13:30	06/14/11 13:48	1
Benzo[g,h,i]perylene	2.59	J	6.2	1.2	ng/L		06/11/11 13:30	06/14/11 13:48	1
Carbazole	ND		3.8	0.72	ng/L		06/11/11 13:30	06/14/11 13:48	1
Chrysene	1.68	J	5.6	1.2	ng/L		06/11/11 13:30	06/14/11 13:48	1
Dibenz(a,h)anthracene	1.41	J	5.9	1.0	ng/L		06/11/11 13:30	06/14/11 13:48	1
Dibenzofuran	ND		5.7	0.99	ng/L		06/11/11 13:30	06/14/11 13:48	1
Dibenzothiophene	ND		4.1	0.98	ng/L		06/11/11 13:30	06/14/11 13:48	1
Fluoranthene	2.65	J	4.6	1.7	ng/L		06/11/11 13:30	06/14/11 13:48	1
Fluorene	ND		4.1	0.85	ng/L		06/11/11 13:30	06/14/11 13:48	1
Indene	ND		4.7	3.3	ng/L		06/11/11 13:30	06/14/11 13:48	1
Indole	ND		4.7	1.7	ng/L		06/11/11 13:30	06/14/11 13:48	1
Indeno[1,2,3-cd]pyrene	2.06	J	5.4	1.3	ng/L		06/11/11 13:30	06/14/11 13:48	1
Naphthalene	6.86	J	8.6	1.1	ng/L		06/11/11 13:30	06/14/11 13:48	1
Perylene	ND		3.8	3.8	ng/L		06/11/11 13:30	06/14/11 13:48	1
Phenanthrene	ND		6.3	3.2	ng/L		06/11/11 13:30	06/14/11 13:48	1
Pyrene	2.51	J	4.2	0.99	ng/L		06/11/11 13:30	06/14/11 13:48	1
Quinoline	ND		9.0	5.7	ng/L		06/11/11 13:30	06/14/11 13:48	1
7,12-Dimethylbenz(a)anthracene	ND		2.8	2.3	ng/L		06/11/11 13:30	06/14/11 13:48	1
Biphenyl	ND		5.6	1.1	ng/L		06/11/11 13:30	06/14/11 13:48	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*22*	*X*	*23 - 84*	*06/11/11 13:30*	*06/14/11 13:48*	*1*
Chrysene-d12 (Surr)	*31*		*28 - 101*	*06/11/11 13:30*	*06/14/11 13:48*	*1*
Naphthalene-d8 (Surr)	*23*		*22 - 97*	*06/11/11 13:30*	*06/14/11 13:48*	*1*

Lab Sample ID: LCS 280-71519/2-A
Matrix: Water
Analysis Batch: 72077

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 71519

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3-Benzofuran	75.0	58.0		ng/L		77	30 - 150
2,3-Dihydroindene	75.0	49.6		ng/L		66	30 - 150
1-Methylnaphthalene	75.0	62.1		ng/L		83	30 - 150
2-Methylnaphthalene	75.0	62.4		ng/L		83	25 - 95
3-Methylcholanthrene	75.0	49.5		ng/L		66	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-71519/2-A
Matrix: Water
Analysis Batch: 72077

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 71519

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	75.0	61.2		ng/L		82	30 - 150
Acenaphthylene	75.0	58.7		ng/L		78	30 - 150
Acridine	75.0	14.4	*	ng/L		19	30 - 150
Anthracene	75.0	61.0		ng/L		81	30 - 150
Benzo[a]anthracene	75.0	67.2		ng/L		90	30 - 150
Benzo[a]pyrene	75.0	62.2		ng/L		83	30 - 150
Benzo[e]pyrene	75.0	63.1		ng/L		84	37 - 105
Benzo[b]fluoranthene	75.0	64.0		ng/L		85	30 - 150
Benzo(b)thiophene	75.0	61.0		ng/L		81	30 - 150
Benzo[k]fluoranthene	75.0	67.9		ng/L		91	30 - 150
Benzo[g,h,i]perylene	75.0	62.4		ng/L		83	30 - 150
Carbazole	75.0	65.0		ng/L		87	30 - 150
Chrysene	75.0	66.7		ng/L		89	20 - 136
Dibenz(a,h)anthracene	75.0	63.4		ng/L		85	30 - 150
Dibenzofuran	75.0	66.0		ng/L		88	30 - 150
Dibenzothiophene	75.0	61.8		ng/L		82	30 - 150
Fluoranthene	75.0	71.2		ng/L		95	30 - 150
Fluorene	75.0	61.4		ng/L		82	34 - 96
Indene	75.0	55.4		ng/L		74	22 - 86
Indole	75.0	59.1		ng/L		79	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	64.0		ng/L		85	30 - 150
Naphthalene	75.0	69.3		ng/L		92	27 - 95
Perylene	75.0	59.7		ng/L		80	30 - 150
Phenanthrene	75.0	66.4		ng/L		89	30 - 150
Pyrene	75.0	64.5		ng/L		86	30 - 150
Quinoline	75.0	53.0		ng/L		71	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	29.6		ng/L		39	30 - 150
Biphenyl	75.0	60.1		ng/L		80	30 - 150

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*73*		*23 - 84*
Chrysene-d12 (Surr)	*83*		*28 - 101*
Naphthalene-d8 (Surr)	*75*		*22 - 97*

Lab Sample ID: 280-16691-3 MS
Matrix: Water
Analysis Batch: 72077

Client Sample ID: E13-060711
Prep Type: Total/NA
Prep Batch: 71519

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3-Benzofuran	ND		71.6	50.7		ng/L		71	30 - 150
2,3-Dihydroindene	6.7		71.6	50.6		ng/L		61	30 - 150
1-Methylnaphthalene	ND		71.6	53.0		ng/L		74	30 - 150
2-Methylnaphthalene	ND		71.6	52.3		ng/L		73	25 - 95
3-Methylcholanthrene	ND		71.6	6.67	F	ng/L		9	30 - 150
Acenaphthene	120		71.6	173		ng/L		77	30 - 150
Acenaphthylene	9.6		71.6	62.8		ng/L		74	30 - 150
Acridine	ND	*	71.6	51.3		ng/L		72	30 - 150
Anthracene	ND		71.6	57.7		ng/L		81	30 - 150
Benzo[a]anthracene	ND		71.6	21.3		ng/L		30	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-16691-3 MS
Matrix: Water
Analysis Batch: 72077

Client Sample ID: E13-060711
Prep Type: Total/NA
Prep Batch: 71519

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzo[a]pyrene	ND		71.6	6.86	F	ng/L		10	30 - 150
Benzo[e]pyrene	ND		71.6	6.75	F	ng/L		9	37 - 105
Benzo[b]fluoranthene	ND		71.6	8.33	F	ng/L		12	30 - 150
Benzo(b)thiophene	ND		71.6	53.0		ng/L		74	30 - 150
Benzo[k]fluoranthene	ND		71.6	8.29	F	ng/L		12	30 - 150
Benzo[g,h,i]perylene	ND		71.6	5.83	J F	ng/L		8	30 - 150
Carbazole	ND		71.6	61.3		ng/L		86	30 - 150
Chrysene	ND		71.6	22.4		ng/L		31	20 - 136
Dibenz(a,h)anthracene	ND		71.6	4.92	J F	ng/L		7	30 - 150
Dibenzofuran	ND		71.6	58.1		ng/L		81	30 - 150
Dibenzothiophene	3.0	J	71.6	59.4		ng/L		79	30 - 150
Fluoranthene	2.4	J B	71.6	56.6		ng/L		76	30 - 150
Fluorene	ND		71.6	54.4		ng/L		76	34 - 96
Indene	ND		71.6	48.5		ng/L		68	22 - 86
Indole	ND		71.6	54.4		ng/L		76	30 - 150
Indeno[1,2,3-cd]pyrene	ND		71.6	5.39	F	ng/L		8	30 - 150
Naphthalene	2.3	J B	71.6	53.8		ng/L		72	27 - 95
Perylene	ND		71.6	6.33	F	ng/L		9	30 - 150
Phenanthrene	ND		71.6	59.2		ng/L		83	30 - 150
Pyrene	10	B	71.6	57.8		ng/L		66	30 - 150
Quinoline	ND		71.6	55.7		ng/L		78	20 - 112
7,12-Dimethylbenz(a)anthracene	ND		71.6	35.3		ng/L		49	30 - 150
Biphenyl	ND		71.6	52.8		ng/L		74	30 - 150

Surrogate	*MS % Recovery*	*MS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*74*		*23 - 84*
Chrysene-d12 (Surr)	*31*		*28 - 101*
Naphthalene-d8 (Surr)	*75*		*22 - 97*

Lab Sample ID: 280-16691-3 MSD
Matrix: Water
Analysis Batch: 72077

Client Sample ID: E13-060711
Prep Type: Total/NA
Prep Batch: 71519

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	ND		71.8	56.7		ng/L		79	30 - 150	11	50
2,3-Dihydroindene	6.7		71.8	77.2		ng/L		98	30 - 150	42	50
1-Methylnaphthalene	ND		71.8	241	F	ng/L		335	30 - 150	128	50
2-Methylnaphthalene	ND		71.8	294	E F	ng/L		409	25 - 95	140	50
3-Methylcholanthrene	ND		71.8	7.85	F	ng/L		11	30 - 150	16	50
Acenaphthene	120		71.8	182		ng/L		89	30 - 150	5	50
Acenaphthylene	9.6		71.8	70.1		ng/L		84	30 - 150	11	50
Acridine	ND	*	71.8	26.3	F	ng/L		37	30 - 150	65	50
Anthracene	ND		71.8	63.8		ng/L		89	30 - 150	10	50
Benzo[a]anthracene	ND		71.8	33.7		ng/L		47	30 - 150	45	50
Benzo[a]pyrene	ND		71.8	9.59	F	ng/L		13	30 - 150	33	50
Benzo[e]pyrene	ND		71.8	8.07	F	ng/L		11	37 - 105	18	50
Benzo[b]fluoranthene	ND		71.8	12.5	F	ng/L		17	30 - 150	40	50
Benzo(b)thiophene	ND		71.8	60.6		ng/L		84	30 - 150	13	50
Benzo[k]fluoranthene	ND		71.8	12.6	F	ng/L		18	30 - 150	41	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-16691-3 MSD
Matrix: Water
Analysis Batch: 72077

Client Sample ID: E13-060711
Prep Type: Total/NA
Prep Batch: 71519

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzo[g,h,i]perylene	ND		71.8	7.19	F	ng/L		10	30 - 150	21	50
Carbazole	ND		71.8	70.1		ng/L		98	30 - 150	13	50
Chrysene	ND		71.8	35.4		ng/L		49	20 - 136	45	50
Dibenz(a,h)anthracene	ND		71.8	7.29	F	ng/L		10	30 - 150	39	50
Dibenzofuran	ND		71.8	72.9		ng/L		102	30 - 150	23	50
Dibenzothiophene	3.0	J	71.8	66.5		ng/L		88	30 - 150	11	50
Fluoranthene	2.4	J B	71.8	69.8		ng/L		94	30 - 150	21	50
Fluorene	ND		71.8	69.0		ng/L		96	34 - 96	24	50
Indene	ND		71.8	57.7		ng/L		80	22 - 86	17	50
Indole	ND		71.8	60.9		ng/L		85	30 - 150	11	50
Indeno[1,2,3-cd]pyrene	ND		71.8	7.36	F	ng/L		10	30 - 150	31	50
Naphthalene	2.3	J B	71.8	205	F	ng/L		282	27 - 95	117	50
Perylene	ND		71.8	8.36	F	ng/L		12	30 - 150	28	50
Phenanthrene	ND		71.8	67.3		ng/L		94	30 - 150	13	50
Pyrene	10	B	71.8	70.7		ng/L		84	30 - 150	20	50
Quinoline	ND		71.8	62.4		ng/L		87	20 - 112	11	50
7,12-Dimethylbenz(a)anthracene	ND		71.8	44.7		ng/L		62	30 - 150	23	50
Biphenyl	ND		71.8	89.2	F	ng/L		124	30 - 150	51	50

Surrogate	*MSD % Recovery*	*MSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*81*		*23 - 84*
Chrysene-d12 (Surr)	*47*		*28 - 101*
Naphthalene-d8 (Surr)	*81*		*22 - 97*

GC/MS Semi VOA

Prep Batch: 71519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-71519/1-A	Method Blank	Total/NA	Water	3520C	
LCS 280-71519/2-A	Lab Control Sample	Total/NA	Water	3520C	
280-16691-1	E2-060711	Total/NA	Water	3520C	
280-16691-2	E3-060711	Total/NA	Water	3520C	
280-16691-3	E13-060711	Total/NA	Water	3520C	
280-16691-3 MS	E13-060711	Total/NA	Water	3520C	
280-16691-3 MSD	E13-060711	Total/NA	Water	3520C	
280-16691-4	E13D-060711	Total/NA	Water	3520C	
280-16691-5	E13FB-060711	Total/NA	Water	3520C	
280-16691-6	E13FBD-060711	Total/NA	Water	3520C	
280-16691-7	E15-060711	Total/NA	Water	3520C	
280-16691-8	SLP10FEED-060711	Total/NA	Water	3520C	
280-16691-8 - DL	SLP10FEED-060711	Total/NA	Water	3520C	
280-16691-9	W23-060711	Total/NA	Water	3520C	
280-16691-9 - DL	W23-060711	Total/NA	Water	3520C	

Analysis Batch: 72077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-71519/2-A	Lab Control Sample	Total/NA	Water	8270C	71519
280-16691-1	E2-060711	Total/NA	Water	8270C	71519
280-16691-2	E3-060711	Total/NA	Water	8270C	71519
MB 280-71519/1-A	Method Blank	Total/NA	Water	8270C	71519
280-16691-3	E13-060711	Total/NA	Water	8270C	71519
280-16691-3 MS	E13-060711	Total/NA	Water	8270C	71519
280-16691-3 MSD	E13-060711	Total/NA	Water	8270C	71519
280-16691-4	E13D-060711	Total/NA	Water	8270C	71519
280-16691-5	E13FB-060711	Total/NA	Water	8270C	71519
280-16691-6	E13FBD-060711	Total/NA	Water	8270C	71519
280-16691-7	E15-060711	Total/NA	Water	8270C	71519
280-16691-8	SLP10FEED-060711	Total/NA	Water	8270C	71519

Analysis Batch: 74572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-16691-9	W23-060711	Total/NA	Water	8270C	71519
280-16691-9 - DL	W23-060711	Total/NA	Water	8270C	71519
280-16691-8 - DL	SLP10FEED-060711	Total/NA	Water	8270C	71519

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E2-060711
Date Collected: 06/07/11 10:25
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4197.6 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			72077	06/14/11 12:33	DPI	TAL DEN

Client Sample ID: E3-060711
Date Collected: 06/07/11 10:35
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4189.9 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			72077	06/14/11 13:10	DPI	TAL DEN

Client Sample ID: E13-060711
Date Collected: 06/07/11 09:30
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4199.5 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			72077	06/14/11 14:25	DPI	TAL DEN

Client Sample ID: E13D-060711
Date Collected: 06/07/11 09:35
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4198.7 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			72077	06/14/11 16:18	DPI	TAL DEN

Client Sample ID: E13FB-060711
Date Collected: 06/07/11 09:20
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4192 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			72077	06/14/11 16:55	DPI	TAL DEN

Client Sample ID: E13FBD-060711
Date Collected: 06/07/11 09:25
Date Received: 06/08/11 09:30

Lab Sample ID: 280-16691-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4199.6 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			72077	06/14/11 17:33	DPI	TAL DEN

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Client Sample ID: E15-060711

Lab Sample ID: 280-16691-7

Date Collected: 06/07/11 10:10

Matrix: Water

Date Received: 06/08/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4189.2 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			72077	06/14/11 18:10	DPI	TAL DEN

Client Sample ID: SLP10FEED-060711

Lab Sample ID: 280-16691-8

Date Collected: 06/07/11 08:30

Matrix: Water

Date Received: 06/08/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4220.5 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			72077	06/14/11 18:48	DPI	TAL DEN
Total/NA	Prep	3520C	DL		4220.5 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C	DL	5			74572	06/29/11 20:01	DPI	TAL DEN

Client Sample ID: W23-060711

Lab Sample ID: 280-16691-9

Date Collected: 06/07/11 11:45

Matrix: Water

Date Received: 06/08/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4206 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C		1			74572	06/29/11 16:52	DPI	TAL DEN
Total/NA	Prep	3520C	DL		4206 mL	1000 uL	71519	06/11/11 13:30	JCV	TAL DEN
Total/NA	Analysis	8270C	DL	20			74572	06/29/11 17:30	DPI	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	
TestAmerica Denver	Alaska	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina	North Carolina DENR	4	358
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Sampler ID _____ 2.6 3.0 2.8

Temperature on Receipt _____ 1.6 1.2

2.2 4.0

Drinking Water? Yes ☐ No ☐ 2.4 w 6085 TO

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client	Project Manager	Date	Chain of Custody Number
City of St. Louis Park	Scott Andersen	6/7/11	146789
Address 7305 Oxford	**Telephone Number (Area Code)/Fax Number** 952-924-2557	**Lab Number**	**Page** 1 of 1
City St. Louis Park / **State** MN / **Zip Code** 55426	**Site Contact** Dan Phelps	**Lab Contact** Lisa U.	
Project Name and Location (State) Reilly Site / MN	**Carrier/Waybill Number** FedEx		
Contract/Purchase Order/Quote No. 60145681			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PAH PCP	Special Instructions/ Conditions of Receipt
E2-060711	6/7/11	1025		X			6						X	
E3-060711		1035												
E13-060711		0930												
E13D-060711		0935												
E13FB-060711		0920												
E13FBD-060711		0925												
E13MS-060711		0940												
E13MSD-060711		0945												
E15-060711		1010												
SLP10FEED-060711		0830												
W23-060711		1145												

Possible Hazard Identification

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By AECOM	6/7/11	1600	1. Received By	6/8/11	930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-16691-1

Login Number: 16691

List Number: 1

Creator: Cofoid, Stephen T

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Detection Limit Exceptions Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16691-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8270C	Water	2,3-Benzofuran	ng/L	5.4	20
8270C	Water	2,3-Dihydroindene	ng/L	5.0	20
8270C	Water	1-Methylnaphthalene	ng/L	5.6	20
8270C	Water	2-Methylnaphthalene	ng/L	5.9	20
8270C	Water	Acenaphthene	ng/L	5.7	20
8270C	Water	Acenaphthylene	ng/L	4.8	20
8270C	Water	Acridine	ng/L	6.5	20
8270C	Water	Anthracene	ng/L	4.2	20
8270C	Water	Benzo[a]anthracene	ng/L	4.3	20
8270C	Water	Benzo[a]pyrene	ng/L	2.5	20
8270C	Water	Benzo[e]pyrene	ng/L	4.3	20
8270C	Water	Benzo[b]fluoranthene	ng/L	4.7	20
8270C	Water	Benzo(b)thiophene	ng/L	5.2	20
8270C	Water	Benzo[k]fluoranthene	ng/L	4.1	20
8270C	Water	Benzo[g,h,i]perylene	ng/L	6.2	20
8270C	Water	Carbazole	ng/L	3.8	20
8270C	Water	Chrysene	ng/L	5.6	20
8270C	Water	Dibenz(a,h)anthracene	ng/L	5.9	20
8270C	Water	Dibenzofuran	ng/L	5.7	20
8270C	Water	Dibenzothiophene	ng/L	4.1	20
8270C	Water	Fluoranthene	ng/L	4.6	20
8270C	Water	Fluorene	ng/L	4.1	20
8270C	Water	Indene	ng/L	4.7	20
8270C	Water	Indole	ng/L	4.7	20
8270C	Water	Indeno[1,2,3-cd]pyrene	ng/L	5.4	20
8270C	Water	Naphthalene	ng/L	8.6	20
8270C	Water	Perylene	ng/L	3.8	20
8270C	Water	Phenanthrene	ng/L	6.3	20
8270C	Water	Pyrene	ng/L	4.2	20
8270C	Water	Quinoline	ng/L	9.0	20
8270C	Water	Biphenyl	ng/L	5.6	20

AECOM
2 Technology Park Drive
Westford, MA 01886-3140

978.589.3000 tel
978.589.3100 fax

Data Quality Assessment Memorandum

Date: December 8, 2011

To: Bill Gregg

From: Drew Tarara

Subject: Data Quality Assessment
Ultra Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 280-16691-1
Appendix C

Distribution: File 60145681 File

SUMMARY

A Data Quality Assessment (DQA) was performed on the data for the analysis of seven aqueous samples and two field blanks for Ultra Low Level aromatic hydrocarbons (PAHs) by SW-846 method 8270C, selected ion monitoring (SIM) method. The samples were collected on June 7, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to TestAmerica in Arvada, CO for analysis. TestAmerica processed and reported the results under lot number 280-16691-1.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes.

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
E2-060711	E13FBD-060711
E3-060711	E15-060711
E13-060711	SLP10FEED-060711
E13D-060711	W23-060711
E13FB-060711	

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

Six cooler temperatures as measured upon sample receipt were within the acceptance criteria of 4± 2°C. Two additional sample coolers had temperatures of 1.6°C and 1.2°C. No action was taken due to this minor nonconformance.

Laboratory Blanks/Field Blanks

Target analytes were detected in the laboratory method blank and in the field blanks E13FB-060711 and E13FBD-060711. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (AL) were established at 5x the concentration detected in the blank. The following table summarizes the level of blank contamination detected in the laboratory method blank; the action level; and the associated samples.

Compound	Concentration (ng/L)	AL (ng/L)	Associated Samples
1-Methynaphthalene	4.09	20.45	All samples in data set
2-Methylnaphthalene	5.62	28.1	All samples in data set
Benzo(a)anthracene	1.19	5.95	All samples in data set
Benzo(b)fluoranthene	2.38	11.9	All samples in data set
Benzo(k)fluoranthene	1.81	9.05	All samples in data set
Benzo(ghi)perylene	2.59	12.95	All samples in data set
Chrysene	1.68	8.4	All samples in data set
Dibenz(a,h)anthracene	1.41	7.05	All samples in data set
Fluoranthene	2.65	13.25	All samples in data set
Indeno(1,2,3-cd)pyrene	2.06	10.3	All samples in data set
Naphthalene	6.86	34.3	All samples in data set

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

Compound	Concentration (ng/L)	AL (ng/L)	Associated Samples
Pyrene	2.51	12.55	All samples in data set

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses with the following exceptions. Qualification of the data for all samples was not required since only one of three surrogate recoveries fell below the QAPP QC acceptance in these sample analyses.

Sample ID	Surrogate Percent Recoveries (%Rs)			Actions	
	Chrysene-d12	Fluorene-d10	Naphthalene-d8	Detects	Nondetects
E2-060711	16	Ok	Ok	Accept	Accept
E15-060711	19	Ok	Ok	Accept	Accept
W23-060711	16	Ok	Ok	Accept	Accept
QAPP QC Limits	**28-101**	**23-84**	**22-97**		

MS/MSD Results

MS/MSD analyses were performed on sample E13-060711 from this data set. All target analytes were spiked. The percent recoveries (%Rs) fell outside the recovery limits in 9 of the 33 spiked target analytes in the MS and of 12 of the 33 spiked target analytes in the MSD. The relative percent differences (RPDs) fell within the QC acceptance criteria in the MS/MSD in all but five analytes. The following table summarizes the %Rs which fell at or below 10%. These results were qualified as indicated below.

Compound	MS %R	MSD %R	RPD	Laboratory QC limits %R (RPD)	Action (Detects/Nondetects)
3-Methylcholanthrene	9	11	ok	30-150 (50)	J/R
Benzo(a)pyrene	10	13	ok	30-150 (50)	J/R
Benzo(e)pyrene	9	11	ok	37-105 (50)	J/R
Benzo(ghi)perylene	8	10	ok	30-150 (50)	J/R
Dibenzo(ah)anthracene	7	10	ok	30-132 (50)	J/R
Indeno(123,cd)pyrene	8	10	ok	30-150 (50)	J/R
Perylene	9	12	ok	30-150 (50)	J/R
1-Methynaphthalene	ok	ok	128	30-150 (50)	J/R
2-Methylnaphthalene	ok	ok	140	30-150 (50)	J/R
Acridine	ok	ok	65	30-150 (50)	J/R
Naphthalene	ok	ok	117	30-150 (50)	J/R
Biphenyl	ok	ok	51	30-150 (50)	J/R
Associated sample: E13-060711					

These low recoveries are consistent with previous years. No other validation action was taken based on these results.

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

LCS Results

All target analytes were spiked. The %Rs were within the QC acceptance criteria for the LCS analysis except for Arcridine (19%). No actions were taken based on this result.

Field Duplicate Results

Samples E13-060711 and E13D-060711 were the field duplicate pair analyzed with this data set.

The results for the detected compounds in samples E13-060711 and E13D-060711 and their RPDs are tabulated below.

Compound	E13-060711 (ng/L)	E13D-060711 (ng/L)	RPD
Acenaphthene	120	110	8.7
Acenaphthylene	9.6	9.2	4.3
Dibenzothiopene	3.0	2.8	6.9
2,3-Dihydroindene	6.7	6.3	6.2
Fluoranthene	2.4	2.0	18.2
Naphthalene	2.3	1.7	30
Pyrene	10	9.3	7.3
Criteria: Aqueous RPD ≤ 30, if both sample and duplicate results are > 5x SQL. The RPD criterion is doubled if both sample and duplicate results are <5x SQL.			

Sample Quantitation/Detection Limit Results

Sample calculations were spot checked. No discrepancies were noted.

All samples were analyzed undiluted with the exception of samples in the table below.

Sample ID	Dilution	Reason
SLP10FEED-060711	Undiluted and 5x	Acenaphthene with 5x dilution
W23-060711	Undiluted and 20x	12 compounds analyzed with 20x dilution

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

June 22, 2011

Andrew Tarara
AECOM
First National Bank Building
332 Minnesota St, Suite E1000
Saint Paul, MN 55101

RE: Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Dear Andrew Tarara:
Enclosed are the analytical results for sample(s) received by the laboratory on June 08, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Carol Davy

carol.davy@pacelabs.com
Project Manager

Enclosures

cc: Bill Gregg, AECOM

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Idaho Certification #: MN00064
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New Mexico Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: D9921
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Washington Certification #: C754
Wisconsin Certification #: 999407970

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10159684001	**W420-06082011**	Water	06/08/11 12:15	06/08/11 16:29
10159684002	**W421-06082011**	Water	06/08/11 12:20	06/08/11 16:29
10159684003	**P310-06082011**	Water	06/08/11 11:20	06/08/11 16:29
10159684004	**P109-06082011**	Water	06/08/11 09:20	06/08/11 16:29
10159684005	**W438-06082011**	Water	06/08/11 10:55	06/08/11 16:29
10159684006	**W438D-06082011**	Water	06/08/11 11:00	06/08/11 16:29
10159684007	**W438FB-06082011**	Water	06/08/11 10:45	06/08/11 16:29
10159684008	**W438FBD-06082011**	Water	06/08/11 10:50	06/08/11 16:29
10159684009	**W20-06082011**	Water	06/08/11 09:15	06/08/11 16:29
10159684010	**W22-06082011**	Water	06/08/11 12:50	06/08/11 16:29
10159684011	**P307-060802011**	Water	06/08/11 14:05	06/08/11 16:29
10159684012	**P308-060802011**	Water	06/08/11 15:20	06/08/11 16:29
10159684013	**W437-06082011**	Water	06/08/11 14:50	06/08/11 16:29

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10159684001	**W420-06082011**	EPA 8270 by SIM	JLR	18
10159684002	**W421-06082011**	EPA 8270 by SIM	JLR	18
10159684003	**P310-06082011**	EPA 8270 by SIM	JLR	18
10159684004	**P109-06082011**	EPA 8270 by SIM	JLR	18
10159684005	**W438-06082011**	EPA 8270 by SIM	DRE	18
10159684006	**W438D-06082011**	EPA 8270 by SIM	JLR	18
10159684007	**W438FB-06082011**	EPA 8270 by SIM	JLR	18
10159684008	**W438FBD-06082011**	EPA 8270 by SIM	JLR	18
10159684009	**W20-06082011**	EPA 8270 by SIM	JLR	18
10159684010	**W22-06082011**	EPA 8270 by SIM	JLR	18
10159684011	**P307-060802011**	EPA 8270 by SIM	JLR	18
10159684012	**P308-060802011**	EPA 8270 by SIM	JLR	18
10159684013	**W437-06082011**	EPA 8270 by SIM	JLR	18

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: June 22, 2011

General Information:
13 samples were analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

B: Analyte was detected in the associated method blank.
- P109-06082011 (Lab ID: 10159684004)
- P307-060802011 (Lab ID: 10159684011)
- P310-06082011 (Lab ID: 10159684003)
- W420-06082011 (Lab ID: 10159684001)
- W421-06082011 (Lab ID: 10159684002)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: June 22, 2011

Analyte Comments:

QC Batch: OEXT/15782

B: Analyte was detected in the associated method blank.
- P109-06082011 (Lab ID: 10159684004)
  - Naphthalene
- P307-060802011 (Lab ID: 10159684011)
  - Naphthalene
- P310-06082011 (Lab ID: 10159684003)
  - Naphthalene
- W420-06082011 (Lab ID: 10159684001)
  - Naphthalene
- W421-06082011 (Lab ID: 10159684002)
  - Naphthalene

C0: Result confirmed by second analysis.
- P307-060802011 (Lab ID: 10159684011)
  - Naphthalene
- P310-06082011 (Lab ID: 10159684003)
  - Naphthalene

C1: Result could not be confirmed by second analysis.
- P109-06082011 (Lab ID: 10159684004)
  - Naphthalene

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W420-06082011 **Lab ID: 10159684001** Collected: 06/08/11 12:15 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**130**	ug/L	4.0		100	06/13/11 07:58	06/20/11 18:21	83-32-9	
Acenaphthylene	**0.54**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	208-96-8	
Anthracene	**2.1**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	53-70-3	
Fluoranthene	**1.3**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	206-44-0	
Fluorene	**61.2**	ug/L	0.40		10	06/13/11 07:58	06/20/11 18:02	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	193-39-5	
Naphthalene	**2010**	ug/L	20.2		500	06/13/11 07:58	06/21/11 14:25	91-20-3	B
Phenanthrene	**45.9**	ug/L	0.40		10	06/13/11 07:58	06/20/11 18:02	85-01-8	
Pyrene	**0.60**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 17:57	129-00-0	
2-Fluorobiphenyl (S)	81	%	56-125		1	06/13/11 07:58	06/17/11 17:57	321-60-8	
Terphenyl-d14 (S)	90	%	58-125		1	06/13/11 07:58	06/17/11 17:57	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W421-06082011 **Lab ID: 10159684002** Collected: 06/08/11 12:20 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**120**	ug/L	2.0		50	06/13/11 07:58	06/20/11 19:00	83-32-9	
Acenaphthylene	**1.1**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	208-96-8	
Anthracene	**6.7**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	120-12-7	
Benzo(a)anthracene	**1.7**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	56-55-3	
Benzo(a)pyrene	**0.80**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	50-32-8	
Benzo(b)fluoranthene	**1.2**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	205-99-2	
Benzo(g,h,i)perylene	**0.36**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	191-24-2	
Benzo(k)fluoranthene	**0.38**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	207-08-9	
Chrysene	**1.2**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	218-01-9	
Dibenz(a,h)anthracene	**0.12**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	53-70-3	
Fluoranthene	**22.3**	ug/L	0.41		10	06/13/11 07:58	06/20/11 18:40	206-44-0	
Fluorene	**56.3**	ug/L	0.41		10	06/13/11 07:58	06/20/11 18:40	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.31**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:16	193-39-5	
Naphthalene	**312**	ug/L	2.0		50	06/13/11 07:58	06/20/11 19:00	91-20-3	B
Phenanthrene	**74.7**	ug/L	0.41		10	06/13/11 07:58	06/20/11 18:40	85-01-8	
Pyrene	**12.6**	ug/L	0.41		10	06/13/11 07:58	06/20/11 18:40	129-00-0	
2-Fluorobiphenyl (S)	83	%	56-125		1	06/13/11 07:58	06/17/11 18:16	321-60-8	
Terphenyl-d14 (S)	93	%	58-125		1	06/13/11 07:58	06/17/11 18:16	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: P310-06082011 **Lab ID: 10159684003** Collected: 06/08/11 11:20 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.38**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	208-96-8	
Anthracene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	207-08-9	
Chrysene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	53-70-3	
Fluoranthene	**0.022J**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	206-44-0	
Fluorene	**0.032J**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	193-39-5	
Naphthalene	**0.051**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	91-20-3	B,C0
Phenanthrene	**0.027J**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	85-01-8	
Pyrene	**0.021J**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:36	129-00-0	
2-Fluorobiphenyl (S)	79	%	56-125		1	06/13/11 07:58	06/17/11 18:36	321-60-8	
Terphenyl-d14 (S)	92	%	58-125		1	06/13/11 07:58	06/17/11 18:36	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: P109-06082011 **Lab ID: 10159684004** Collected: 06/08/11 09:20 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	208-96-8	
Anthracene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	207-08-9	
Chrysene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	53-70-3	
Fluoranthene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	206-44-0	
Fluorene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	193-39-5	
Naphthalene	**0.023J**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	91-20-3	B,C1
Phenanthrene	**0.022J**	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	85-01-8	
Pyrene	ND	ug/L	0.041	0.020	1	06/13/11 07:58	06/17/11 18:55	129-00-0	
2-Fluorobiphenyl (S)	77	%	56-125		1	06/13/11 07:58	06/17/11 18:55	321-60-8	
Terphenyl-d14 (S)	91	%	58-125		1	06/13/11 07:58	06/17/11 18:55	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W438-06082011 **Lab ID: 10159684005** Collected: 06/08/11 10:55 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/16/11 13:26	129-00-0	
2-Fluorobiphenyl (S)	76	%	56-125		1	06/13/11 07:58	06/16/11 13:26	321-60-8	
Terphenyl-d14 (S)	101	%	58-125		1	06/13/11 07:58	06/16/11 13:26	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W438D-06082011 **Lab ID: 10159684006** Collected: 06/08/11 11:00 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:14	129-00-0	
2-Fluorobiphenyl (S)	83	%	56-125		1	06/13/11 07:58	06/17/11 19:14	321-60-8	
Terphenyl-d14 (S)	94	%	58-125		1	06/13/11 07:58	06/17/11 19:14	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W438FB-06082011 **Lab ID: 10159684007** Collected: 06/08/11 10:45 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	91-20-3	
Phenanthrene	**0.032J**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:33	129-00-0	
2-Fluorobiphenyl (S)	80	%	56-125		1	06/13/11 07:58	06/17/11 19:33	321-60-8	
Terphenyl-d14 (S)	86	%	58-125		1	06/13/11 07:58	06/17/11 19:33	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W438FBD-06082011 **Lab ID: 10159684008** Collected: 06/08/11 10:50 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 19:53	129-00-0	
2-Fluorobiphenyl (S)	61	%	56-125		1	06/13/11 07:58	06/17/11 19:53	321-60-8	
Terphenyl-d14 (S)	77	%	58-125		1	06/13/11 07:58	06/17/11 19:53	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W20-06082011 **Lab ID: 10159684009** Collected: 06/08/11 09:15 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:12	129-00-0	
2-Fluorobiphenyl (S)	76	%	56-125		1	06/13/11 07:58	06/17/11 20:12	321-60-8	
Terphenyl-d14 (S)	94	%	58-125		1	06/13/11 07:58	06/17/11 20:12	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W22-06082011 **Lab ID: 10159684010** Collected: 06/08/11 12:50 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.029J**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	53-70-3	
Fluoranthene	**0.021J**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	206-44-0	
Fluorene	**0.027J**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	91-20-3	
Phenanthrene	**0.052**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:31	129-00-0	
2-Fluorobiphenyl (S)	84	%	56-125		1	06/13/11 07:58	06/17/11 20:31	321-60-8	
Terphenyl-d14 (S)	112	%	58-125		1	06/13/11 07:58	06/17/11 20:31	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: P307-060802011 **Lab ID: 10159684011** Collected: 06/08/11 14:05 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**9.8**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	83-32-9	
Acenaphthylene	**2.1**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	206-44-0	
Fluorene	**1.5**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	193-39-5	
Naphthalene	**0.13**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	91-20-3	B,C0
Phenanthrene	**0.028J**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 20:51	129-00-0	
2-Fluorobiphenyl (S)	79	%	56-125		1	06/13/11 07:58	06/17/11 20:51	321-60-8	
Terphenyl-d14 (S)	97	%	58-125		1	06/13/11 07:58	06/17/11 20:51	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: P308-060802011 **Lab ID: 10159684012** Collected: 06/08/11 15:20 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**2.1**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	208-96-8	
Anthracene	**0.026J**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:10	129-00-0	
2-Fluorobiphenyl (S)	75	%	56-125		1	06/13/11 07:58	06/17/11 21:10	321-60-8	
Terphenyl-d14 (S)	94	%	58-125		1	06/13/11 07:58	06/17/11 21:10	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Sample: W437-06082011 **Lab ID: 10159684013** Collected: 06/08/11 14:50 Received: 06/08/11 16:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**41.6**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	83-32-9	
Acenaphthylene	**0.26**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	208-96-8	
Anthracene	**0.66**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	206-44-0	
Fluorene	**13.8**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	193-39-5	
Naphthalene	**850**	ug/L	10.1	5.0	250	06/13/11 07:58	06/21/11 14:44	91-20-3	
Phenanthrene	**1.0**	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/13/11 07:58	06/17/11 21:29	129-00-0	
2-Fluorobiphenyl (S)	79	%	56-125		1	06/13/11 07:58	06/17/11 21:29	321-60-8	
Terphenyl-d14 (S)	94	%	58-125		1	06/13/11 07:58	06/17/11 21:29	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

QC Batch: OEXT/15782 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10159684001, 10159684002, 10159684003, 10159684004, 10159684005, 10159684006, 10159684007, 10159684008, 10159684009, 10159684010, 10159684011, 10159684012, 10159684013

METHOD BLANK: 993433 Matrix: Water
Associated Lab Samples: 10159684001, 10159684002, 10159684003, 10159684004, 10159684005, 10159684006, 10159684007, 10159684008, 10159684009, 10159684010, 10159684011, 10159684012, 10159684013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	06/16/11 11:11	
Acenaphthylene	ug/L	ND	0.040	06/16/11 11:11	
Anthracene	ug/L	ND	0.040	06/16/11 11:11	
Benzo(a)anthracene	ug/L	ND	0.040	06/16/11 11:11	
Benzo(a)pyrene	ug/L	ND	0.040	06/16/11 11:11	
Benzo(b)fluoranthene	ug/L	ND	0.040	06/16/11 11:11	
Benzo(g,h,i)perylene	ug/L	ND	0.040	06/16/11 11:11	
Benzo(k)fluoranthene	ug/L	ND	0.040	06/16/11 11:11	
Chrysene	ug/L	ND	0.040	06/16/11 11:11	
Dibenz(a,h)anthracene	ug/L	ND	0.040	06/16/11 11:11	
Fluoranthene	ug/L	ND	0.040	06/16/11 11:11	
Fluorene	ug/L	ND	0.040	06/16/11 11:11	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	06/16/11 11:11	
Naphthalene	ug/L	0.067	0.040	06/16/11 11:11	
Phenanthrene	ug/L	ND	0.040	06/16/11 11:11	
Pyrene	ug/L	ND	0.040	06/16/11 11:11	
2-Fluorobiphenyl (S)	%	74	56-125	06/16/11 11:11	
Terphenyl-d14 (S)	%	100	58-125	06/16/11 11:11	

LABORATORY CONTROL SAMPLE: 993434

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.78	78	56-125	
Acenaphthylene	ug/L	1	0.73	73	55-125	
Anthracene	ug/L	1	0.77	77	62-125	
Benzo(a)anthracene	ug/L	1	0.87	87	56-125	
Benzo(a)pyrene	ug/L	1	0.94	94	64-125	
Benzo(b)fluoranthene	ug/L	1	1.0	100	53-125	
Benzo(g,h,i)perylene	ug/L	1	0.84	84	38-125	
Benzo(k)fluoranthene	ug/L	1	0.96	96	59-125	
Chrysene	ug/L	1	0.93	93	64-125	
Dibenz(a,h)anthracene	ug/L	1	0.78	78	40-125	
Fluoranthene	ug/L	1	0.89	89	60-125	
Fluorene	ug/L	1	0.81	81	59-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.90	90	42-125	
Naphthalene	ug/L	1	0.71	71	52-125	
Phenanthrene	ug/L	1	0.81	81	54-125	
Pyrene	ug/L	1	0.94	94	66-125	
2-Fluorobiphenyl (S)	%			70	56-125	
Terphenyl-d14 (S)	%			101	58-125	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 993435 993436

Parameter	Units	10159684005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	1	1	0.80	0.76	80	76	46-125	6	30	
Acenaphthylene	ug/L	ND	1	1	0.75	0.72	75	72	46-125	4	30	
Anthracene	ug/L	ND	1	1	0.81	0.76	80	76	48-125	6	30	
Benzo(a)anthracene	ug/L	ND	1	1	0.87	0.82	87	82	47-125	6	30	
Benzo(a)pyrene	ug/L	ND	1	1	0.97	0.92	97	92	59-125	5	30	
Benzo(b)fluoranthene	ug/L	ND	1	1	0.90	0.86	90	86	40-125	5	30	
Benzo(g,h,i)perylene	ug/L	ND	1	1	0.92	0.90	91	90	38-125	2	30	
Benzo(k)fluoranthene	ug/L	ND	1	1	0.99	0.92	98	92	46-125	7	30	
Chrysene	ug/L	ND	1	1	0.91	0.87	91	87	56-125	5	30	
Dibenz(a,h)anthracene	ug/L	ND	1	1	0.87	0.86	87	86	30-125	2	30	
Fluoranthene	ug/L	ND	1	1	0.93	0.85	93	85	46-125	9	30	
Fluorene	ug/L	ND	1	1	0.84	0.78	84	78	48-125	8	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	1	1	0.92	0.88	91	88	32-125	4	30	
Naphthalene	ug/L	ND	1	1	0.75	0.71	74	71	44-125	5	30	
Phenanthrene	ug/L	ND	1	1	0.84	0.78	83	78	47-125	7	30	
Pyrene	ug/L	ND	1	1	0.95	0.89	94	89	55-125	7	30	
2-Fluorobiphenyl (S)	%						76	71	56-125			
Terphenyl-d14 (S)	%						98	93	58-125			

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

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.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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 NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
C0	Result confirmed by second analysis.
C1	Result could not be confirmed by second analysis.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60145681 St Louis Pk Reilly
Pace Project No.: 10159684

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10159684001	**W420-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684002	**W421-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684003	**P310-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684004	**P109-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684005	**W438-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684006	**W438D-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684007	**W438FB-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684008	**W438FBD-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684009	**W20-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684010	**W22-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684011	**P307-060802011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684012	**P308-060802011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723
10159684013	**W437-06082011**	EPA 3510	OEXT/15782	EPA 8270 by SIM	MSSV/6723

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10159684

1130
1131

Page: 1 of 2

1444561

Section A Required Client Information:

Company: City of St. Louis Park
Address: 7305 Oxford
St. Louis Park MN 55426
Email To: Scott Anderson
Phone: 952-924-2557 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Scott Anderson
Copy To: Drew Tarara (AECOM)
Purchase Order No.:
Project Name: City of St. Louis Park Realty Site
Project Number: 60145681

Section C Invoice Information:

Attention: Drew Tarara
Company Name: AECOM
Address:
Pace Quote Reference:
Pace Project Manager: Carol Davy
Pace Profile #: 12562 #1

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MN

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: PAH PCBs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	W420-06082011	WT	G			6/8/11	1215		2	2								X		001
2	W421-06082011						1220													002
3	P310-06082011						1120													003
4	P109-06082011						0920													004
5	W438-06082011						1055													005
6	W438D-06082011						1100													006
7	W438FB-06082011						1045													007
8	W438FBD-06082011						1050													008
9	W438MS-06082011						1105													005
10	W438MSD-06082011						1110													005
11	W20-06082011						0915													009
12	W22-06082011						1250													010

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	AECOM	6/8/11	1627	[illegible] / TAL	6-8-11	1629	3.7 6.0 4.1

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dan Phelps / Drew Tarara
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 6/8/11

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1129

Page: 2 of 2

1384593

25 of 26

Section A Required Client Information:

Company: City of St. Louis Park
Address: 7305 Oxford
St. Louis Park MN 55426
Email To: Scott Anderson
Phone: 952-924-2557 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Scott Anderson
Copy To: Drew Tarara (AECOM)
Purchase Order No.:
Project Name: City of St. Louis Park Reilly Site
Project Number: 60145681

Section C Invoice Information:

Attention: Drew Tarara
Company Name: AECOM
Address:
Pace Quote Reference:
Pace Project Manager: Carol Davy
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MN

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Analysis Test: PAH PCB	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	P307-060820M	WT	G			6/8/11	1405		2	2									X		011
2	P308-060820M	↓	↓			↓	1520		↓	↓									↓		012
3	W437-060820M	↓	↓			↓	1450		↓	↓									↓		013
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	AECOM	6/8/11	1627	PACE	6-8-11	1629	3.7
							6.0
							4.1

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dan Phelps / Drew Tarara

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 6/8/11

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Revised Date: 02Jun2011 Page 1 of 1
	Document Number: **F-L-213 Rev.01**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Cty St. Louis Prk Project # 10159684

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____ Temp Blank: Yes ✓ No _____

Thermometer Used 80344042 or 80512447 **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.7 6.0 4.1 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:**

Date and initials of person examining contents: 6-8-11 JMA

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: -Includes date/time/ID/Analysis Matrix: WT	☑Yes ☐No ☐N/A	12.	
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	Samp #	
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☑No	Initial when completed	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: (YMD) **Date:** 6-9-11

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)

AECOM
2 Technology Park Drive
Westford, MA 01886-3140

978.589.3000 tel
978.589.3100 fax

Data Quality Assessment Memorandum

Date: December 8, 2011

To: Bill Gregg

From: Drew Tarara

Subject: Data Quality Assessment
Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 10159684
Appendix D

Distribution: File 60145681 File

SUMMARY

A Data Quality Assessment (DQA) was performed on the data for the analysis of 11 aqueous samples and two field blanks for Ultra Low Level aromatic hydrocarbons (PAHs) by SW-846 method 8270C, selected ion monitoring (SIM) method. The samples were collected on June 8, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to Pace Analytical Services (Pace) in Minneapolis, MN for analysis. Pace processed and reported the results under lot number 10159684.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes.

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
W420-06082011	W438FB-06082011
W421-06082011	W438FBD-06082011
P310-06082011	W20-06082011
P109-06082011	W22-06082011
W438-06082011	P307-06082011
W438D-06082011	P308-06082011
	W437-06082011

AECOM
AECOM 978.589.3000 tel
2 Technology Park Drive 978.589.3100 fax
Westford, MA 01886-3140

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

All three cooler temperatures as measured upon sample receipt were within the acceptance criteria of 4± 2°C.

Laboratory Blanks/Field Blanks

Naphthalene was detected in the laboratory method blank associated with all samples in this data set. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. The following table summarizes the blank contamination detected, the action level (AL), and the associated samples.

Date Analyzed	Compound	Concentration (units)	Action Level (units)
6-16-11	Naphthalene	0.067 µg/L	.335 µg/L
Associated samples: All samples in this sample set.			

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

The following compounds were detected in the aqueous field blanks. No validation actions were necessary since these results were for informational purposes only.

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

W438FB-06082011	
Compound	**Concentration (µg/L)**
Phenanthrene	.032 J

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on sample W438-06082011 from this data set. All target analytes were spiked. All percent recoveries (%Rs) and relative percent differences (RPDs) were within the QAPP QC acceptance criteria.

LCS Results

All target analytes were spiked. The %Rs were within the QC acceptance criteria for the LCS analysis.

Field Duplicate Results

Samples W438-06082011 and W438D-06082011 is the field duplicate pair analyzed with this data set. None of the 16 analytes were detected in either sample.

Sample Quantitation/Detection Limit Results

Sample calculations were spot checked. No discrepancies were noted.

All samples were analyzed undiluted with the exception of samples in the table below.

Sample ID	Dilution	Reason
W420-06082011	10x,100x and 500x	10x for fluorene and phenanthrene,100x for acenaphthene, and 500x for naphthalene
W421-06082011	10x and 50x	10x for fluoranthene, fluorine, phenanthrene, and pyrene. 50x for naphthalene and acenaphthene
W437-06082011	250x	250x for naphthalene

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-16815-1
Client Project/Site: CSLP - Reilly Tar & Chemical

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, Minnesota 55426

Attn: Scott Anderson

Authorized for release by:
07/08/2011 10:50:39 AM

Lisa Uriell
Project Manager I
lisa.uriell@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Table of Contents

Job ID: 280-16815-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-16815-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
Eight samples were received under chain of custody on June 10, 2011. The samples were received at temperatures of 4.0°C, 4.8° C, 2.0°C, 4.0°C, 5.8°C, 4.8°C and 4.4°C. All sample containers were received in acceptable condition.

No anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Sample W410-06092011 (280-16815-8) was analyzed at two different dilutions to obtain all target analytes within the linear calibration range. Reporting limits were adjusted accordingly. Surrogate recoveries could not be calculated for the analysis performed at a dilution, because the extracts were diluted beyond the ability to quantitate recoveries.

Surrogates Fluorene-d10 and/or Chrysene-d12 were recovered below the QC control limits in the following samples, as detailed below. Matrix interference was not obvious. Upon re-aliquoting and reanalyzing, the surrogate recovery outlier was still present. Re-extraction was not possible due to insufficient remaining sample volume; therefore, the data is reported as is.

W24-06092011 (280-16815-5) recovered Chrysene-d12 at 27% (limits 28-101%)
SLP6-06092011 (280-16815-6) recovered Chrysene-d12 at 25% (limits 28-101%)
W410-06092011 (280-16815-8) recovered Chrysene-d12 at 17% (limits 28-101%)
W410-06092011 (280-16815-8) recovered Fluorene-d10 at 85% (limits 23-84%)

Low levels of Pyrene are present in the method blank associated with prep batch 280-72093. Because the concentration in the method blank is not present at a level greater than one half the reporting limit, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”. Usability of the sample data is not compromised.

The LCS associated with prep batch 280-72093 exhibited the percent recovery below the QC control limits for Acridine at 7% (limits 30-150%). The LCS was re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

The MS/MSD associated with prep batch 280-72093 was performed using sample SLP10T-06092011 (280-16815-1), as requested. MS/MSD exhibited 14 of the 33 Matrix Spike compound recoveries and 1 of the 3 surrogate recoveries outside the control limits. MS/MSD exhibited 11 of the 33 Matrix Spike Duplicate compound recoveries outside the control limits. The MS/MSD exhibited 9

Job ID: 280-16815-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

of the 33 Relative Percent Difference (RPD) data outside the control limits. The MS/MSD exhibited percent recoveries and/or RPD data outside the control limits for the compounds listed below. Details of the specific analyte recoveries can found in the Matrix Spike Sample Recovery and Data Reports.

3-Methylnaphthalene	Acridine	Anthracene
Benzo[a]anthracene	Benzo[a]pyrene	Benzo[e]pyrene
Benzo[b]fluoranthene	Benzo[k]fluoranthene	Benzo[ghi]perylene
Chrysene	Dibenzo(a,h)pyrene	Indole
Indeno[1,2,3-cd]pyrene	Perylene	Quinoline
7,12-Dimethylbenz(a)anthracene		Chrysene-d12

No other anomalies were noted.

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION
JOB: 280-16815-1
ANALYSIS: SW846-8270C SIM

QC Parameter	Data Planned	Valid Data Obtained
Method Blank	31	31
MB Surrogates	3	3
LCS	7	7
LCS Surrogates	3	3
FB/FBD	62	62
MS	7	6
MS Surrogates	3	2
MSD	7	6
MSD Surrogates	3	3
MS/MSD RPD	7	4
Sample/Dup. RPD	31	29
Sample Surrogates	24	20
Samples and QC Internal Standard Area	36	36
TOTAL	**224**	**212**
% Completeness	**94.6%**	

Sample Duplicate Calculation for Method 8270C SIM

Sample Duplicate RPD					
JOB 280-16815-1					
Sample: SLP10T-06092011		**DUP: SLP10TDUP-06092011**			
Compound	**Result**	**Compound**	**Result**	**RPD**	**RPD>50%**
Acenaphthene	4.3	Acenaphthene	4.1	4.8	
Acenaphthylene	1.1	Acenaphthylene	ND	NC	
Acridine	ND	Acridine	ND	0.0	
Anthracene	ND	Anthracene	ND	0.0	
Benzo(a)anthracene	ND	Benzo(a)anthracene	ND	0.0	
Benzo(b)fluoranthene	ND	Benzo(b)fluoranthene	ND	0.0	
Benzo(k)fluoranthene	ND	Benzo(k)fluoranthene	ND	0.0	
2,3-Benzofuran	ND	2,3-Benzofuran	ND	0.0	
Benzo(ghi)perylene	ND	Benzo(ghi)perylene	ND	0.0	
Benzo(a)pyrene	ND	Benzo(a)pyrene	ND	0.0	
Benzo(e)pyrene	ND	Benzo(e)pyrene	ND	0.0	
Benzo(b)thiophene	ND	Benzo(b)thiophene	0.91	NC	
Biphenyl	ND	Biphenyl	ND	0.0	
Carbazole	ND	Carbazole	ND	0.0	
Chrysene	ND	Chrysene	ND	0.0	
Dibenz(a,h)anthracene	ND	Dibenz(a,h)anthracene	ND	0.0	
Dibenzofuran	ND	Dibenzofuran	ND	0.0	
Dibenzothiophene	ND	Dibenzothiophene	ND	0.0	
2,3-Dihydroindene	10	2,3-Dihydroindene	9.8	2.0	
Fluoranthene	ND	Fluoranthene	ND	0.0	
Fluorene	ND	Fluorene	ND	0.0	
Indene	ND	Indene	ND	0.0	
Indeno(1,2,3-cd)pyrene	ND	Indeno(1,2,3-cd)pyrene	ND	0.0	
Indole	ND	Indole	ND	0.0	
2-Methylnaphthalene	2.8	2-Methylnaphthalene	1.2	80.0	p
1-Methylnaphthalene	2.8	1-Methylnaphthalene	1.6	54.5	p
Naphthalene	5.4	Naphthalene	3.7	37.4	
Perylene	ND	Perylene	ND	0.0	
Phenanthrene	ND	Phenanthrene	ND	0.0	
Pyrene	1.4	Pyrene	ND	NC	
Quinoline	ND	Quinoline	ND	0.0	

RPD = Relative Percent Difference
ND = Compound not detected in the sample
p = RPD is outside of control limits
*NC = RPD not calculated, one positive result and one ND.
Considered acceptable if the positive result is less than 4x the RL.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Detection Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Client Sample ID: SLP10T-06092011 — Lab Sample ID: 280-16815-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	10		4.9	0.69	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	2.8	J	5.5	0.88	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	2.8	J	5.8	0.97	ng/L	1		8270C	Total/NA
Acenaphthene	4.3	J	5.6	0.49	ng/L	1		8270C	Total/NA
Acenaphthylene	1.1	J	4.7	0.76	ng/L	1		8270C	Total/NA
Naphthalene	5.4	J	8.5	1.1	ng/L	1		8270C	Total/NA
Pyrene	1.4	J B	4.2	0.98	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TDUP-06092011 — Lab Sample ID: 280-16815-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	9.8		4.8	0.67	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.6	J	5.3	0.85	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.2	J	5.6	0.93	ng/L	1		8270C	Total/NA
Acenaphthene	4.1	J	5.4	0.48	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	0.91	J	5.0	0.71	ng/L	1		8270C	Total/NA
Naphthalene	3.7	J	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFB-06092011 — Lab Sample ID: 280-16815-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.5	J	8.3	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFBD-06092011 — Lab Sample ID: 280-16815-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.6	J	8.6	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: W24-06092011 — Lab Sample ID: 280-16815-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	0.87	J	5.3	0.67	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	2.9	J	4.9	0.69	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	0.92	J	5.5	0.87	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.4	J	5.8	0.96	ng/L	1		8270C	Total/NA
Acenaphthene	2.5	J	5.6	0.49	ng/L	1		8270C	Total/NA
Acenaphthylene	0.87	J	4.7	0.76	ng/L	1		8270C	Total/NA
Acridine	7.1	*	6.4	6.4	ng/L	1		8270C	Total/NA
Anthracene	5.9		4.1	0.79	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	1.2	J	5.1	0.74	ng/L	1		8270C	Total/NA
Carbazole	2.2	J	3.7	0.71	ng/L	1		8270C	Total/NA
Indene	4.4	J	4.6	3.2	ng/L	1		8270C	Total/NA
Indole	2.9	J	4.6	1.7	ng/L	1		8270C	Total/NA
Naphthalene	4.4	J	8.4	1.1	ng/L	1		8270C	Total/NA
Pyrene	2.9	J B	4.1	0.97	ng/L	1		8270C	Total/NA

Client Sample ID: SLP6-06092011 — Lab Sample ID: 280-16815-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	56		5.0	0.69	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.6	J	5.6	0.88	ng/L	1		8270C	Total/NA
Acenaphthene	80		5.7	0.50	ng/L	1		8270C	Total/NA
Acridine	13	*	6.5	6.5	ng/L	1		8270C	Total/NA
Anthracene	2.7	J	4.2	0.79	ng/L	1		8270C	Total/NA

Client Sample ID: SLP6-06092011 (Continued)

Lab Sample ID: 280-16815-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(b)thiophene	12		5.2	0.74	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	1.2	J	6.2	1.2	ng/L	1		8270C	Total/NA
Carbazole	2.2	J	3.8	0.71	ng/L	1		8270C	Total/NA
Dibenzothiophene	1.8	J	4.1	0.97	ng/L	1		8270C	Total/NA
Fluoranthene	4.4	J	4.6	1.7	ng/L	1		8270C	Total/NA
Indene	7.5		4.7	3.3	ng/L	1		8270C	Total/NA
Naphthalene	4.2	J	8.5	1.1	ng/L	1		8270C	Total/NA
Pyrene	4.6	B	4.2	0.98	ng/L	1		8270C	Total/NA

Client Sample ID: W119-06092011

Lab Sample ID: 280-16815-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	3.6	J	5.0	0.70	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.1	J	5.6	0.89	ng/L	1		8270C	Total/NA
Acenaphthene	27		5.7	0.50	ng/L	1		8270C	Total/NA
Acenaphthylene	2.0	J	4.8	0.77	ng/L	1		8270C	Total/NA
Anthracene	2.8	J	4.2	0.80	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	3.8	J	5.2	0.75	ng/L	1		8270C	Total/NA
Indene	5.1		4.7	3.3	ng/L	1		8270C	Total/NA
Naphthalene	2.7	J	8.6	1.1	ng/L	1		8270C	Total/NA
Pyrene	13	B	4.2	0.99	ng/L	1		8270C	Total/NA

Client Sample ID: W410-06092011

Lab Sample ID: 280-16815-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	130		5.4	0.68	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	290		5.9	0.98	ng/L	1		8270C	Total/NA
Acenaphthylene	810		4.8	0.77	ng/L	1		8270C	Total/NA
Acridine	150	*	6.5	6.5	ng/L	1		8270C	Total/NA
Anthracene	210		4.2	0.80	ng/L	1		8270C	Total/NA
Dibenzothiophene	290		4.1	0.98	ng/L	1		8270C	Total/NA
Fluoranthene	230		4.6	1.7	ng/L	1		8270C	Total/NA
Pyrene	95	B	4.2	0.99	ng/L	1		8270C	Total/NA
2,3-Dihydroindene - DL	14000		500	70	ng/L	100		8270C	Total/NA
1-Methylnaphthalene - DL	14000		560	89	ng/L	100		8270C	Total/NA
Acenaphthene - DL	9300		570	50	ng/L	100		8270C	Total/NA
Benzo(b)thiophene - DL	7100		520	75	ng/L	100		8270C	Total/NA
Carbazole - DL	2700		380	72	ng/L	100		8270C	Total/NA
Dibenzofuran - DL	1100		570	99	ng/L	100		8270C	Total/NA
Fluorene - DL	3500		410	85	ng/L	100		8270C	Total/NA
Indene - DL	13000		470	330	ng/L	100		8270C	Total/NA
Naphthalene - DL	10000		860	110	ng/L	100		8270C	Total/NA
Phenanthrene - DL	3500		630	320	ng/L	100		8270C	Total/NA
Biphenyl - DL	2100		560	100	ng/L	100		8270C	Total/NA

Method Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compound (GC/MS SIM LL)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-16815-1	SLP10T-06092011	Water	06/09/11 07:10	06/10/11 09:30
280-16815-2	SLP10TDUP-06092011	Water	06/09/11 07:15	06/10/11 09:30
280-16815-3	SLP10TFB-06092011	Water	06/09/11 07:00	06/10/11 09:30
280-16815-4	SLP10TFBD-06092011	Water	06/09/11 07:05	06/10/11 09:30
280-16815-5	W24-06092011	Water	06/09/11 08:55	06/10/11 09:30
280-16815-6	SLP6-06092011	Water	06/09/11 09:10	06/10/11 09:30
280-16815-7	W119-06092011	Water	06/09/11 11:00	06/10/11 09:30
280-16815-8	W410-06092011	Water	06/09/11 10:30	06/10/11 09:30

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Client Sample ID: SLP10T-06092011
Date Collected: 06/09/11 07:10
Date Received: 06/10/11 09:30

Lab Sample ID: 280-16815-1
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.3	0.67	ng/L		06/15/11 17:10	07/06/11 12:46	1
2,3-Dihydroindene	**10**		4.9	0.69	ng/L		06/15/11 17:10	07/06/11 12:46	1
1-Methylnaphthalene	**2.8**	**J**	5.5	0.88	ng/L		06/15/11 17:10	07/06/11 12:46	1
2-Methylnaphthalene	**2.8**	**J**	5.8	0.97	ng/L		06/15/11 17:10	07/06/11 12:46	1
Acenaphthene	**4.3**	**J**	5.6	0.49	ng/L		06/15/11 17:10	07/06/11 12:46	1
Acenaphthylene	**1.1**	**J**	4.7	0.76	ng/L		06/15/11 17:10	07/06/11 12:46	1
Acridine	ND	*	6.4	6.4	ng/L		06/15/11 17:10	07/06/11 12:46	1
Anthracene	ND		4.2	0.79	ng/L		06/15/11 17:10	07/06/11 12:46	1
Benzo[a]anthracene	ND		4.3	0.91	ng/L		06/15/11 17:10	07/06/11 12:46	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/15/11 17:10	07/06/11 12:46	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/15/11 17:10	07/06/11 12:46	1
Benzo[b]fluoranthene	ND		4.6	1.4	ng/L		06/15/11 17:10	07/06/11 12:46	1
Benzo(b)thiophene	ND		5.1	0.74	ng/L		06/15/11 17:10	07/06/11 12:46	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		06/15/11 17:10	07/06/11 12:46	1
Benzo[g,h,i]perylene	ND		6.1	1.2	ng/L		06/15/11 17:10	07/06/11 12:46	1
Carbazole	ND		3.8	0.71	ng/L		06/15/11 17:10	07/06/11 12:46	1
Chrysene	ND		5.5	1.2	ng/L		06/15/11 17:10	07/06/11 12:46	1
Dibenz(a,h)anthracene	ND		5.8	1.0	ng/L		06/15/11 17:10	07/06/11 12:46	1
Dibenzofuran	ND		5.6	0.98	ng/L		06/15/11 17:10	07/06/11 12:46	1
Dibenzothiophene	ND		4.1	0.97	ng/L		06/15/11 17:10	07/06/11 12:46	1
Fluoranthene	ND		4.6	1.7	ng/L		06/15/11 17:10	07/06/11 12:46	1
Fluorene	ND		4.1	0.84	ng/L		06/15/11 17:10	07/06/11 12:46	1
Indene	ND		4.6	3.2	ng/L		06/15/11 17:10	07/06/11 12:46	1
Indole	ND		4.6	1.7	ng/L		06/15/11 17:10	07/06/11 12:46	1
Indeno[1,2,3-cd]pyrene	ND		5.3	1.2	ng/L		06/15/11 17:10	07/06/11 12:46	1
Naphthalene	**5.4**	**J**	8.5	1.1	ng/L		06/15/11 17:10	07/06/11 12:46	1
Perylene	ND		3.8	3.8	ng/L		06/15/11 17:10	07/06/11 12:46	1
Phenanthrene	ND		6.2	3.2	ng/L		06/15/11 17:10	07/06/11 12:46	1
Pyrene	**1.4**	**J B**	4.2	0.98	ng/L		06/15/11 17:10	07/06/11 12:46	1
Quinoline	ND		8.9	5.6	ng/L		06/15/11 17:10	07/06/11 12:46	1
Biphenyl	ND		5.5	1.0	ng/L		06/15/11 17:10	07/06/11 12:46	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*76*		*23 - 84*	*06/15/11 17:10*	*07/06/11 12:46*	*1*
Chrysene-d12 (Surr)	*48*		*28 - 101*	*06/15/11 17:10*	*07/06/11 12:46*	*1*
Naphthalene-d8 (Surr)	*78*		*22 - 97*	*06/15/11 17:10*	*07/06/11 12:46*	*1*

Client Sample ID: SLP10TDUP-06092011
Date Collected: 06/09/11 07:15
Date Received: 06/10/11 09:30

Lab Sample ID: 280-16815-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		06/15/11 17:10	07/06/11 14:36	1
2,3-Dihydroindene	**9.8**		4.8	0.67	ng/L		06/15/11 17:10	07/06/11 14:36	1
1-Methylnaphthalene	**1.6**	**J**	5.3	0.85	ng/L		06/15/11 17:10	07/06/11 14:36	1
2-Methylnaphthalene	**1.2**	**J**	5.6	0.93	ng/L		06/15/11 17:10	07/06/11 14:36	1
Acenaphthene	**4.1**	**J**	5.4	0.48	ng/L		06/15/11 17:10	07/06/11 14:36	1
Acenaphthylene	ND		4.6	0.73	ng/L		06/15/11 17:10	07/06/11 14:36	1
Acridine	ND	*	6.2	6.2	ng/L		06/15/11 17:10	07/06/11 14:36	1
Anthracene	ND		4.0	0.76	ng/L		06/15/11 17:10	07/06/11 14:36	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/15/11 17:10	07/06/11 14:36	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/15/11 17:10	07/06/11 14:36	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/15/11 17:10	07/06/11 14:36	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/15/11 17:10	07/06/11 14:36	1
Benzo(b)thiophene	**0.91**	**J**	5.0	0.71	ng/L		06/15/11 17:10	07/06/11 14:36	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/15/11 17:10	07/06/11 14:36	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/15/11 17:10	07/06/11 14:36	1
Carbazole	ND		3.6	0.69	ng/L		06/15/11 17:10	07/06/11 14:36	1
Chrysene	ND		5.3	1.2	ng/L		06/15/11 17:10	07/06/11 14:36	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/15/11 17:10	07/06/11 14:36	1
Dibenzofuran	ND		5.4	0.94	ng/L		06/15/11 17:10	07/06/11 14:36	1
Dibenzothiophene	ND		3.9	0.93	ng/L		06/15/11 17:10	07/06/11 14:36	1
Fluoranthene	ND		4.4	1.6	ng/L		06/15/11 17:10	07/06/11 14:36	1
Fluorene	ND		3.9	0.81	ng/L		06/15/11 17:10	07/06/11 14:36	1
Indene	ND		4.5	3.1	ng/L		06/15/11 17:10	07/06/11 14:36	1
Indole	ND		4.5	1.6	ng/L		06/15/11 17:10	07/06/11 14:36	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		06/15/11 17:10	07/06/11 14:36	1
Naphthalene	**3.7**	**J**	8.2	1.1	ng/L		06/15/11 17:10	07/06/11 14:36	1
Perylene	ND		3.6	3.6	ng/L		06/15/11 17:10	07/06/11 14:36	1
Phenanthrene	ND		6.0	3.1	ng/L		06/15/11 17:10	07/06/11 14:36	1
Pyrene	ND		4.0	0.94	ng/L		06/15/11 17:10	07/06/11 14:36	1
Quinoline	ND		8.6	5.4	ng/L		06/15/11 17:10	07/06/11 14:36	1
Biphenyl	ND		5.3	1.0	ng/L		06/15/11 17:10	07/06/11 14:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*73*		*23 - 84*	*06/15/11 17:10*	*07/06/11 14:36*	*1*
Chrysene-d12 (Surr)	*32*		*28 - 101*	*06/15/11 17:10*	*07/06/11 14:36*	*1*
Naphthalene-d8 (Surr)	*79*		*22 - 97*	*06/15/11 17:10*	*07/06/11 14:36*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Client Sample ID: SLP10TFB-06092011
Date Collected: 06/09/11 07:00
Date Received: 06/10/11 09:30

Lab Sample ID: 280-16815-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.2	0.65	ng/L		06/15/11 17:10	07/06/11 15:13	1
2,3-Dihydroindene	ND		4.8	0.67	ng/L		06/15/11 17:10	07/06/11 15:13	1
1-Methylnaphthalene	ND		5.4	0.85	ng/L		06/15/11 17:10	07/06/11 15:13	1
2-Methylnaphthalene	ND		5.7	0.94	ng/L		06/15/11 17:10	07/06/11 15:13	1
Acenaphthene	ND		5.5	0.48	ng/L		06/15/11 17:10	07/06/11 15:13	1
Acenaphthylene	ND		4.6	0.74	ng/L		06/15/11 17:10	07/06/11 15:13	1
Acridine	ND	*	6.2	6.2	ng/L		06/15/11 17:10	07/06/11 15:13	1
Anthracene	ND		4.0	0.77	ng/L		06/15/11 17:10	07/06/11 15:13	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		06/15/11 17:10	07/06/11 15:13	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		06/15/11 17:10	07/06/11 15:13	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/15/11 17:10	07/06/11 15:13	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		06/15/11 17:10	07/06/11 15:13	1
Benzo(b)thiophene	ND		5.0	0.72	ng/L		06/15/11 17:10	07/06/11 15:13	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/15/11 17:10	07/06/11 15:13	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		06/15/11 17:10	07/06/11 15:13	1
Carbazole	ND		3.6	0.69	ng/L		06/15/11 17:10	07/06/11 15:13	1
Chrysene	ND		5.4	1.2	ng/L		06/15/11 17:10	07/06/11 15:13	1
Dibenz(a,h)anthracene	ND		5.7	1.0	ng/L		06/15/11 17:10	07/06/11 15:13	1
Dibenzofuran	ND		5.5	0.95	ng/L		06/15/11 17:10	07/06/11 15:13	1
Dibenzothiophene	ND		3.9	0.94	ng/L		06/15/11 17:10	07/06/11 15:13	1
Fluoranthene	ND		4.4	1.6	ng/L		06/15/11 17:10	07/06/11 15:13	1
Fluorene	ND		3.9	0.82	ng/L		06/15/11 17:10	07/06/11 15:13	1
Indene	ND		4.5	3.1	ng/L		06/15/11 17:10	07/06/11 15:13	1
Indole	ND		4.5	1.7	ng/L		06/15/11 17:10	07/06/11 15:13	1
Indeno[1,2,3-cd]pyrene	ND		5.2	1.2	ng/L		06/15/11 17:10	07/06/11 15:13	1
Naphthalene	**1.5**	**J**	8.3	1.1	ng/L		06/15/11 17:10	07/06/11 15:13	1
Perylene	ND		3.7	3.7	ng/L		06/15/11 17:10	07/06/11 15:13	1
Phenanthrene	ND		6.0	3.1	ng/L		06/15/11 17:10	07/06/11 15:13	1
Pyrene	ND		4.0	0.95	ng/L		06/15/11 17:10	07/06/11 15:13	1
Quinoline	ND		8.6	5.4	ng/L		06/15/11 17:10	07/06/11 15:13	1
Biphenyl	ND		5.4	1.0	ng/L		06/15/11 17:10	07/06/11 15:13	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*65*		*23 - 84*	*06/15/11 17:10*	*07/06/11 15:13*	*1*
Chrysene-d12 (Surr)	*68*		*28 - 101*	*06/15/11 17:10*	*07/06/11 15:13*	*1*
Naphthalene-d8 (Surr)	*61*		*22 - 97*	*06/15/11 17:10*	*07/06/11 15:13*	*1*

Client Sample ID: SLP10TFBD-06092011
Date Collected: 06/09/11 07:05
Date Received: 06/10/11 09:30

Lab Sample ID: 280-16815-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		06/15/11 17:10	07/06/11 15:49	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		06/15/11 17:10	07/06/11 15:49	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		06/15/11 17:10	07/06/11 15:49	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		06/15/11 17:10	07/06/11 15:49	1
Acenaphthene	ND		5.7	0.50	ng/L		06/15/11 17:10	07/06/11 15:49	1
Acenaphthylene	ND		4.8	0.77	ng/L		06/15/11 17:10	07/06/11 15:49	1
Acridine	ND	*	6.5	6.5	ng/L		06/15/11 17:10	07/06/11 15:49	1
Anthracene	ND		4.2	0.80	ng/L		06/15/11 17:10	07/06/11 15:49	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		06/15/11 17:10	07/06/11 15:49	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/15/11 17:10	07/06/11 15:49	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/15/11 17:10	07/06/11 15:49	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		06/15/11 17:10	07/06/11 15:49	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		06/15/11 17:10	07/06/11 15:49	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		06/15/11 17:10	07/06/11 15:49	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		06/15/11 17:10	07/06/11 15:49	1
Carbazole	ND		3.8	0.72	ng/L		06/15/11 17:10	07/06/11 15:49	1
Chrysene	ND		5.6	1.2	ng/L		06/15/11 17:10	07/06/11 15:49	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		06/15/11 17:10	07/06/11 15:49	1
Dibenzofuran	ND		5.7	0.99	ng/L		06/15/11 17:10	07/06/11 15:49	1
Dibenzothiophene	ND		4.1	0.98	ng/L		06/15/11 17:10	07/06/11 15:49	1
Fluoranthene	ND		4.6	1.7	ng/L		06/15/11 17:10	07/06/11 15:49	1
Fluorene	ND		4.1	0.85	ng/L		06/15/11 17:10	07/06/11 15:49	1
Indene	ND		4.7	3.3	ng/L		06/15/11 17:10	07/06/11 15:49	1
Indole	ND		4.7	1.7	ng/L		06/15/11 17:10	07/06/11 15:49	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		06/15/11 17:10	07/06/11 15:49	1
Naphthalene	**1.6**	**J**	8.6	1.1	ng/L		06/15/11 17:10	07/06/11 15:49	1
Perylene	ND		3.8	3.8	ng/L		06/15/11 17:10	07/06/11 15:49	1
Phenanthrene	ND		6.3	3.2	ng/L		06/15/11 17:10	07/06/11 15:49	1
Pyrene	ND		4.2	0.99	ng/L		06/15/11 17:10	07/06/11 15:49	1
Quinoline	ND		9.0	5.6	ng/L		06/15/11 17:10	07/06/11 15:49	1
Biphenyl	ND		5.6	1.0	ng/L		06/15/11 17:10	07/06/11 15:49	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*74*		*23 - 84*	*06/15/11 17:10*	*07/06/11 15:49*	*1*
Chrysene-d12 (Surr)	*73*		*28 - 101*	*06/15/11 17:10*	*07/06/11 15:49*	*1*
Naphthalene-d8 (Surr)	*72*		*22 - 97*	*06/15/11 17:10*	*07/06/11 15:49*	*1*

Client Sample ID: W24-06092011
Date Collected: 06/09/11 08:55
Date Received: 06/10/11 09:30

Lab Sample ID: 280-16815-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**0.87**	**J**	5.3	0.67	ng/L		06/15/11 17:10	07/06/11 16:26	1
2,3-Dihydroindene	**2.9**	**J**	4.9	0.69	ng/L		06/15/11 17:10	07/06/11 16:26	1
1-Methylnaphthalene	**0.92**	**J**	5.5	0.87	ng/L		06/15/11 17:10	07/06/11 16:26	1
2-Methylnaphthalene	**1.4**	**J**	5.8	0.96	ng/L		06/15/11 17:10	07/06/11 16:26	1
Acenaphthene	**2.5**	**J**	5.6	0.49	ng/L		06/15/11 17:10	07/06/11 16:26	1
Acenaphthylene	**0.87**	**J**	4.7	0.76	ng/L		06/15/11 17:10	07/06/11 16:26	1
Acridine	**7.1**	*****	6.4	6.4	ng/L		06/15/11 17:10	07/06/11 16:26	1
Anthracene	**5.9**		4.1	0.79	ng/L		06/15/11 17:10	07/06/11 16:26	1
Benzo[a]anthracene	ND		4.2	0.90	ng/L		06/15/11 17:10	07/06/11 16:26	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/15/11 17:10	07/06/11 16:26	1
Benzo[e]pyrene	ND		4.2	1.1	ng/L		06/15/11 17:10	07/06/11 16:26	1
Benzo[b]fluoranthene	ND		4.6	1.4	ng/L		06/15/11 17:10	07/06/11 16:26	1
Benzo(b)thiophene	**1.2**	**J**	5.1	0.74	ng/L		06/15/11 17:10	07/06/11 16:26	1
Benzo[k]fluoranthene	ND		4.0	1.2	ng/L		06/15/11 17:10	07/06/11 16:26	1
Benzo[g,h,i]perylene	ND		6.1	1.1	ng/L		06/15/11 17:10	07/06/11 16:26	1
Carbazole	**2.2**	**J**	3.7	0.71	ng/L		06/15/11 17:10	07/06/11 16:26	1
Chrysene	ND		5.5	1.2	ng/L		06/15/11 17:10	07/06/11 16:26	1
Dibenz(a,h)anthracene	ND		5.8	1.0	ng/L		06/15/11 17:10	07/06/11 16:26	1
Dibenzofuran	ND		5.6	0.97	ng/L		06/15/11 17:10	07/06/11 16:26	1
Dibenzothiophene	ND		4.0	0.96	ng/L		06/15/11 17:10	07/06/11 16:26	1
Fluoranthene	ND		4.5	1.7	ng/L		06/15/11 17:10	07/06/11 16:26	1
Fluorene	ND		4.0	0.84	ng/L		06/15/11 17:10	07/06/11 16:26	1
Indene	**4.4**	**J**	4.6	3.2	ng/L		06/15/11 17:10	07/06/11 16:26	1
Indole	**2.9**	**J**	4.6	1.7	ng/L		06/15/11 17:10	07/06/11 16:26	1
Indeno[1,2,3-cd]pyrene	ND		5.3	1.2	ng/L		06/15/11 17:10	07/06/11 16:26	1
Naphthalene	**4.4**	**J**	8.4	1.1	ng/L		06/15/11 17:10	07/06/11 16:26	1
Perylene	ND		3.7	3.7	ng/L		06/15/11 17:10	07/06/11 16:26	1
Phenanthrene	ND		6.2	3.2	ng/L		06/15/11 17:10	07/06/11 16:26	1
Pyrene	**2.9**	**J B**	4.1	0.97	ng/L		06/15/11 17:10	07/06/11 16:26	1
Quinoline	ND		8.8	5.6	ng/L		06/15/11 17:10	07/06/11 16:26	1
Biphenyl	ND		5.5	1.0	ng/L		06/15/11 17:10	07/06/11 16:26	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*78*		*23 - 84*	*06/15/11 17:10*	*07/06/11 16:26*	*1*
Chrysene-d12 (Surr)	*27*	*X*	*28 - 101*	*06/15/11 17:10*	*07/06/11 16:26*	*1*
Naphthalene-d8 (Surr)	*79*		*22 - 97*	*06/15/11 17:10*	*07/06/11 16:26*	*1*

Client Sample ID: SLP6-06092011
Date Collected: 06/09/11 09:10
Date Received: 06/10/11 09:30

Lab Sample ID: 280-16815-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.67	ng/L		06/15/11 17:10	07/06/11 17:04	1
2,3-Dihydroindene	**56**		5.0	0.69	ng/L		06/15/11 17:10	07/06/11 17:04	1
1-Methylnaphthalene	**1.6**	**J**	5.6	0.88	ng/L		06/15/11 17:10	07/06/11 17:04	1
2-Methylnaphthalene	ND		5.9	0.97	ng/L		06/15/11 17:10	07/06/11 17:04	1
Acenaphthene	**80**		5.7	0.50	ng/L		06/15/11 17:10	07/06/11 17:04	1
Acenaphthylene	ND		4.8	0.76	ng/L		06/15/11 17:10	07/06/11 17:04	1
Acridine	**13**	*****	6.5	6.5	ng/L		06/15/11 17:10	07/06/11 17:04	1
Anthracene	**2.7**	**J**	4.2	0.79	ng/L		06/15/11 17:10	07/06/11 17:04	1
Benzo[a]anthracene	ND		4.3	0.91	ng/L		06/15/11 17:10	07/06/11 17:04	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/15/11 17:10	07/06/11 17:04	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/15/11 17:10	07/06/11 17:04	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		06/15/11 17:10	07/06/11 17:04	1
Benzo(b)thiophene	**12**		5.2	0.74	ng/L		06/15/11 17:10	07/06/11 17:04	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		06/15/11 17:10	07/06/11 17:04	1
Benzo[g,h,i]perylene	**1.2**	**J**	6.2	1.2	ng/L		06/15/11 17:10	07/06/11 17:04	1
Carbazole	**2.2**	**J**	3.8	0.71	ng/L		06/15/11 17:10	07/06/11 17:04	1
Chrysene	ND		5.6	1.2	ng/L		06/15/11 17:10	07/06/11 17:04	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		06/15/11 17:10	07/06/11 17:04	1
Dibenzofuran	ND		5.7	0.98	ng/L		06/15/11 17:10	07/06/11 17:04	1
Dibenzothiophene	**1.8**	**J**	4.1	0.97	ng/L		06/15/11 17:10	07/06/11 17:04	1
Fluoranthene	**4.4**	**J**	4.6	1.7	ng/L		06/15/11 17:10	07/06/11 17:04	1
Fluorene	ND		4.1	0.84	ng/L		06/15/11 17:10	07/06/11 17:04	1
Indene	**7.5**		4.7	3.3	ng/L		06/15/11 17:10	07/06/11 17:04	1
Indole	ND		4.7	1.7	ng/L		06/15/11 17:10	07/06/11 17:04	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		06/15/11 17:10	07/06/11 17:04	1
Naphthalene	**4.2**	**J**	8.5	1.1	ng/L		06/15/11 17:10	07/06/11 17:04	1
Perylene	ND		3.8	3.8	ng/L		06/15/11 17:10	07/06/11 17:04	1
Phenanthrene	ND		6.3	3.2	ng/L		06/15/11 17:10	07/06/11 17:04	1
Pyrene	**4.6**	**B**	4.2	0.98	ng/L		06/15/11 17:10	07/06/11 17:04	1
Quinoline	ND		8.9	5.6	ng/L		06/15/11 17:10	07/06/11 17:04	1
Biphenyl	ND		5.6	1.0	ng/L		06/15/11 17:10	07/06/11 17:04	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*74*		*23 - 84*	*06/15/11 17:10*	*07/06/11 17:04*	*1*
Chrysene-d12 (Surr)	*25*	*X*	*28 - 101*	*06/15/11 17:10*	*07/06/11 17:04*	*1*
Naphthalene-d8 (Surr)	*77*		*22 - 97*	*06/15/11 17:10*	*07/06/11 17:04*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Client Sample ID: W119-06092011
Date Collected: 06/09/11 11:00
Date Received: 06/10/11 09:30

Lab Sample ID: 280-16815-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		06/15/11 17:10	07/06/11 17:40	1
2,3-Dihydroindene	**3.6**	**J**	5.0	0.70	ng/L		06/15/11 17:10	07/06/11 17:40	1
1-Methylnaphthalene	**1.1**	**J**	5.6	0.89	ng/L		06/15/11 17:10	07/06/11 17:40	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		06/15/11 17:10	07/06/11 17:40	1
Acenaphthene	**27**		5.7	0.50	ng/L		06/15/11 17:10	07/06/11 17:40	1
Acenaphthylene	**2.0**	**J**	4.8	0.77	ng/L		06/15/11 17:10	07/06/11 17:40	1
Acridine	ND	*	6.5	6.5	ng/L		06/15/11 17:10	07/06/11 17:40	1
Anthracene	**2.8**	**J**	4.2	0.80	ng/L		06/15/11 17:10	07/06/11 17:40	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		06/15/11 17:10	07/06/11 17:40	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/15/11 17:10	07/06/11 17:40	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/15/11 17:10	07/06/11 17:40	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		06/15/11 17:10	07/06/11 17:40	1
Benzo(b)thiophene	**3.8**	**J**	5.2	0.75	ng/L		06/15/11 17:10	07/06/11 17:40	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		06/15/11 17:10	07/06/11 17:40	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		06/15/11 17:10	07/06/11 17:40	1
Carbazole	ND		3.8	0.72	ng/L		06/15/11 17:10	07/06/11 17:40	1
Chrysene	ND		5.6	1.2	ng/L		06/15/11 17:10	07/06/11 17:40	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		06/15/11 17:10	07/06/11 17:40	1
Dibenzofuran	ND		5.7	0.99	ng/L		06/15/11 17:10	07/06/11 17:40	1
Dibenzothiophene	ND		4.1	0.98	ng/L		06/15/11 17:10	07/06/11 17:40	1
Fluoranthene	ND		4.6	1.7	ng/L		06/15/11 17:10	07/06/11 17:40	1
Fluorene	ND		4.1	0.85	ng/L		06/15/11 17:10	07/06/11 17:40	1
Indene	**5.1**		4.7	3.3	ng/L		06/15/11 17:10	07/06/11 17:40	1
Indole	ND		4.7	1.7	ng/L		06/15/11 17:10	07/06/11 17:40	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		06/15/11 17:10	07/06/11 17:40	1
Naphthalene	**2.7**	**J**	8.6	1.1	ng/L		06/15/11 17:10	07/06/11 17:40	1
Perylene	ND		3.8	3.8	ng/L		06/15/11 17:10	07/06/11 17:40	1
Phenanthrene	ND		6.3	3.2	ng/L		06/15/11 17:10	07/06/11 17:40	1
Pyrene	**13**	**B**	4.2	0.99	ng/L		06/15/11 17:10	07/06/11 17:40	1
Quinoline	ND		9.0	5.6	ng/L		06/15/11 17:10	07/06/11 17:40	1
Biphenyl	ND		5.6	1.0	ng/L		06/15/11 17:10	07/06/11 17:40	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*77*		*23 - 84*	*06/15/11 17:10*	*07/06/11 17:40*	*1*
Chrysene-d12 (Surr)	*34*		*28 - 101*	*06/15/11 17:10*	*07/06/11 17:40*	*1*
Naphthalene-d8 (Surr)	*80*		*22 - 97*	*06/15/11 17:10*	*07/06/11 17:40*	*1*

Client Sample ID: W410-06092011
Date Collected: 06/09/11 10:30
Date Received: 06/10/11 09:30

Lab Sample ID: 280-16815-8
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	130		5.4	0.68	ng/L		06/15/11 17:10	07/06/11 18:17	1
2-Methylnaphthalene	290		5.9	0.98	ng/L		06/15/11 17:10	07/06/11 18:17	1
Acenaphthylene	810		4.8	0.77	ng/L		06/15/11 17:10	07/06/11 18:17	1
Acridine	150	*	6.5	6.5	ng/L		06/15/11 17:10	07/06/11 18:17	1
Anthracene	210		4.2	0.80	ng/L		06/15/11 17:10	07/06/11 18:17	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		06/15/11 17:10	07/06/11 18:17	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/15/11 17:10	07/06/11 18:17	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/15/11 17:10	07/06/11 18:17	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		06/15/11 17:10	07/06/11 18:17	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		06/15/11 17:10	07/06/11 18:17	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		06/15/11 17:10	07/06/11 18:17	1
Chrysene	ND		5.6	1.2	ng/L		06/15/11 17:10	07/06/11 18:17	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		06/15/11 17:10	07/06/11 18:17	1
Dibenzothiophene	290		4.1	0.98	ng/L		06/15/11 17:10	07/06/11 18:17	1
Fluoranthene	230		4.6	1.7	ng/L		06/15/11 17:10	07/06/11 18:17	1
Indole	ND		4.7	1.7	ng/L		06/15/11 17:10	07/06/11 18:17	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		06/15/11 17:10	07/06/11 18:17	1
Perylene	ND		3.8	3.8	ng/L		06/15/11 17:10	07/06/11 18:17	1
Pyrene	95	B	4.2	0.99	ng/L		06/15/11 17:10	07/06/11 18:17	1
Quinoline	ND		9.0	5.6	ng/L		06/15/11 17:10	07/06/11 18:17	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*85*	*X*	*23 - 84*	*06/15/11 17:10*	*07/06/11 18:17*	*1*
Chrysene-d12 (Surr)	*17*	*X*	*28 - 101*	*06/15/11 17:10*	*07/06/11 18:17*	*1*
Naphthalene-d8 (Surr)	*74*		*22 - 97*	*06/15/11 17:10*	*07/06/11 18:17*	*1*

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dihydroindene	14000		500	70	ng/L		06/15/11 17:10	07/07/11 11:02	100
1-Methylnaphthalene	14000		560	89	ng/L		06/15/11 17:10	07/07/11 11:02	100
Acenaphthene	9300		570	50	ng/L		06/15/11 17:10	07/07/11 11:02	100
Benzo(b)thiophene	7100		520	75	ng/L		06/15/11 17:10	07/07/11 11:02	100
Carbazole	2700		380	72	ng/L		06/15/11 17:10	07/07/11 11:02	100
Dibenzofuran	1100		570	99	ng/L		06/15/11 17:10	07/07/11 11:02	100
Fluorene	3500		410	85	ng/L		06/15/11 17:10	07/07/11 11:02	100
Indene	13000		470	330	ng/L		06/15/11 17:10	07/07/11 11:02	100
Naphthalene	10000		860	110	ng/L		06/15/11 17:10	07/07/11 11:02	100
Phenanthrene	3500		630	320	ng/L		06/15/11 17:10	07/07/11 11:02	100
Biphenyl	2100		560	100	ng/L		06/15/11 17:10	07/07/11 11:02	100

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*83*	*D*	*23 - 84*	*06/15/11 17:10*	*07/07/11 11:02*	*100*
Chrysene-d12 (Surr)	*0*	*D*	*28 - 101*	*06/15/11 17:10*	*07/07/11 11:02*	*100*
Naphthalene-d8 (Surr)	*71*	*D*	*22 - 97*	*06/15/11 17:10*	*07/07/11 11:02*	*100*

Surrogate Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		FD10	sene-d12 (S	thalene-d8						
Lab Sample ID	Client Sample ID	(23-84)	(28-101)	(22-97)						
280-16815-1	SLP10T-06092011	76	48	78						
280-16815-1 MS	SLP10T-06092011	69	24 X	72						
280-16815-1 MSD	SLP10T-06092011	76	47	74						
280-16815-2	SLP10TDUP-06092011	73	32	79						
280-16815-3	SLP10TFB-06092011	65	68	61						
280-16815-4	SLP10TFBD-06092011	74	73	72						
280-16815-5	W24-06092011	78	27 X	79						
280-16815-6	SLP6-06092011	74	25 X	77						
280-16815-7	W119-06092011	77	34	80						
280-16815-8	W410-06092011	85 X	17 X	74						
280-16815-8 - DL	W410-06092011	83 D	0 D	71 D						
LCS 280-72093/2-A	Lab Control Sample	77	78	76						
MB 280-72093/1-A	Method Blank	74	68	77						

Surrogate Legend

FD10 = Fluorene-d10 (Surr)
Chrysene-d12 (Surr) = Chrysene-d12 (Surr)
Naphthalene-d8 (Surr) = Naphthalene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Lab Sample ID: MB 280-72093/1-A
Matrix: Water
Analysis Batch: 75413

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72093

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		06/15/11 17:10	07/06/11 11:33	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		06/15/11 17:10	07/06/11 11:33	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		06/15/11 17:10	07/06/11 11:33	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		06/15/11 17:10	07/06/11 11:33	1
3-Methylcholanthrene	ND		5.0	5.0	ng/L		06/15/11 17:10	07/06/11 11:33	1
Acenaphthene	ND		5.7	0.50	ng/L		06/15/11 17:10	07/06/11 11:33	1
Acenaphthylene	ND		4.8	0.77	ng/L		06/15/11 17:10	07/06/11 11:33	1
Acridine	ND		6.5	6.5	ng/L		06/15/11 17:10	07/06/11 11:33	1
Anthracene	ND		4.2	0.80	ng/L		06/15/11 17:10	07/06/11 11:33	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		06/15/11 17:10	07/06/11 11:33	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/15/11 17:10	07/06/11 11:33	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/15/11 17:10	07/06/11 11:33	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		06/15/11 17:10	07/06/11 11:33	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		06/15/11 17:10	07/06/11 11:33	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		06/15/11 17:10	07/06/11 11:33	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		06/15/11 17:10	07/06/11 11:33	1
Carbazole	ND		3.8	0.72	ng/L		06/15/11 17:10	07/06/11 11:33	1
Chrysene	ND		5.6	1.2	ng/L		06/15/11 17:10	07/06/11 11:33	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		06/15/11 17:10	07/06/11 11:33	1
Dibenzofuran	ND		5.7	0.99	ng/L		06/15/11 17:10	07/06/11 11:33	1
Dibenzothiophene	ND		4.1	0.98	ng/L		06/15/11 17:10	07/06/11 11:33	1
Fluoranthene	ND		4.6	1.7	ng/L		06/15/11 17:10	07/06/11 11:33	1
Fluorene	ND		4.1	0.85	ng/L		06/15/11 17:10	07/06/11 11:33	1
Indene	ND		4.7	3.3	ng/L		06/15/11 17:10	07/06/11 11:33	1
Indole	ND		4.7	1.7	ng/L		06/15/11 17:10	07/06/11 11:33	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		06/15/11 17:10	07/06/11 11:33	1
Naphthalene	ND		8.6	1.1	ng/L		06/15/11 17:10	07/06/11 11:33	1
Perylene	ND		3.8	3.8	ng/L		06/15/11 17:10	07/06/11 11:33	1
Phenanthrene	ND		6.3	3.2	ng/L		06/15/11 17:10	07/06/11 11:33	1
Pyrene	1.55	J	4.2	0.99	ng/L		06/15/11 17:10	07/06/11 11:33	1
Quinoline	ND		9.0	5.7	ng/L		06/15/11 17:10	07/06/11 11:33	1
7,12-Dimethylbenz(a)anthracene	ND		2.8	2.3	ng/L		06/15/11 17:10	07/06/11 11:33	1
Biphenyl	ND		5.6	1.1	ng/L		06/15/11 17:10	07/06/11 11:33	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*74*		*23 - 84*	*06/15/11 17:10*	*07/06/11 11:33*	*1*
Chrysene-d12 (Surr)	*68*		*28 - 101*	*06/15/11 17:10*	*07/06/11 11:33*	*1*
Naphthalene-d8 (Surr)	*77*		*22 - 97*	*06/15/11 17:10*	*07/06/11 11:33*	*1*

Lab Sample ID: LCS 280-72093/2-A
Matrix: Water
Analysis Batch: 75413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3-Benzofuran	75.0	55.9		ng/L		75	30 - 150
2,3-Dihydroindene	75.0	53.2		ng/L		71	30 - 150
1-Methylnaphthalene	75.0	61.1		ng/L		81	30 - 150
2-Methylnaphthalene	75.0	58.4		ng/L		78	25 - 95
Acenaphthene	75.0	61.1		ng/L		81	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-72093/2-A
Matrix: Water
Analysis Batch: 75413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthylene	75.0	60.7		ng/L		81	30 - 150
Acridine	75.0	ND	*	ng/L		7	30 - 150
Anthracene	75.0	60.0		ng/L		80	30 - 150
Benzo[a]anthracene	75.0	59.0		ng/L		79	30 - 150
Benzo[a]pyrene	75.0	53.8		ng/L		72	30 - 150
Benzo[e]pyrene	75.0	60.8		ng/L		81	37 - 105
Benzo[b]fluoranthene	75.0	58.4		ng/L		78	30 - 150
Benzo(b)thiophene	75.0	58.1		ng/L		77	30 - 150
Benzo[k]fluoranthene	75.0	67.0		ng/L		89	30 - 150
Benzo[g,h,i]perylene	75.0	69.2		ng/L		92	30 - 150
Carbazole	75.0	59.6		ng/L		80	30 - 150
Chrysene	75.0	62.8		ng/L		84	20 - 136
Dibenz(a,h)anthracene	75.0	69.6		ng/L		93	30 - 150
Dibenzofuran	75.0	59.9		ng/L		80	30 - 150
Dibenzothiophene	75.0	59.6		ng/L		79	30 - 150
Fluoranthene	75.0	65.8		ng/L		88	30 - 150
Fluorene	75.0	62.9		ng/L		84	34 - 96
Indene	75.0	54.0		ng/L		72	22 - 86
Indole	75.0	49.0		ng/L		65	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	72.2		ng/L		96	30 - 150
Naphthalene	75.0	58.9		ng/L		79	27 - 95
Perylene	75.0	51.3		ng/L		68	30 - 150
Phenanthrene	75.0	63.0		ng/L		84	30 - 150
Pyrene	75.0	60.3		ng/L		80	30 - 150
Quinoline	75.0	25.7		ng/L		34	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	36.0		ng/L		48	30 - 150
Biphenyl	75.0	58.3		ng/L		78	30 - 150

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*77*		*23 - 84*
Chrysene-d12 (Surr)	*78*		*28 - 101*
Naphthalene-d8 (Surr)	*76*		*22 - 97*

Lab Sample ID: 280-16815-1 MS
Matrix: Water
Analysis Batch: 75413

Client Sample ID: SLP10T-06092011
Prep Type: Total/NA
Prep Batch: 72093

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3-Benzofuran	ND		74.4	51.6		ng/L		69	30 - 150
2,3-Dihydroindene	10		74.4	56.0		ng/L		62	30 - 150
1-Methylnaphthalene	2.8	J	74.4	57.7		ng/L		74	30 - 150
2-Methylnaphthalene	2.8	J	74.4	53.7		ng/L		68	25 - 95
3-Methylcholanthrene	ND		74.4	ND	F	ng/L		0	30 - 150
Acenaphthene	4.3	J	74.4	59.3		ng/L		74	30 - 150
Acenaphthylene	1.1	J	74.4	50.2		ng/L		66	30 - 150
Acridine	ND	*	74.4	9.99	F	ng/L		13	30 - 150
Anthracene	ND		74.4	14.1	F	ng/L		19	30 - 150
Benzo[a]anthracene	ND		74.4	12.9	F	ng/L		17	30 - 150
Benzo[a]pyrene	ND		74.4	ND	F	ng/L		0	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-16815-1 MS
Matrix: Water
Analysis Batch: 75413

Client Sample ID: SLP10T-06092011
Prep Type: Total/NA
Prep Batch: 72093

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzo[e]pyrene	ND		74.4	4.86	F	ng/L		7	37 - 105
Benzo[b]fluoranthene	ND		74.4	3.60	J F	ng/L		5	30 - 150
Benzo(b)thiophene	ND		74.4	55.2		ng/L		74	30 - 150
Benzo[k]fluoranthene	ND		74.4	6.42	F	ng/L		9	30 - 150
Benzo[g,h,i]perylene	ND		74.4	4.21	J F	ng/L		6	30 - 150
Carbazole	ND		74.4	52.5		ng/L		70	30 - 150
Chrysene	ND		74.4	19.2		ng/L		26	20 - 136
Dibenz(a,h)anthracene	ND		74.4	3.55	J F	ng/L		5	30 - 150
Dibenzofuran	ND		74.4	51.9		ng/L		70	30 - 150
Dibenzothiophene	ND		74.4	47.0		ng/L		63	30 - 150
Fluoranthene	ND		74.4	48.9		ng/L		66	30 - 150
Fluorene	ND		74.4	57.1		ng/L		77	34 - 96
Indene	ND		74.4	40.9		ng/L		55	22 - 86
Indole	ND		74.4	4.58	J F	ng/L		6	30 - 150
Indeno[1,2,3-cd]pyrene	ND		74.4	3.70	J F	ng/L		5	30 - 150
Naphthalene	5.4	J	74.4	56.8		ng/L		69	27 - 95
Perylene	ND		74.4	ND	F	ng/L		0	30 - 150
Phenanthrene	ND		74.4	56.4		ng/L		76	30 - 150
Pyrene	1.4	J B	74.4	43.0		ng/L		56	30 - 150
Quinoline	ND		74.4	28.8		ng/L		39	20 - 112
7,12-Dimethylbenz(a)anthracene	ND		74.4	ND	F	ng/L		0	30 - 150
Biphenyl	ND		74.4	54.1		ng/L		73	30 - 150

Surrogate	*MS % Recovery*	*MS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*69*		*23 - 84*
Chrysene-d12 (Surr)	*24*	*X*	*28 - 101*
Naphthalene-d8 (Surr)	*72*		*22 - 97*

Lab Sample ID: 280-16815-1 MSD
Matrix: Water
Analysis Batch: 75413

Client Sample ID: SLP10T-06092011
Prep Type: Total/NA
Prep Batch: 72093

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	ND		73.7	52.8		ng/L		72	30 - 150	2	50
2,3-Dihydroindene	10		73.7	56.1		ng/L		62	30 - 150	0	50
1-Methylnaphthalene	2.8	J	73.7	59.0		ng/L		76	30 - 150	2	50
2-Methylnaphthalene	2.8	J	73.7	55.1		ng/L		71	25 - 95	3	50
3-Methylcholanthrene	ND		73.7	ND	F	ng/L		0	30 - 150	NC	50
Acenaphthene	4.3	J	73.7	62.2		ng/L		78	30 - 150	5	50
Acenaphthylene	1.1	J	73.7	55.3		ng/L		73	30 - 150	10	50
Acridine	ND	*	73.7	18.6	F	ng/L		25	30 - 150	60	50
Anthracene	ND		73.7	36.9	F	ng/L		50	30 - 150	89	50
Benzo[a]anthracene	ND		73.7	32.1	F	ng/L		44	30 - 150	85	50
Benzo[a]pyrene	ND		73.7	5.46	F	ng/L		7	30 - 150	NC	50
Benzo[e]pyrene	ND		73.7	9.98	F	ng/L		14	37 - 105	69	50
Benzo[b]fluoranthene	ND		73.7	9.02	F	ng/L		12	30 - 150	86	50
Benzo(b)thiophene	ND		73.7	56.5		ng/L		77	30 - 150	2	50
Benzo[k]fluoranthene	ND		73.7	11.9	F	ng/L		16	30 - 150	60	50
Benzo[g,h,i]perylene	ND		73.7	5.19	J F	ng/L		7	30 - 150	21	50

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-16815-1 MSD
Matrix: Water
Analysis Batch: 75413

Client Sample ID: SLP10T-06092011
Prep Type: Total/NA
Prep Batch: 72093

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Carbazole	ND		73.7	60.3		ng/L		82	30 - 150	14	50
Chrysene	ND		73.7	37.7	F	ng/L		51	20 - 136	65	50
Dibenz(a,h)anthracene	ND		73.7	4.44	J F	ng/L		6	30 - 150	22	50
Dibenzofuran	ND		73.7	57.2		ng/L		78	30 - 150	10	50
Dibenzothiophene	ND		73.7	56.8		ng/L		77	30 - 150	19	50
Fluoranthene	ND		73.7	62.0		ng/L		84	30 - 150	24	50
Fluorene	ND		73.7	59.2		ng/L		80	34 - 96	4	50
Indene	ND		73.7	47.2		ng/L		64	22 - 86	14	50
Indole	ND		73.7	27.8	F	ng/L		38	30 - 150	143	50
Indeno[1,2,3-cd]pyrene	ND		73.7	4.95	J F	ng/L		7	30 - 150	29	50
Naphthalene	5.4	J	73.7	57.6		ng/L		71	27 - 95	1	50
Perylene	ND		73.7	8.51	F	ng/L		12	30 - 150	NC	50
Phenanthrene	ND		73.7	59.9		ng/L		81	30 - 150	6	50
Pyrene	1.4	J B	73.7	55.0		ng/L		73	30 - 150	24	50
Quinoline	ND		73.7	52.1	F	ng/L		71	20 - 112	58	50
7,12-Dimethylbenz(a)anthracene	ND		73.7	16.4	F	ng/L		22	30 - 150	NC	50
Biphenyl	ND		73.7	55.8		ng/L		76	30 - 150	3	50

Surrogate	*MSD % Recovery*	*MSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*76*		*23 - 84*
Chrysene-d12 (Surr)	*47*		*28 - 101*
Naphthalene-d8 (Surr)	*74*		*22 - 97*

GC/MS Semi VOA

Prep Batch: 72093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-72093/1-A	Method Blank	Total/NA	Water	3520C	
LCS 280-72093/2-A	Lab Control Sample	Total/NA	Water	3520C	
280-16815-1	SLP10T-06092011	Total/NA	Water	3520C	
280-16815-1 MS	SLP10T-06092011	Total/NA	Water	3520C	
280-16815-1 MSD	SLP10T-06092011	Total/NA	Water	3520C	
280-16815-2	SLP10TDUP-06092011	Total/NA	Water	3520C	
280-16815-3	SLP10TFB-06092011	Total/NA	Water	3520C	
280-16815-4	SLP10TFBD-06092011	Total/NA	Water	3520C	
280-16815-5	W24-06092011	Total/NA	Water	3520C	
280-16815-6	SLP6-06092011	Total/NA	Water	3520C	
280-16815-7	W119-06092011	Total/NA	Water	3520C	
280-16815-8	W410-06092011	Total/NA	Water	3520C	
280-16815-8 - DL	W410-06092011	Total/NA	Water	3520C	

Analysis Batch: 75413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-72093/1-A	Method Blank	Total/NA	Water	8270C	72093
LCS 280-72093/2-A	Lab Control Sample	Total/NA	Water	8270C	72093
280-16815-1	SLP10T-06092011	Total/NA	Water	8270C	72093
280-16815-1 MS	SLP10T-06092011	Total/NA	Water	8270C	72093
280-16815-1 MSD	SLP10T-06092011	Total/NA	Water	8270C	72093
280-16815-2	SLP10TDUP-06092011	Total/NA	Water	8270C	72093
280-16815-3	SLP10TFB-06092011	Total/NA	Water	8270C	72093
280-16815-4	SLP10TFBD-06092011	Total/NA	Water	8270C	72093
280-16815-5	W24-06092011	Total/NA	Water	8270C	72093
280-16815-6	SLP6-06092011	Total/NA	Water	8270C	72093
280-16815-7	W119-06092011	Total/NA	Water	8270C	72093
280-16815-8	W410-06092011	Total/NA	Water	8270C	72093

Analysis Batch: 75518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-16815-8 - DL	W410-06092011	Total/NA	Water	8270C	72093

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Client Sample ID: SLP10T-06092011

Lab Sample ID: 280-16815-1

Date Collected: 06/09/11 07:10

Matrix: Water

Date Received: 06/10/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4043.7 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75413	07/06/11 12:46	DPI	TAL DEN

Client Sample ID: SLP10TDUP-06092011

Lab Sample ID: 280-16815-2

Date Collected: 06/09/11 07:15

Matrix: Water

Date Received: 06/10/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4197.9 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75413	07/06/11 14:36	DPI	TAL DEN

Client Sample ID: SLP10TFB-06092011

Lab Sample ID: 280-16815-3

Date Collected: 06/09/11 07:00

Matrix: Water

Date Received: 06/10/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4169.3 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75413	07/06/11 15:13	DPI	TAL DEN

Client Sample ID: SLP10TFBD-06092011

Lab Sample ID: 280-16815-4

Date Collected: 06/09/11 07:05

Matrix: Water

Date Received: 06/10/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4009.3 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75413	07/06/11 15:49	DPI	TAL DEN

Client Sample ID: W24-06092011

Lab Sample ID: 280-16815-5

Date Collected: 06/09/11 08:55

Matrix: Water

Date Received: 06/10/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4071.1 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75413	07/06/11 16:26	DPI	TAL DEN

Client Sample ID: SLP6-06092011

Lab Sample ID: 280-16815-6

Date Collected: 06/09/11 09:10

Matrix: Water

Date Received: 06/10/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4030 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75413	07/06/11 17:04	DPI	TAL DEN

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Client Sample ID: W119-06092011

Lab Sample ID: 280-16815-7

Date Collected: 06/09/11 11:00

Matrix: Water

Date Received: 06/10/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4004 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75413	07/06/11 17:40	DPI	TAL DEN

Client Sample ID: W410-06092011

Lab Sample ID: 280-16815-8

Date Collected: 06/09/11 10:30

Matrix: Water

Date Received: 06/10/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4005 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75413	07/06/11 18:17	DPI	TAL DEN
Total/NA	Prep	3520C	DL		4005 mL	1000 uL	72093	06/15/11 17:10	JCV	TAL DEN
Total/NA	Analysis	8270C	DL	100			75518	07/07/11 11:02	DPI	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	
TestAmerica Denver	Alaska	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina	North Carolina DENR	4	358
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Sampler ID
Temperature on Receipt 4.0, 4.8, 2.0, 4.0, 5.8, 4.8, 4.4 FP
Drinking Water? Yes ☐ No ☐ NP b/p

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (1007)

Client	Project Manager	Date	Chain of Custody Number
City of St. Louis Park	Scott Anderson	6/9/11	103633
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
7305 Oxford	952-924-2557		

City	State	Zip Code	Site Contact	Lab Contact
St. Louis Park	MN	55426	Dan Phelps	Lisa U.

Project Name and Location (State)	Carrier/Waybill Number
Reilly Site / MN	FedEx

Contract/Purchase Order/Quote No.: 60145681

Analysis (Attach list if more space is needed): PAH PPT

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAcl/ NaOH	PAH PPT
SLP10T-06092011	6/9/11	0710		X			6						X
SLP10TDUP-06092011		0715											
SLP10TFB-06092011		0700											
SLP10TFBD-06092011		0705											
SLP10TMS-06092011		0720											
SLP10TMSD-06092011		0725											
W24-06092011		0855											
SLP6-06092011		0910											
W119-06092011		1100											
~~W48-06092011~~													e DEP
W410-06092011		1030											

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jason Decom	6/9/11	1600	1. Received By	6/10/11	0930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-16815-1

Login Number: 16815

List Source: TestAmerica Denver

List Number: 1

Creator: Philipp, Nicholas A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Detection Limit Exceptions Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-16815-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8270C	Water	2,3-Benzofuran	ng/L	5.4	20
8270C	Water	2,3-Dihydroindene	ng/L	5.0	20
8270C	Water	1-Methylnaphthalene	ng/L	5.6	20
8270C	Water	2-Methylnaphthalene	ng/L	5.9	20
8270C	Water	Acenaphthene	ng/L	5.7	20
8270C	Water	Acenaphthylene	ng/L	4.8	20
8270C	Water	Acridine	ng/L	6.5	20
8270C	Water	Anthracene	ng/L	4.2	20
8270C	Water	Benzo[a]anthracene	ng/L	4.3	20
8270C	Water	Benzo[a]pyrene	ng/L	2.5	20
8270C	Water	Benzo[e]pyrene	ng/L	4.3	20
8270C	Water	Benzo[b]fluoranthene	ng/L	4.7	20
8270C	Water	Benzo(b)thiophene	ng/L	5.2	20
8270C	Water	Benzo[k]fluoranthene	ng/L	4.1	20
8270C	Water	Benzo[g,h,i]perylene	ng/L	6.2	20
8270C	Water	Carbazole	ng/L	3.8	20
8270C	Water	Chrysene	ng/L	5.6	20
8270C	Water	Dibenz(a,h)anthracene	ng/L	5.9	20
8270C	Water	Dibenzofuran	ng/L	5.7	20
8270C	Water	Dibenzothiophene	ng/L	4.1	20
8270C	Water	Fluoranthene	ng/L	4.6	20
8270C	Water	Fluorene	ng/L	4.1	20
8270C	Water	Indene	ng/L	4.7	20
8270C	Water	Indole	ng/L	4.7	20
8270C	Water	Indeno[1,2,3-cd]pyrene	ng/L	5.4	20
8270C	Water	Naphthalene	ng/L	8.6	20
8270C	Water	Perylene	ng/L	3.8	20
8270C	Water	Phenanthrene	ng/L	6.3	20
8270C	Water	Pyrene	ng/L	4.2	20
8270C	Water	Quinoline	ng/L	9.0	20
8270C	Water	Biphenyl	ng/L	5.6	20

AECOM
2 Technology Park Drive
Westford, MA 01886-3140

978.589.3000 tel
978.589.3100 fax

Data Quality Assessment Memorandum

Date: December 9, 2011

To: Bill Gregg

From: Drew Tarara

Subject: Data Quality Assessment
Ultra Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 280-16815-1
Appendix E

Distribution: File 60145681 File

SUMMARY

A Data Quality Assessment (DQA) was performed on the data for the analysis of six aqueous samples and two field blanks for Ultra Low Level aromatic hydrocarbons (PAHs) by SW-846 method 8270C, selected ion monitoring (SIM) method. The samples were collected on June 9, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to TestAmerica in Arvada, CO for analysis. TestAmerica processed and reported the results under lot number 280-16815-1.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes.

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
SLP10T-06092011	W24-06092011
SLP10TDUP-06092011	SLP6-06092011
SLP10TFB-06092011	W119-06092011
SLP10TFBD-06092011	W410-06092011

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests

AECOM
AECOM 978.589.3000 tel
2 Technology Park Drive 978.589.3100 fax
Westford, MA 01886-3140

- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

All five cooler temperatures as measured upon sample receipt were within the acceptance criteria of 4± 2°C.

Laboratory Blanks/Field Blanks

Pyrene was detected in the laboratory method blank associated with all samples in this data set. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. The following table summarizes the blank contamination detected, the action level (AL), and the associated samples.

Date Analyzed	Compound	Concentration (units)	Action Level (units)
7/6/11	Pyrene	1.55 ng/L	7.75 ng/L
Associated samples: All samples in this sample set.			

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

The following compounds were detected in the aqueous field blanks. No validation actions were necessary since these results were for informational purposes only.

SLP10TFB-06092011	
Compound	**Concentration (ng/L)**
Naphthalene	1.5

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

SLP10TFBD-06092011	
Compound	**Concentration (ng/L)**
Naphthalene	1.6

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses with the following exceptions. Qualification of the data for all samples was not required since only one of three surrogate recoveries fell below the QAPP QC acceptance in these sample analyses. W410-06092011 had 2 surrogates outside of the QC limits, however, it was outside on the high end so no qualification was required.

Sample ID	**Surrogate Percent Recoveries (%Rs)**			**Actions**	
	Chrysene-d12	**Fluorene-d10**	**Naphthalene-d8**	**Detects**	**Nondetects**
W24-06092011	27	ok	ok	Accept	Accept
SLP6-06092011	25	ok	ok	Accept	Accept
W410-06092011	17	85	ok	Accept	Accept
QAPP QC Limits	**28-101**	**23-84**	**22-97**		

MS/MSD Results

MS/MSD analyses were performed on sample SLP10T-06092011 from this data set. All target analytes were spiked. The percent recoveries (%Rs) of 14 of the 33 spiked target analytes in the MS and the %Rs of 11 of the 33 spiked target analytes in the MSD fell outside the QC acceptance criteria in the MS/MSD analyses. The following table summarizes the %Rs which fell below 10%. These results were qualified as indicated below.

Compound	**MS %R**	**MSD %R**	**RPD**	**Laboratory QC limits %R (RPD)**	**Action (Detects/Nondetects)**
3-Methylnaphthalene	0	0	NC	30-150 (50)	J/UJ
Benzo(a)pyrene	0	7	NC	30-150 (50)	J/UJ
Benzo(e)pyrene	7	14	69	30-132 (50)	J/UJ
Benzo(b)fluoranthene	5	12	86	30-150 (50)	J/UJ
Benzo(k)fluoranthene	9	16	60	30-150 (50)	J/UJ
Benzo(ghi)perylene	6	7	21	30-150 (50)	J/UJ
Dibenzo(ah)anthracene	5	6	22	30-150 (50)	J/UJ
Indole	6	38	143	30-150 (50)	J/UJ
Indeno(123,cd)pyrene	5	7	29	30-150 (50)	J/UJ
Perylene	0	12	NC	30-150 (50)	J/UJ
Associated sample: SLP10T-06092011					

These low recoveries are consistent with previous years. No other validation action was taken based on these results.

LCS Results

All target analytes were spiked. The %Rs were within the QC acceptance criteria for the LCS analysis except for Arcridine (7%). No actions were taken based on this result.

Field Duplicate Results

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

Samples SLP10T-06092011 and SLP10TDUP-06092011 were the field duplicate pair analyzed with this data set.

The results for the detected compounds in samples SLP10T-06092011 and SLP10TDUP-06092011 and their RPDs are tabulated below.

Compound	SLP10T-06092011 (ng/L)	SLP10TDUP-06092011 (ng/L)	RPD
Acenaphthene	4.3	4.1	4.8
Acenaphthylene	1.1	ND	NC
Benzo(b)thiophene	ND	0.91	NC
2,3-Dihydroindene	10	9.8	2.0
2-Methylnaphthalene	2.8	1.2	80
1-Methylnaphthalene	2.8	1.6	54.5
Naphthalene	5.4	3.7	37.4
Pyrene	1.4	ND	NC
Criteria: Aqueous RPD ≤ 30, if both sample and duplicate results are > 5x SQL. The RPD criterion is doubled if both sample and duplicate results are <5x SQL.			

Sample Quantitation/Detection Limit Results

Sample calculations were spot checked. No discrepancies were noted.

All samples were analyzed undiluted with the exception of samples in the table below.

Sample ID	Dilution	Reason
W410-06092011	Undiluted and 100x	11 compounds analyzed with 100x dilution

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

June 27, 2011

Andrew Tarara
AECOM
First National Bank Building
332 Minnesota St, Suite E1000
Saint Paul, MN 55101

RE: Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Dear Andrew Tarara:
Enclosed are the analytical results for sample(s) received by the laboratory on June 10, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Carol Davy

carol.davy@pacelabs.com
Project Manager

Enclosures

cc: Bill Gregg, AECOM

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Idaho Certification #: MN00064
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New Mexico Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: D9921
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Washington Certification #: C754
Wisconsin Certification #: 999407970

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10159991001	**W439-06102011**	Water	06/10/11 07:30	06/10/11 17:54
10159991002	**W15-06102011**	Water	06/10/11 08:50	06/10/11 17:54
10159991003	**W15DUP-06102011**	Water	06/10/11 08:55	06/10/11 17:54
10159991004	**W15FB-06102011**	Water	06/10/11 08:30	06/10/11 17:54
10159991005	**W15FBD-06102011**	Water	06/10/11 08:35	06/10/11 17:54
10159991006	**W15MS-06102011**	Water	06/10/11 09:00	06/10/11 17:54
10159991007	**W15MSD-06102011**	Water	06/10/11 09:05	06/10/11 17:54
10159991008	**P309-06102011**	Water	06/10/11 10:10	06/10/11 17:54
10159991009	**W27-06102011**	Water	06/10/11 14:45	06/10/11 17:54
10159991010	**W2-06102011**	Water	06/10/11 12:10	06/10/11 17:54
10159991011	**W9-06102011**	Water	06/10/11 12:20	06/10/11 17:54
10159991012	**W426-06102011**	Water	06/10/11 16:50	06/10/11 17:54

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10159991001	**W439-06102011**	EPA 8270 by SIM	JLR	18
10159991002	**W15-06102011**	EPA 8270 by SIM	DRE	18
10159991003	**W15DUP-06102011**	EPA 8270 by SIM	DRE	18
10159991004	**W15FB-06102011**	EPA 8270 by SIM	DRE	18
10159991005	**W15FBD-06102011**	EPA 8270 by SIM	DRE	18
10159991006	**W15MS-06102011**	EPA 8270 by SIM	DRE	18
10159991007	**W15MSD-06102011**	EPA 8270 by SIM	DRE	18
10159991008	**P309-06102011**	EPA 8270 by SIM	DRE	18
10159991009	**W27-06102011**	EPA 8270 by SIM	DRE	18
10159991010	**W2-06102011**	EPA 8270 by SIM	DRE	18
10159991011	**W9-06102011**	EPA 8270 by SIM	DRE	18
10159991012	**W426-06102011**	EPA 8270 by SIM	DRE	18

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: June 27, 2011

General Information:
12 samples were analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

B: Analyte was detected in the associated method blank.
- W15DUP-06102011 (Lab ID: 10159991003)
- W15MS-06102011 (Lab ID: 10159991006)
- W15MSD-06102011 (Lab ID: 10159991007)
- W27-06102011 (Lab ID: 10159991009)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/15808

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- BLANK (Lab ID: 995300)
  - Terphenyl-d14 (S)
- W15FB-06102011 (Lab ID: 10159991004)
  - Terphenyl-d14 (S)
- W15FBD-06102011 (Lab ID: 10159991005)
  - Terphenyl-d14 (S)

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: June 27, 2011

QC Batch: MSSV/6749

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/15808

B: Analyte was detected in the associated method blank.
- W15DUP-06102011 (Lab ID: 10159991003)
  - Fluoranthene
  - Pyrene
- W15MS-06102011 (Lab ID: 10159991006)
  - Fluoranthene
  - Pyrene
- W15MSD-06102011 (Lab ID: 10159991007)
  - Fluoranthene
  - Pyrene
- W27-06102011 (Lab ID: 10159991009)
  - Fluoranthene
  - Pyrene

C0: Result confirmed by second analysis.
- W15MSD-06102011 (Lab ID: 10159991007)
  - Pyrene

C1: Result could not be confirmed by second analysis.
- W15DUP-06102011 (Lab ID: 10159991003)
  - Fluoranthene
  - Pyrene
- W15MS-06102011 (Lab ID: 10159991006)
  - Fluoranthene
  - Pyrene
- W15MSD-06102011 (Lab ID: 10159991007)
  - Fluoranthene

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W439-06102011 **Lab ID: 10159991001** Collected: 06/10/11 07:30 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**77.5**	ug/L	0.41		10	06/14/11 08:11	06/20/11 20:36	83-32-9	
Acenaphthylene	**0.62**	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	208-96-8	
Anthracene	**0.48**	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	207-08-9	
Chrysene	ND	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	53-70-3	
Fluoranthene	**0.13**	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	206-44-0	
Fluorene	**14.0**	ug/L	0.41		10	06/14/11 08:11	06/20/11 20:36	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	193-39-5	
Naphthalene	**900**	ug/L	4.1		100	06/14/11 08:11	06/20/11 20:55	91-20-3	
Phenanthrene	**8.7**	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	85-01-8	
Pyrene	**0.085**	ug/L	0.041	0.020	1	06/14/11 08:11	06/18/11 00:04	129-00-0	
2-Fluorobiphenyl (S)	81	%	56-125		1	06/14/11 08:11	06/18/11 00:04	321-60-8	
Terphenyl-d14 (S)	98	%	58-125		1	06/14/11 08:11	06/18/11 00:04	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W15-06102011 **Lab ID: 10159991002** Collected: 06/10/11 08:50 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	208-96-8	
Anthracene	**0.080**	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	193-39-5	
Naphthalene	**0.057**	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	91-20-3	
Phenanthrene	**0.022J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:08	129-00-0	
2-Fluorobiphenyl (S)	80	%	56-125		1	06/15/11 08:18	06/22/11 15:08	321-60-8	
Terphenyl-d14 (S)	100	%	58-125		1	06/15/11 08:18	06/22/11 15:08	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W15DUP-06102011 **Lab ID: 10159991003** Collected: 06/10/11 08:55 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	208-96-8	
Anthracene	**0.071**	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	53-70-3	
Fluoranthene	**0.034J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	206-44-0	B,C1
Fluorene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	91-20-3	
Phenanthrene	**0.021J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	85-01-8	
Pyrene	**0.024J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/22/11 15:27	129-00-0	B,C1
2-Fluorobiphenyl (S)	70	%	56-125		1	06/15/11 08:18	06/22/11 15:27	321-60-8	
Terphenyl-d14 (S)	89	%	58-125		1	06/15/11 08:18	06/22/11 15:27	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W15FB-06102011 **Lab ID: 10159991004** Collected: 06/10/11 08:30 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	208-96-8	
Anthracene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	207-08-9	
Chrysene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	53-70-3	
Fluoranthene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	206-44-0	
Fluorene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	193-39-5	
Naphthalene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	85-01-8	
Pyrene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:36	129-00-0	
2-Fluorobiphenyl (S)	80	%	56-125		1	06/15/11 08:18	06/21/11 18:36	321-60-8	
Terphenyl-d14 (S)	136	%	58-125		1	06/15/11 08:18	06/21/11 18:36	1718-51-0	S3

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W15FBD-06102011 **Lab ID: 10159991005** Collected: 06/10/11 08:35 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	208-96-8	
Anthracene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	207-08-9	
Chrysene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	53-70-3	
Fluoranthene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	206-44-0	
Fluorene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	193-39-5	
Naphthalene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	85-01-8	
Pyrene	ND	ug/L	0.041	0.020	1	06/15/11 08:18	06/21/11 18:55	129-00-0	
2-Fluorobiphenyl (S)	77	%	56-125		1	06/15/11 08:18	06/21/11 18:55	321-60-8	
Terphenyl-d14 (S)	152	%	58-125		1	06/15/11 08:18	06/21/11 18:55	1718-51-0	S3

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W15MS-06102011 **Lab ID: 10159991006** Collected: 06/10/11 09:00 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	208-96-8	
Anthracene	**0.071**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	53-70-3	
Fluoranthene	**0.035J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	206-44-0	B,C1
Fluorene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	193-39-5	
Naphthalene	**0.025J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	91-20-3	
Phenanthrene	**0.026J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	85-01-8	
Pyrene	**0.029J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:15	129-00-0	B,C1
2-Fluorobiphenyl (S)	76	%	56-125		1	06/15/11 08:18	06/21/11 19:15	321-60-8	
Terphenyl-d14 (S)	111	%	58-125		1	06/15/11 08:18	06/21/11 19:15	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W15MSD-06102011 **Lab ID: 10159991007** Collected: 06/10/11 09:05 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	208-96-8	
Anthracene	**0.083**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	53-70-3	
Fluoranthene	**0.032J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	206-44-0	B,C1
Fluorene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	193-39-5	
Naphthalene	**0.023J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	91-20-3	
Phenanthrene	**0.023J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	85-01-8	
Pyrene	**0.024J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:34	129-00-0	B,C0
2-Fluorobiphenyl (S)	74	%	56-125		1	06/15/11 08:18	06/21/11 19:34	321-60-8	
Terphenyl-d14 (S)	101	%	58-125		1	06/15/11 08:18	06/21/11 19:34	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: P309-06102011 **Lab ID: 10159991008** Collected: 06/10/11 10:10 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**6.8**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	83-32-9	
Acenaphthylene	**0.060**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	208-96-8	
Anthracene	**0.044**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	206-44-0	
Fluorene	**0.29**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	193-39-5	
Naphthalene	**0.036J**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 19:53	129-00-0	
2-Fluorobiphenyl (S)	78	%	56-125		1	06/15/11 08:18	06/21/11 19:53	321-60-8	
Terphenyl-d14 (S)	93	%	58-125		1	06/15/11 08:18	06/21/11 19:53	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W27-06102011 **Lab ID: 10159991009** Collected: 06/10/11 14:45 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**48.0**	ug/L	0.40	0.20	10	06/15/11 08:18	06/27/11 15:11	83-32-9	
Acenaphthylene	**1.5**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	208-96-8	
Anthracene	**0.94**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	53-70-3	
Fluoranthene	**0.99**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	206-44-0	B
Fluorene	**26.3**	ug/L	0.40	0.20	10	06/15/11 08:18	06/27/11 15:11	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	193-39-5	
Naphthalene	**0.18**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	91-20-3	
Phenanthrene	**0.39**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	85-01-8	
Pyrene	**0.48**	ug/L	0.040	0.020	1	06/15/11 08:18	06/21/11 20:13	129-00-0	B
2-Fluorobiphenyl (S)	74	%	56-125		1	06/15/11 08:18	06/21/11 20:13	321-60-8	
Terphenyl-d14 (S)	95	%	58-125		1	06/15/11 08:18	06/21/11 20:13	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W2-06102011 **Lab ID: 10159991010** Collected: 06/10/11 12:10 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	193-39-5	
Naphthalene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:37	129-00-0	
2-Fluorobiphenyl (S)	87	%	56-125		1	06/16/11 07:54	06/23/11 13:37	321-60-8	
Terphenyl-d14 (S)	91	%	58-125		1	06/16/11 07:54	06/23/11 13:37	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W9-06102011 **Lab ID: 10159991011** Collected: 06/10/11 12:20 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**2.2**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	208-96-8	
Anthracene	**0.023J**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	207-08-9	
Chrysene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	53-70-3	
Fluoranthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	206-44-0	
Fluorene	**0.53**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	193-39-5	
Naphthalene	**6.0**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	91-20-3	
Phenanthrene	**0.036J**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 13:56	129-00-0	
2-Fluorobiphenyl (S)	73	%	56-125		1	06/16/11 07:54	06/23/11 13:56	321-60-8	
Terphenyl-d14 (S)	81	%	58-125		1	06/16/11 07:54	06/23/11 13:56	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Sample: W426-06102011 **Lab ID: 10159991012** Collected: 06/10/11 16:50 Received: 06/10/11 17:54 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**44.0**	ug/L	0.40	0.20	10	06/16/11 07:54	06/24/11 13:55	83-32-9	
Acenaphthylene	**9.8**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	208-96-8	
Anthracene	**3.2**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	120-12-7	
Benzo(a)anthracene	**0.069**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	207-08-9	
Chrysene	**0.047**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	53-70-3	
Fluoranthene	**4.1**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	206-44-0	
Fluorene	**31.4**	ug/L	0.40	0.20	10	06/16/11 07:54	06/24/11 13:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	193-39-5	
Naphthalene	**1.6**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	91-20-3	
Phenanthrene	**24.6**	ug/L	0.40	0.20	10	06/16/11 07:54	06/24/11 13:55	85-01-8	
Pyrene	**2.6**	ug/L	0.040	0.020	1	06/16/11 07:54	06/23/11 14:15	129-00-0	
2-Fluorobiphenyl (S)	83	%	56-125		1	06/16/11 07:54	06/23/11 14:15	321-60-8	
Terphenyl-d14 (S)	88	%	58-125		1	06/16/11 07:54	06/23/11 14:15	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

QC Batch: OEXT/15794
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10159991001

METHOD BLANK: 994176
Matrix: Water
Associated Lab Samples: 10159991001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	06/15/11 13:33	
Acenaphthylene	ug/L	ND	0.040	06/15/11 13:33	
Anthracene	ug/L	ND	0.040	06/15/11 13:33	
Benzo(a)anthracene	ug/L	ND	0.040	06/15/11 13:33	
Benzo(a)pyrene	ug/L	ND	0.040	06/15/11 13:33	
Benzo(b)fluoranthene	ug/L	ND	0.040	06/15/11 13:33	
Benzo(g,h,i)perylene	ug/L	ND	0.040	06/15/11 13:33	
Benzo(k)fluoranthene	ug/L	ND	0.040	06/15/11 13:33	
Chrysene	ug/L	ND	0.040	06/15/11 13:33	
Dibenz(a,h)anthracene	ug/L	ND	0.040	06/15/11 13:33	
Fluoranthene	ug/L	ND	0.040	06/15/11 13:33	
Fluorene	ug/L	ND	0.040	06/15/11 13:33	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	06/15/11 13:33	
Naphthalene	ug/L	ND	0.040	06/15/11 13:33	
Phenanthrene	ug/L	ND	0.040	06/15/11 13:33	
Pyrene	ug/L	ND	0.040	06/15/11 13:33	
2-Fluorobiphenyl (S)	%	83	56-125	06/15/11 13:33	
Terphenyl-d14 (S)	%	101	58-125	06/15/11 13:33	

LABORATORY CONTROL SAMPLE: 994177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.82	82	56-125	
Acenaphthylene	ug/L	1	0.81	81	55-125	
Anthracene	ug/L	1	0.82	82	62-125	
Benzo(a)anthracene	ug/L	1	0.89	89	56-125	
Benzo(a)pyrene	ug/L	1	0.98	98	64-125	
Benzo(b)fluoranthene	ug/L	1	0.99	99	53-125	
Benzo(g,h,i)perylene	ug/L	1	0.97	97	38-125	
Benzo(k)fluoranthene	ug/L	1	1.0	104	59-125	
Chrysene	ug/L	1	0.91	91	64-125	
Dibenz(a,h)anthracene	ug/L	1	0.95	95	40-125	
Fluoranthene	ug/L	1	0.94	94	60-125	
Fluorene	ug/L	1	0.85	85	59-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.96	96	42-125	
Naphthalene	ug/L	1	0.77	77	52-125	
Phenanthrene	ug/L	1	0.84	84	54-125	
Pyrene	ug/L	1	0.94	94	66-125	
2-Fluorobiphenyl (S)	%			79	56-125	
Terphenyl-d14 (S)	%			100	58-125	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 994500 994501

Parameter	Units	10160123001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	1	1	0.67	0.74	67	74	46-125	10	30	
Acenaphthylene	ug/L	ND	1	1	0.65	0.72	65	72	46-125	10	30	
Anthracene	ug/L	ND	1	1	0.77	0.80	77	80	48-125	3	30	
Benzo(a)anthracene	ug/L	ND	1	1	0.86	0.89	86	89	47-125	3	30	
Benzo(a)pyrene	ug/L	ND	1	1	0.96	0.98	96	98	59-125	2	30	
Benzo(b)fluoranthene	ug/L	ND	1	1	1.0	0.96	103	96	40-125	7	30	
Benzo(g,h,i)perylene	ug/L	ND	1	1	0.95	0.95	95	95	38-125	.7	30	
Benzo(k)fluoranthene	ug/L	ND	1	1	1.0	1.0	104	102	46-125	2	30	
Chrysene	ug/L	ND	1	1	0.89	0.91	89	91	56-125	2	30	
Dibenz(a,h)anthracene	ug/L	ND	1	1	0.96	0.96	96	96	30-125	.9	30	
Fluoranthene	ug/L	ND	1	1	0.89	0.92	89	92	46-125	3	30	
Fluorene	ug/L	ND	1	1	0.72	0.78	72	78	48-125	8	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	1	1	0.93	0.95	93	95	32-125	2	30	
Naphthalene	ug/L	ND	1	1	0.65	0.65	63	62	44-125	.9	30	
Phenanthrene	ug/L	ND	1	1	0.78	0.80	78	80	47-125	3	30	
Pyrene	ug/L	ND	1	1	0.92	0.94	92	94	55-125	2	30	
2-Fluorobiphenyl (S)	%						65	69	56-125			
Terphenyl-d14 (S)	%						99	99	58-125			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

QC Batch: OEXT/15808 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10159991002, 10159991003, 10159991004, 10159991005, 10159991006, 10159991007, 10159991008, 10159991009

METHOD BLANK: 995300 Matrix: Water
Associated Lab Samples: 10159991002, 10159991003, 10159991004, 10159991005, 10159991006, 10159991007, 10159991008, 10159991009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	06/21/11 14:05	
Acenaphthylene	ug/L	ND	0.040	06/21/11 14:05	
Anthracene	ug/L	ND	0.040	06/21/11 14:05	
Benzo(a)anthracene	ug/L	0.022J	0.040	06/21/11 14:05	
Benzo(a)pyrene	ug/L	ND	0.040	06/21/11 14:05	
Benzo(b)fluoranthene	ug/L	0.025J	0.040	06/21/11 14:05	
Benzo(g,h,i)perylene	ug/L	ND	0.040	06/21/11 14:05	
Benzo(k)fluoranthene	ug/L	ND	0.040	06/21/11 14:05	
Chrysene	ug/L	ND	0.040	06/21/11 14:05	
Dibenz(a,h)anthracene	ug/L	ND	0.040	06/21/11 14:05	
Fluoranthene	ug/L	0.033J	0.040	06/21/11 14:05	
Fluorene	ug/L	ND	0.040	06/21/11 14:05	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	06/21/11 14:05	
Naphthalene	ug/L	ND	0.040	06/21/11 14:05	
Phenanthrene	ug/L	ND	0.040	06/21/11 14:05	
Pyrene	ug/L	0.034J	0.040	06/21/11 14:05	
2-Fluorobiphenyl (S)	%	87	56-125	06/21/11 14:05	
Terphenyl-d14 (S)	%	138	58-125	06/21/11 14:05	S3

LABORATORY CONTROL SAMPLE: 995301

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.81	81	56-125	
Acenaphthylene	ug/L	1	0.79	79	55-125	
Anthracene	ug/L	1	0.88	88	62-125	
Benzo(a)anthracene	ug/L	1	0.87	87	56-125	
Benzo(a)pyrene	ug/L	1	0.91	91	64-125	
Benzo(b)fluoranthene	ug/L	1	0.91	91	53-125	
Benzo(g,h,i)perylene	ug/L	1	0.94	94	38-125	
Benzo(k)fluoranthene	ug/L	1	0.87	87	59-125	
Chrysene	ug/L	1	0.91	91	64-125	
Dibenz(a,h)anthracene	ug/L	1	0.94	94	40-125	
Fluoranthene	ug/L	1	0.94	94	60-125	
Fluorene	ug/L	1	0.84	84	59-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.94	94	42-125	
Naphthalene	ug/L	1	0.74	74	52-125	
Phenanthrene	ug/L	1	0.88	88	54-125	
Pyrene	ug/L	1	0.92	92	66-125	
2-Fluorobiphenyl (S)	%			85	56-125	
Terphenyl-d14 (S)	%			106	58-125	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 995845 995846

Parameter	Units	10159750004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	ND	1	1	0.78	0.76	78	76	46-125	4	30	
Acenaphthylene	ug/L	ND	1	1	0.76	0.74	76	74	46-125	3	30	
Anthracene	ug/L	0.022J	1	1	0.86	0.85	84	83	48-125	.5	30	
Benzo(a)anthracene	ug/L	ND	1	1	0.80	0.79	80	79	47-125	1	30	
Benzo(a)pyrene	ug/L	ND	1	1	0.95	0.83	95	83	59-125	13	30	
Benzo(b)fluoranthene	ug/L	ND	1	1	0.94	0.79	94	79	40-125	16	30	
Benzo(g,h,i)perylene	ug/L	ND	1	1	0.98	0.91	98	91	38-125	7	30	
Benzo(k)fluoranthene	ug/L	ND	1	1	0.94	0.82	94	82	46-125	14	30	
Chrysene	ug/L	ND	1	1	0.84	0.82	84	82	56-125	2	30	
Dibenz(a,h)anthracene	ug/L	ND	1	1	0.98	0.92	98	92	30-125	6	30	
Fluoranthene	ug/L	ND	1	1	0.87	0.86	87	86	46-125	1	30	
Fluorene	ug/L	ND	1	1	0.79	0.77	79	77	48-125	3	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	1	1	0.96	0.91	96	91	32-125	5	30	
Naphthalene	ug/L	ND	1	1	0.78	0.73	78	73	44-125	6	30	
Phenanthrene	ug/L	ND	1	1	0.83	0.82	83	82	47-125	.7	30	
Pyrene	ug/L	ND	1	1	0.85	0.84	85	84	55-125	2	30	
2-Fluorobiphenyl (S)	%						85	82	56-125			
Terphenyl-d14 (S)	%						92	92	58-125			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

QC Batch: OEXT/15819 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10159991010, 10159991011, 10159991012

METHOD BLANK: 996173 Matrix: Water
Associated Lab Samples: 10159991010, 10159991011, 10159991012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	06/23/11 12:39	
Acenaphthylene	ug/L	ND	0.040	06/23/11 12:39	
Anthracene	ug/L	ND	0.040	06/23/11 12:39	
Benzo(a)anthracene	ug/L	ND	0.040	06/23/11 12:39	
Benzo(a)pyrene	ug/L	ND	0.040	06/23/11 12:39	
Benzo(b)fluoranthene	ug/L	ND	0.040	06/23/11 12:39	
Benzo(g,h,i)perylene	ug/L	ND	0.040	06/23/11 12:39	
Benzo(k)fluoranthene	ug/L	ND	0.040	06/23/11 12:39	
Chrysene	ug/L	ND	0.040	06/23/11 12:39	
Dibenz(a,h)anthracene	ug/L	ND	0.040	06/23/11 12:39	
Fluoranthene	ug/L	ND	0.040	06/23/11 12:39	
Fluorene	ug/L	ND	0.040	06/23/11 12:39	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	06/23/11 12:39	
Naphthalene	ug/L	ND	0.040	06/23/11 12:39	
Phenanthrene	ug/L	ND	0.040	06/23/11 12:39	
Pyrene	ug/L	ND	0.040	06/23/11 12:39	
2-Fluorobiphenyl (S)	%	89	56-125	06/23/11 12:39	
Terphenyl-d14 (S)	%	88	58-125	06/23/11 12:39	

LABORATORY CONTROL SAMPLE & LCSD: 996174 996175

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	1	0.74	0.78	74	78	56-125	5	20	
Acenaphthylene	ug/L	1	0.73	0.77	73	77	55-125	4	20	
Anthracene	ug/L	1	0.75	0.83	75	83	62-125	10	20	
Benzo(a)anthracene	ug/L	1	0.70	0.78	70	78	56-125	12	20	
Benzo(a)pyrene	ug/L	1	0.74	0.82	74	82	64-125	10	20	
Benzo(b)fluoranthene	ug/L	1	0.74	0.78	74	78	53-125	5	20	
Benzo(g,h,i)perylene	ug/L	1	0.95	1.1	95	105	38-125	10	20	
Benzo(k)fluoranthene	ug/L	1	0.64	0.75	64	75	59-125	16	20	
Chrysene	ug/L	1	0.77	0.82	77	82	64-125	8	20	
Dibenz(a,h)anthracene	ug/L	1	0.89	0.97	89	97	40-125	9	20	
Fluoranthene	ug/L	1	0.77	0.83	77	83	60-125	7	20	
Fluorene	ug/L	1	0.76	0.77	76	77	59-125	2	20	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.91	1.0	91	101	42-125	10	20	
Naphthalene	ug/L	1	0.77	0.78	77	78	52-125	.6	20	
Phenanthrene	ug/L	1	0.75	0.81	75	81	54-125	8	20	
Pyrene	ug/L	1	0.75	0.83	75	83	66-125	10	20	
2-Fluorobiphenyl (S)	%				86	87	56-125			
Terphenyl-d14 (S)	%				85	92	58-125			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

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.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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 NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

BATCH QUALIFIERS

Batch: MSSV/6749

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

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
C0	Result confirmed by second analysis.
C1	Result could not be confirmed by second analysis.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60145681 City of St. Louis Par
Pace Project No.: 10159991

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10159991001	**W439-06102011**	EPA 3510	OEXT/15794	EPA 8270 by SIM	MSSV/6716
10159991002	**W15-06102011**	EPA 3510	OEXT/15808	EPA 8270 by SIM	MSSV/6740
10159991003	**W15DUP-06102011**	EPA 3510	OEXT/15808	EPA 8270 by SIM	MSSV/6740
10159991004	**W15FB-06102011**	EPA 3510	OEXT/15808	EPA 8270 by SIM	MSSV/6740
10159991005	**W15FBD-06102011**	EPA 3510	OEXT/15808	EPA 8270 by SIM	MSSV/6740
10159991006	**W15MS-06102011**	EPA 3510	OEXT/15808	EPA 8270 by SIM	MSSV/6740
10159991007	**W15MSD-06102011**	EPA 3510	OEXT/15808	EPA 8270 by SIM	MSSV/6740
10159991008	**P309-06102011**	EPA 3510	OEXT/15808	EPA 8270 by SIM	MSSV/6740
10159991009	**W27-06102011**	EPA 3510	OEXT/15808	EPA 8270 by SIM	MSSV/6740
10159991010	**W2-06102011**	EPA 3510	OEXT/15819	EPA 8270 by SIM	MSSV/6749
10159991011	**W9-06102011**	EPA 3510	OEXT/15819	EPA 8270 by SIM	MSSV/6749
10159991012	**W426-06102011**	EPA 3510	OEXT/15819	EPA 8270 by SIM	MSSV/6749

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

~~RUSH~~ F.M 6/10/11 6-10-11 NB

10159991

Page: 1 of 1

1384594

Section A Required Client Information:

Company: City of St. Louis Park
Address: 7305 Oxford
St. Louis Park MN 55426
Email To: Scott Anderson
Phone: 952-924-2557 Fax:
Requested Due Date/TAT: STD

Section B Required Project Information:

Report To: Scott Anderson
Copy To: Drew Tavara (AECOM)
Purchase Order No.:
Project Name: City of St. Louis Park Rally Site
Project Number: 60145681

Section C Invoice Information:

Attention: Drew Tavara
Company Name: AECOM
Address:
Pace Quote Reference:
Pace Project Manager: Carol Davy
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☑ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MN

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Analysis Test: PAH PCB	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	W439-06102011	WT	G			6/10/11	0730		2	2									X		001
2	W15-06102011						0850														002
3	W15DUP-06102011						0855														003
4	W15FB-06102011						0830														004
5	W15FBD-06102011						0835														005
6	W15MS-06102011						0900														006
7	W15MSD-06102011						0905														007
8	P309-06102011						1010														008
9	W27-06102011						1445														009
10	W2-06102011						1210														010
11	W9-06102011						1220														011
12	W26-06102011						1650														012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Amy Tavara	6/10/11	1755		6-10-11	1754

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
2.3	Y	N	Y
4.3	Y	N	Y
2.1	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dan Phelps / Drew Tavara (AECOM)

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 6/10/11

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical®	Document Name: Sample Condition Upon Receipt Form	Revised Date: 02Jun2011 Page 1 of 1
	Document Number: F-L-213 Rev.01	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: City of St. Louis Pk. Project # 10159991

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____ Temp Blank: Yes ____ No ☒

Thermometer Used: (80344042) or 80512447 Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature: 2.3, 4.2, 2.1 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 6/10/11 F.M

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. (N3) STD. Lookup Like STD
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: WS		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	Samp #
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☑No	Initial when completed / 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: Mariah Kleint **Date:** 6/13/11

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)

Data Quality Assessment Memorandum

Date: December 9, 2011

To: Bill Gregg

From: Drew Tarara

Subject: Data Quality Assessment
Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 10159991
Appendix F

Distribution: File 60145681 File

SUMMARY

A data quality assessment (DQA) was performed on the data for the analysis of eight aqueous samples and two field blanks for Low Level part per billion (ppb) polynuclear aromatic hydrocarbons (PAHs) by SW-846 method 8270C. The samples were collected on June 10, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to Pace Analytical Services (Pace) in Minneapolis, MN for analysis. Pace processed and reported the results under lot number 10159991.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified as estimated due to nonconformances of certain quality control (QC) criteria

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
W439-06102011	W15MSD-06102011
W15-06102011	P309-06102011
W15DUP-06102011	W27-06102011
W15FB-06102011	W2-06102011
W15FBD-06102011	W9-06102011
W15MS-06102011	W426-06102011

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

Three cooler temperatures as measured upon sample receipt were within the acceptance criteria of 4± 2°C.

Laboratory Blanks/Field Blanks

Four compounds were detected in one of the three laboratory method blanks associated with all samples in this data set. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. The following table summarizes the blank contamination detected, the action level (AL), and the associated samples.

Date Analyzed	Compound	Concentration (µg/L)	Action Level (µg/L)
6/21/2011	Benzo(a)anthracene	0.022	0.110
6/21/2011	Benzo(b)fluoranthene	0.025	0.125
6/21/2011	Fluoranthene	0.033	0.165
6/21/2011	Pyrene	0.034	0.170
Associated samples: W15-06102011, P309-06102011, and W27-06102011			

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

No compounds were detected in either of the field blanks collected for this data set.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses. The surrogates for the field blanks and one of the method blanks were outside of the control limits on the high side. No actions were taken.

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

MS/MSD Results

MS/MSD analyses were performed on sample W15-06102011 from this data set. All target analytes were spiked. All percent recoveries (%Rs) and relative percent differences (RPDs) were within the QAPP QC acceptance criteria.

LCS Results

All target analytes were spiked. The %Rs were within the QAPP QC acceptance criteria for the LCS analyses.

Field Duplicate Results

Samples W15-06102011 and W15DUP-06102011 was the field duplicate pair analyzed with this data set.

The results for the detected compounds in samples W15-06102011 and W15DUP-06102011 and their RPDs are tabulated below. The RPDs were within the acceptance criteria. The RPD of fluoranthene, naphthalene, and pyrene were not calculable (NC) due to a nondetect result in the sample.

Compound	W15-06102011 (µg/L)	W15DUP-06102011 (µg/L)	RPD
Anthracene	0.080	0.071	6.0
Fluoranthene	ND	0.034	NC
Naphthalene	0.057	ND	NC
Phenanthrene	0.022	0.021	4.7
Pyrene	ND	0.024	NC
Criteria: Aqueous RPD ≤ 30, if both sample and duplicate results are > 5x SQL. The RPD criterion is doubled if both sample and duplicate results are <5x SQL.			

Sample Quantitation/Detection Limit Results

Sample calculations were spot checked. No discrepancies were noted.

The following samples were analyzed at dilutions due to the concentration of target analytes in the undiluted analyses.

Sample ID	Dilution	Reason
W439-06102011	Undiluted, 10x, and 100x	10x for fluorene and acenaphthene and 100x for naphthalene
W27-06102011	Undiluted and 10x	10x for fluorene and acenaphthene
W426-06102011	Undiluted and 10x	10x for fluorene, acenaphthene, and phenanthrene

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

June 29, 2011

Andrew Tarara
AECOM
First National Bank Building
332 Minnesota St, Suite E1000
Saint Paul, MN 55101

RE: Project: REILLY-CITY
Pace Project No.: 10160101

Dear Andrew Tarara:
Enclosed are the analytical results for sample(s) received by the laboratory on June 13, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Carol Davy

carol.davy@pacelabs.com
Project Manager

Enclosures

cc: Bill Gregg, AECOM

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: REILLY-CITY
Pace Project No.: 10160101

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Idaho Certification #: MN00064
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New Mexico Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: D9921
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Washington Certification #: C754
Wisconsin Certification #: 999407970

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: REILLY-CITY
Pace Project No.: 10160101

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10160101001	**W130-06132011**	Water	06/13/11 11:25	06/13/11 17:10
10160101002	**W424-06132011**	Water	06/13/11 13:15	06/13/11 17:10

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: REILLY-CITY
Pace Project No.: 10160101

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10160101001	**W130-06132011**	EPA 8270 by SIM	DRE	18
10160101002	**W424-06132011**	EPA 8270 by SIM	DRE	18

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: REILLY-CITY
Pace Project No.: 10160101

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: June 29, 2011

General Information:
2 samples were analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/15844

S0: Surrogate recovery outside laboratory control limits.

- W424-06132011 (Lab ID: 10160101002)
  - 2-Fluorobiphenyl (S)
  - Terphenyl-d14 (S)

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSSV/6743

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: REILLY-CITY
Pace Project No.: 10160101

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: June 29, 2011

Analyte Comments:

QC Batch: OEXT/15844

1M: All analytes confirmed by second analysis.
- W424-06132011 (Lab ID: 10160101002)
  - 2-Fluorobiphenyl (S)

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: REILLY-CITY
Pace Project No.: 10160101

Sample: W130-06132011 **Lab ID: 10160101001** Collected: 06/13/11 11:25 Received: 06/13/11 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	83-32-9	
Acenaphthylene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	208-96-8	
Anthracene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	207-08-9	
Chrysene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	53-70-3	
Fluoranthene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	206-44-0	
Fluorene	**0.023J**	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	193-39-5	
Naphthalene	**0.056**	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	91-20-3	
Phenanthrene	**0.064**	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	85-01-8	
Pyrene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:40	129-00-0	
2-Fluorobiphenyl (S)	75	%	56-125		1	06/20/11 08:04	06/24/11 11:40	321-60-8	
Terphenyl-d14 (S)	81	%	58-125		1	06/20/11 08:04	06/24/11 11:40	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: REILLY-CITY
Pace Project No.: 10160101

Sample: W424-06132011 **Lab ID: 10160101002** Collected: 06/13/11 13:15 Received: 06/13/11 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	83-32-9	
Acenaphthylene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	208-96-8	
Anthracene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	207-08-9	
Chrysene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	53-70-3	
Fluoranthene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	206-44-0	
Fluorene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	193-39-5	
Naphthalene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	91-20-3	
Phenanthrene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	85-01-8	
Pyrene	ND	ug/L	0.042	0.021	1	06/20/11 08:04	06/24/11 11:59	129-00-0	
2-Fluorobiphenyl (S)	41	%	56-125		1	06/20/11 08:04	06/24/11 11:59	321-60-8	1M,S0
Terphenyl-d14 (S)	40	%	58-125		1	06/20/11 08:04	06/24/11 11:59	1718-51-0	S0

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: REILLY-CITY
Pace Project No.: 10160101

QC Batch: OEXT/15844
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10160101001, 10160101002

METHOD BLANK: 998357 Matrix: Water
Associated Lab Samples: 10160101001, 10160101002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	06/22/11 12:53	
Acenaphthylene	ug/L	ND	0.040	06/22/11 12:53	
Anthracene	ug/L	ND	0.040	06/22/11 12:53	
Benzo(a)anthracene	ug/L	ND	0.040	06/22/11 12:53	
Benzo(a)pyrene	ug/L	ND	0.040	06/22/11 12:53	
Benzo(b)fluoranthene	ug/L	ND	0.040	06/22/11 12:53	
Benzo(g,h,i)perylene	ug/L	ND	0.040	06/22/11 12:53	
Benzo(k)fluoranthene	ug/L	ND	0.040	06/22/11 12:53	
Chrysene	ug/L	ND	0.040	06/22/11 12:53	
Dibenz(a,h)anthracene	ug/L	ND	0.040	06/22/11 12:53	
Fluoranthene	ug/L	ND	0.040	06/22/11 12:53	
Fluorene	ug/L	ND	0.040	06/22/11 12:53	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	06/22/11 12:53	
Naphthalene	ug/L	ND	0.040	06/22/11 12:53	
Phenanthrene	ug/L	ND	0.040	06/22/11 12:53	
Pyrene	ug/L	ND	0.040	06/22/11 12:53	
2-Fluorobiphenyl (S)	%	71	56-125	06/22/11 12:53	
Terphenyl-d14 (S)	%	90	58-125	06/22/11 12:53	

LABORATORY CONTROL SAMPLE & LCSD: 998358 998359

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	1	0.71	0.76	71	76	56-125	7	20	
Acenaphthylene	ug/L	1	0.69	0.73	69	73	55-125	6	20	
Anthracene	ug/L	1	0.76	0.81	76	81	62-125	6	20	
Benzo(a)anthracene	ug/L	1	0.72	0.78	72	78	56-125	9	20	
Benzo(a)pyrene	ug/L	1	0.76	0.83	76	83	64-125	9	20	
Benzo(b)fluoranthene	ug/L	1	0.71	0.80	71	80	53-125	12	20	
Benzo(g,h,i)perylene	ug/L	1	0.85	0.96	85	96	38-125	12	20	
Benzo(k)fluoranthene	ug/L	1	0.71	0.75	71	75	59-125	5	20	
Chrysene	ug/L	1	0.76	0.83	76	83	64-125	8	20	
Dibenz(a,h)anthracene	ug/L	1	0.83	0.93	83	93	40-125	11	20	
Fluoranthene	ug/L	1	0.77	0.85	77	85	60-125	10	20	
Fluorene	ug/L	1	0.72	0.74	72	74	59-125	3	20	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.87	0.97	87	97	42-125	11	20	
Naphthalene	ug/L	1	0.67	0.75	67	75	52-125	11	20	
Phenanthrene	ug/L	1	0.75	0.80	75	80	54-125	6	20	
Pyrene	ug/L	1	0.76	0.83	76	83	66-125	9	20	
2-Fluorobiphenyl (S)	%				73	80	56-125			
Terphenyl-d14 (S)	%				84	91	58-125			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: REILLY-CITY
Pace Project No.: 10160101

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

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.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

WORKORDER QUALIFIERS

WO: 10160101

[1] Samples were received outside of the recommended temperature range of 0-6 degrees Celsius. The samples were received from the field on ice, indicating the cool down process had begun.

BATCH QUALIFIERS

Batch: MSSV/6743

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

ANALYTE QUALIFIERS

1M All analytes confirmed by second analysis.

S0 Surrogate recovery outside laboratory control limits.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: REILLY-CITY
Pace Project No.: 10160101

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10160101001	**W130-06132011**	EPA 3510	OEXT/15844	EPA 8270 by SIM	MSSV/6743
10160101002	**W424-06132011**	EPA 3510	OEXT/15844	EPA 8270 by SIM	MSSV/6743

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Chain of Custody Record

FACE Mpls 10160161

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL Denver
4955 Yarrow Street
Arvada, CO 80002

STL-4124 (0901)

Client: AECOM (City of SLP)	Project Manager: Drew Tarara	Date: 6/13/11	Chain of Custody Number: 329129
Address: 7305 Oxford	Telephone Number (Area Code)/Fax Number: 651 367 2335	Lab Number:	Page 1 of 1
City: St. Louis Park / State: MN / Zip Code: 55426	Site Contact: Drew Tarara	Lab Contact: Carol Davy	
Project Name and Location (State): Reilly-City	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Matrix: Air, Aqueous, Sed., Soil

Containers & Preservatives: 2 — Unpres., H2SO4, HNO3, HCl, NaOH, ZnAc/NaOH

Analysis (Attach list if more space is needed): PAH, PCB, Priority Poll

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix	Containers & Preservatives	Special Instructions/ Conditions of Receipt
W130-06132011	6/13/11	1125	Aqueous	Unpres.	001
W424-06132011	6/13/11	1315	Aqueous	Unpres.	002

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	6/13/11	1710	1. Received By T = 6.6°	6/13/11	1710
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Revised Date: 02Jun2011 Page 1 of 1
	Document Number: **F-L-213 Rev.01**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: AECOM (City of SLP) Project # 10160101

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____ Temp Blank: Yes ✓ No _____

Thermometer Used 80344042 or 80512447 **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 6.6 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:**

Date and Initials of person examining contents: 6-13-11 (MS)

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: WT		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl Samp #
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☑No	Initial when completed / 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): _____	6-13-11 (MS)	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CAO **Date:** 6-14-11

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)

Data Quality Assessment Memorandum

Date: December 9, 2011

To: Bill Gregg

From: Drew Tarara

Subject: Data Quality Assessment
Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 10160101
Appendix G

Distribution: File 60145681 File

SUMMARY

A data quality assessment (DQA) was performed on the data for the analysis of 2 aqueous samples for Low Level part per billion (ppb) polynuclear aromatic hydrocarbons (PAHs) by SW-846 method 8270C. The samples were collected on June 13, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to Pace Analytical Services (Pace) in Minneapolis, MN for analysis. Pace processed and reported the results under lot number 10160101.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified as estimated due to nonconformances of certain quality control (QC) criteria

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
W130-06132011	W424-06132011

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

The cooler temperature as measured upon sample receipt was 6°C. The acceptance criteria of 4± 2°C was not met, however the samples were delivered to the lab the same day the samples were collected. They were on ice and cooling had begun. No action was taken.

Laboratory Blanks/Field Blanks

Target compounds were not detected in the laboratory method blank. No field blanks were collected for this sample data set.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in one of the two samples. The two surrogates for sample W424-06132011 were outside the control limits. No actions were taken.

MS/MSD Results

No MS/MSD analyses was performed for this sample data set.

LCS Results

All target analytes were spiked. The %Rs were within the QAPP QC acceptance criteria for the LCS analyses.

Field Duplicate Results

No duplicate samples were collected for the data set.

Sample Quantitation/Detection Limit Results

Sample calculations were spot checked. No discrepancies were noted.

All samples were analyzed undiluted.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-17133-1
Client Project/Site: CSLP - Reilly Tar & Chemical
Revision: 1

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, Minnesota 55426

Attn: Scott Anderson

Authorized for release by:
3/5/2012 2:34:46 PM

Lisa Uriell
Project Manager II
lisa.uriell@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 280-17133-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-17133-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
Thirteen samples were received under chain of custody on June 17, 2011. The samples were received at temperatures of 3.0°C, 2.8°C, 1.7°C, 1.1°C, 2.9°C, 2.3°C, 1.6°C, 1.3°C, 2.4°C and 2.9°C.

One of 18 X 1L Amber bottles was received at the laboratory broken for sample W129-06142011 (280-17133-2). Sufficient volume remained for the requested analyses. The client was notified on June 17, 2011.

No other anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to limited sample volume, the following samples had an initial aliquot volume below the nominal aliquot volume of 4000 mL. Therefore, the analysis of these samples had to be performed with elevated detection limits. The reporting limits have been adjusted relative to the dilutions required.

W48-06142011 (280-17133-1) had an initial volume of 3904.6 mL
W129-06142011 (280-17133-2) had an initial volume of 3834.5 mL
W129DUP-06142011 (280-17133-3) had an initial volume of 3922.3 mL
W129FB-06142011 (280-17133-4) had an initial volume of 3460.1 mL
W129FBD-06142011 (280-17133-5) had an initial volume of 3749.5 mL
W33R-06142011 (280-17133-6) had an initial volume of 3821.4 mL
W414-06142011 (280-17133-7) had an initial volume of 3578.3 mL
W14-06142011 (280-17133-8) had an initial volume of 3548.4 mL
W409-06152011 (280-17133-9) had an initial volume of 3723.7 mL
W411-06152011 (280-17133-10) had an initial volume of 3604.2 mL
W412-06152011 (280-17133-11) had an initial volume of 3983.0 mL

The following samples were analyzed at two different dilutions to obtain all target analytes within the linear calibration range . Reporting limits were adjusted accordingly. Only those compounds that were within the linear range were reported in each dilution in order to achieve the lowest reporting limits possible within the constraints of the method. Surrogate recoveries could not be calculated for the analysis performed at a dilution, because the extracts were diluted beyond the ability to quantitate recoveries.

W129-06142011 (280-17133-2) was analyzed at a 1X and a 10X dilution

Job ID: 280-17133-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

W129DUP-06142011 (280-17133-3) was analyzed at a 1X and a 10X dilution
W409-06152011 (280-17133-9) was analyzed at a 1X and a 25X dilution

Surrogate Chrysene-d12 was recovered below the QC control limits in the following samples, as detailed below. Matrix interference was not obvious. Upon re-aliquoting and reanalyzing, the surrogate recovery outlier was still present. Re-extraction was not possible due to insufficient remaining sample volume; therefore, the data is reported as is.

W129-06142011 (280-17133-2) recovered Chrysene-d12 at 13% (limits 28-101%)
W129DUP-06142011 (280-17133-3) recovered Chrysene-d12 at 26% (limits 28-101%)
W33R-06142011 (280-17133-6) recovered Chrysene-d12 at 16% (limits 28-101%)
W14-06142011 (280-17133-8) recovered Chrysene-d12 at 26% (limits 28-101%)
W409-06152011 (280-17133-9) recovered Chrysene-d12 at 21% (limits 28-101%)
W411-06152011 (280-17133-10) recovered Chrysene-d12 at 18% (limits 28-101%)
W412-06152011 (280-17133-11) recovered Chrysene-d12 at 25% (limits 28-101%)

Compounds Benzo(b)fluoranthene and Benzo(k)fluoranthene were unresolved in samples W129-06142011 (280-17133-2) and W129DUP-06142011 (280-17133-3) due to matrix interferences. It can be noted that these compounds were adequately resolved in associated standards, indicating the instrument is achieving separation. The combined peak was reported as Benzo(b)fluoranthene, while Benzo(k)fluoranthene was reported as undetected even though it may be present. Associated results in the analytical report have been flagged with a “K”.

The LCS associated with prep batch 280-72761 exhibited the percent recovery above the QC control limits for 2-Methylnaphthalene at 98% (limits 25-95%). This is an indicator that data may be biased high. As no detectable concentrations of 2-Methylnaphthalene are present above the reporting limit in the associated samples, corrective action is deemed unnecessary. Associated data in the analytical report have been flagged “*”.

Additionally, the LCS associated with prep batch 280-72761 exhibited percent recoveries below the QC control limits for 3-Methylnaphthalene at 16% (limits 30-150%) and 7,12-Dimethylbenz(a)anthracene at 22% (limits 30-150%). These analytes are not compounds of interest for this project; therefore, corrective action was deemed unnecessary. The LCS was reanalyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume.

The LCS/LCSD associated with prep batch 280-73251 exhibited percent recoveries below the QC control limits for Acridine at 17% (limits 30-150%). Additionally, the LCS/LCSD exhibited relative percent difference (RPD) data outside the QC control limits for Quinoline at 75% (max limit 50%). The LCS/LCSD was re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

Additionally, the LCS/LCSD associated with prep batch 280-73251 exhibited the LCS percent recovery and relative percent difference (RPD) data outside the QC control limits for 7,12-Dimethylbenz(a)anthracene. This analyte is not a compound of interest for this project; therefore, corrective action was deemed unnecessary. The LCS/LCSD was reanalyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume.

The MS/MSD associated with prep batch 280-72761 was performed using sample W129-06142011 (280-17133-2), as requested. MS/MSD exhibited 11 of the 33 Matrix Spike compound recoveries outside the control limits. MS/MSD exhibited 11 of the 33 Matrix Spike Duplicate compound recoveries outside the control limits. The MS/MSD exhibited 3 of the 33 Relative Percent Difference (RPD) data outside the control limits. The MS/MSD exhibited percent recoveries and/or RPD data outside the control limits for the compounds listed below. Details of the specific analyte recoveries can found in the Matrix Spike Sample Recovery and Data Reports.

3-Methylnaphthalene	Benzo[a]anthracene	Benzo[a]pyrene
Benzo[e]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene
Benzo[ghi]perylene	Dibenzo(a,h)pyrene	Indeno[1,2,3-cd]pyrene
Perylene	7,12-Dimethylbenz(a)anthracene	

Job ID: 280-17133-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

The method required MS/MSD could not be performed for prep batch 280-73251, due to insufficient sample volume.

No other anomalies were noted.

Revision

This report has been revised to correct the Benzo(b)fluoranthene and Benzo(k)fluoranthene results for samples W129- 06142011 (280-17133-2) and W129DUP-06142011 (280-17133-3), as the results did not reflect the matrix interferences causing the compounds to be unresolved in the original submission.

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION
JOB: 280-17133-1
ANALYSIS: SW846-8270C SIM

QC Parameter	Data Planned	Valid Data Obtained
Method Blank	62	62
MB Surrogates	6	6
LCS/LCSD	21	20
LCS/LCSD Surrogates	9	9
FB/FBD	62	62
MS	7	6
MS Surrogates	3	3
MSD	7	6
MSD Surrogates	3	3
MS/MSD RPD	7	7
Sample/Dup. RPD	31	23
Sample Surrogates	39	32
Samples and QC Internal Standard Area	60	60
TOTAL	**317**	**299**
% Completeness	**94.3%**	

Sample Duplicate Calculation for Method 8270C SIM

Sample Duplicate RPD					
JOB 280-17133-1					
Sample: W129-06142011		**DUP: W129DUP-06142011**			
Compound	**Result**	**Compound**	**Result**	**RPD**	**RPD>50%**
Acenaphthene	1.5	Acenaphthene	1.7	12.5	
Acenaphthylene	ND	Acenaphthylene	ND	0.0	
Acridine	ND	Acridine	ND	0.0	
Anthracene	1.2	Anthracene	1.7	34.5	
Benzo(a)anthracene	1.9	Benzo(a)anthracene	3.6	61.8	p
Benzo(b)fluoranthene	4.8	Benzo(b)fluoranthene	8.5	55.6	p
Benzo(k)fluoranthene	ND	Benzo(k)fluoranthene	ND	0.0	
2,3-Benzofuran	ND	2,3-Benzofuran	ND	0.0	
Benzo(ghi)perylene	2.7	Benzo(ghi)perylene	4.2	43.5	
Benzo(a)pyrene	2.5	Benzo(a)pyrene	4.6	59.2	p
Benzo(e)pyrene	1.9	Benzo(e)pyrene	3.2	51.0	p
Benzo(b)thiophene	8.0	Benzo(b)thiophene	8.3	3.7	
Biphenyl	1.5	Biphenyl	2.2	37.8	
Carbazole	2.9	Carbazole	2.1	32.0	
Chrysene	2.8	Chrysene	5.2	60.0	p
Dibenz(a,h)anthracene	ND	Dibenz(a,h)anthracene	ND	0.0	
Dibenzofuran	1.7	Dibenzofuran	1.5	12.5	
Dibenzothiophene	ND	Dibenzothiophene	ND	0.0	
2,3-Dihydroindene	460	2,3-Dihydroindene	510	10.3	
Fluoranthene	7.5	Fluoranthene	13	53.7	p
Fluorene	2.3	Fluorene	2.2	4.4	
Indene	ND	Indene	ND	0.0	
Indeno(1,2,3-cd)pyrene	2.1	Indeno(1,2,3-cd)pyrene	3.6	52.6	p
Indole	ND	Indole	ND	0.0	
2-Methylnaphthalene	4.9	2-Methylnaphthalene	4.5	8.5	
1-Methylnaphthalene	2.9	1-Methylnaphthalene	2.9	0.0	
Naphthalene	20	Naphthalene	19	5.1	
Perylene	ND	Perylene	ND	0.0	
Phenanthrene	8.5	Phenanthrene	11	25.6	
Pyrene	5.2	Pyrene	9.1	54.5	p
Quinoline	ND	Quinoline	ND	0.0	

RPD = Relative Percent Difference
ND = Compound not detected in the sample
p = RPD is outside of control limits
*NC = RPD not calculated, one positive result and one ND.
Considered acceptable if the positive result is less than 4x the RL.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits
K	Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W48-06142011 — Lab Sample ID: 280-17133-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	1.0	J	5.5	0.70	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	4.2	J	5.1	0.72	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.5	J	5.7	0.91	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.6	J *	6.0	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	85		5.8	0.51	ng/L	1		8270C	Total/NA
Acridine	11		6.7	6.7	ng/L	1		8270C	Total/NA
Anthracene	5.2		4.3	0.82	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	7.4		5.3	0.77	ng/L	1		8270C	Total/NA
Carbazole	1.9	J	3.9	0.74	ng/L	1		8270C	Total/NA
Indene	25		4.8	3.4	ng/L	1		8270C	Total/NA
Naphthalene	4.0	J	8.8	1.2	ng/L	1		8270C	Total/NA
Pyrene	3.2	J	4.3	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: W129-06142011 — Lab Sample ID: 280-17133-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	2.9	J	5.8	0.93	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	4.9	J *	6.2	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	1.5	J	5.9	0.52	ng/L	1		8270C	Total/NA
Anthracene	1.2	J	4.4	0.83	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	1.9	J	4.5	0.96	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	2.5	J	2.6	1.3	ng/L	1		8270C	Total/NA
Benzo[e]pyrene	1.9	J	4.5	1.2	ng/L	1		8270C	Total/NA
Benzo[b]fluoranthene	4.8	J K	4.9	1.4	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	8.0		5.4	0.78	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	2.7	J	6.5	1.2	ng/L	1		8270C	Total/NA
Carbazole	2.9	J	4.0	0.75	ng/L	1		8270C	Total/NA
Chrysene	2.8	J	5.8	1.3	ng/L	1		8270C	Total/NA
Dibenzofuran	1.7	J	5.9	1.0	ng/L	1		8270C	Total/NA
Fluoranthene	7.5		4.8	1.8	ng/L	1		8270C	Total/NA
Fluorene	2.3	J	4.3	0.89	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	2.1	J	5.6	1.3	ng/L	1		8270C	Total/NA
Naphthalene	20		9.0	1.2	ng/L	1		8270C	Total/NA
Phenanthrene	8.5		6.6	3.3	ng/L	1		8270C	Total/NA
Pyrene	5.2		4.4	1.0	ng/L	1		8270C	Total/NA
Biphenyl	1.5	J	5.8	1.1	ng/L	1		8270C	Total/NA
2,3-Dihydroindene - DL	460		52	7.3	ng/L	10		8270C	Total/NA

Client Sample ID: W129DUP-06142011 — Lab Sample ID: 280-17133-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	2.9	J	5.7	0.91	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	4.5	J *	6.0	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	1.7	J	5.8	0.51	ng/L	1		8270C	Total/NA
Anthracene	1.7	J	4.3	0.82	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	3.6	J	4.4	0.94	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	4.6		2.5	1.3	ng/L	1		8270C	Total/NA
Benzo[e]pyrene	3.2	J	4.4	1.2	ng/L	1		8270C	Total/NA
Benzo[b]fluoranthene	8.5	K	4.8	1.4	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	8.3		5.3	0.76	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	4.2	J	6.3	1.2	ng/L	1		8270C	Total/NA
Carbazole	2.1	J	3.9	0.73	ng/L	1		8270C	Total/NA
Chrysene	5.2	J	5.7	1.3	ng/L	1		8270C	Total/NA
Dibenzofuran	1.5	J	5.8	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: W129DUP-06142011 (Continued) — Lab Sample ID: 280-17133-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	13		4.7	1.7	ng/L	1		8270C	Total/NA
Fluorene	2.2	J	4.2	0.87	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	3.6	J	5.5	1.3	ng/L	1		8270C	Total/NA
Naphthalene	19		8.8	1.2	ng/L	1		8270C	Total/NA
Phenanthrene	11		6.4	3.3	ng/L	1		8270C	Total/NA
Pyrene	9.1		4.3	1.0	ng/L	1		8270C	Total/NA
Biphenyl	2.2	J	5.7	1.1	ng/L	1		8270C	Total/NA
2,3-Dihydroindene - DL	510		51	7.1	ng/L	10		8270C	Total/NA

Client Sample ID: W129FB-06142011 — Lab Sample ID: 280-17133-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	0.90	J	5.8	0.81	ng/L	1		8270C	Total/NA
Acenaphthylene	0.91	J	5.5	0.89	ng/L	1		8270C	Total/NA

Client Sample ID: W129FBD-06142011 — Lab Sample ID: 280-17133-5

No Detections

Client Sample ID: W33R-06142011 — Lab Sample ID: 280-17133-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	3.0	J	5.2	0.73	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.6	J	5.9	0.93	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	3.3	J *	6.2	1.0	ng/L	1		8270C	Total/NA
Carbazole	2.3	J	4.0	0.75	ng/L	1		8270C	Total/NA
Dibenzofuran	1.4	J	6.0	1.0	ng/L	1		8270C	Total/NA
Fluoranthene	1.9	J	4.8	1.8	ng/L	1		8270C	Total/NA
Fluorene	1.5	J	4.3	0.89	ng/L	1		8270C	Total/NA
Naphthalene	9.7		9.0	1.2	ng/L	1		8270C	Total/NA
Pyrene	1.8	J	4.4	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: W414-06142011 — Lab Sample ID: 280-17133-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	1.9	J	5.6	0.78	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.3	J	6.3	0.99	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.7	J *	6.6	1.1	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	3.7	J	6.9	1.3	ng/L	1		8270C	Total/NA
Naphthalene	7.3	J	9.6	1.3	ng/L	1		8270C	Total/NA
Pyrene	30		4.7	1.1	ng/L	1		8270C	Total/NA
Biphenyl	4.6	J	6.3	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: W14-06142011 — Lab Sample ID: 280-17133-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	1.4	J	5.6	0.79	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.4	J	6.3	1.0	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.6	J *	6.7	1.1	ng/L	1		8270C	Total/NA
Acenaphthene	1.3	J	6.4	0.56	ng/L	1		8270C	Total/NA
Anthracene	5.4		4.7	0.90	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	5.8		4.8	1.0	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	7.2		2.8	1.4	ng/L	1		8270C	Total/NA
Benzo[e]pyrene	9.3		4.8	1.3	ng/L	1		8270C	Total/NA

Client Sample ID: W14-06142011 (Continued) — Lab Sample ID: 280-17133-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	16		5.3	1.6	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	15		7.0	1.3	ng/L	1		8270C	Total/NA
Carbazole	4.4		4.3	0.81	ng/L	1		8270C	Total/NA
Chrysene	12		6.3	1.4	ng/L	1		8270C	Total/NA
Dibenz(a,h)anthracene	2.2	J	6.7	1.2	ng/L	1		8270C	Total/NA
Dibenzofuran	1.1	J	6.4	1.1	ng/L	1		8270C	Total/NA
Fluoranthene	30		5.2	1.9	ng/L	1		8270C	Total/NA
Fluorene	1.0	J	4.6	0.96	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	8.3		6.1	1.4	ng/L	1		8270C	Total/NA
Naphthalene	5.0	J	9.7	1.3	ng/L	1		8270C	Total/NA
Phenanthrene	8.6		7.1	3.6	ng/L	1		8270C	Total/NA
Pyrene	27		4.7	1.1	ng/L	1		8270C	Total/NA
Quinoline	8.3	J	10	6.4	ng/L	1		8270C	Total/NA

Client Sample ID: W409-06152011 — Lab Sample ID: 280-17133-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	2.0	J	5.8	0.73	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	49		6.0	0.96	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	6.0	J *	6.3	1.1	ng/L	1		8270C	Total/NA
Acenaphthylene	470		5.2	0.83	ng/L	1		8270C	Total/NA
Acridine	23		7.0	7.0	ng/L	1		8270C	Total/NA
Anthracene	180		4.5	0.86	ng/L	1		8270C	Total/NA
Dibenzofuran	52		6.1	1.1	ng/L	1		8270C	Total/NA
Dibenzothiophene	180		4.4	1.1	ng/L	1		8270C	Total/NA
Naphthalene	67		9.2	1.2	ng/L	1		8270C	Total/NA
Pyrene	200		4.5	1.1	ng/L	1		8270C	Total/NA
2,3-Dihydroindene - DL	3700		130	19	ng/L	25		8270C	Total/NA
Acenaphthene - DL	3100		150	13	ng/L	25		8270C	Total/NA
Benzo(b)thiophene - DL	730		140	20	ng/L	25		8270C	Total/NA
Carbazole - DL	900		100	19	ng/L	25		8270C	Total/NA
Fluoranthene - DL	440		120	45	ng/L	25		8270C	Total/NA
Fluorene - DL	1500		110	23	ng/L	25		8270C	Total/NA
Indene - DL	330		130	88	ng/L	25		8270C	Total/NA
Phenanthrene - DL	2600		170	86	ng/L	25		8270C	Total/NA
Biphenyl - DL	760		150	28	ng/L	25		8270C	Total/NA

Client Sample ID: W411-06152011 — Lab Sample ID: 280-17133-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	2.2	J	5.5	0.78	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.3	J *	6.5	1.1	ng/L	1		8270C	Total/NA
Acenaphthylene	1.5	J	5.3	0.85	ng/L	1		8270C	Total/NA
Anthracene	2.1	J	4.7	0.89	ng/L	1		8270C	Total/NA
Carbazole	2.4	J	4.2	0.80	ng/L	1		8270C	Total/NA
Fluoranthene	2.2	J	5.1	1.9	ng/L	1		8270C	Total/NA
Indole	6.7		5.2	1.9	ng/L	1		8270C	Total/NA
Naphthalene	5.4	J	9.5	1.3	ng/L	1		8270C	Total/NA
Pyrene	1.9	J	4.7	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: W412-06152011 — Lab Sample ID: 280-17133-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	15		5.0	0.70	ng/L	1		8270C	Total/NA

Client Sample ID: W412-06152011 (Continued)

Lab Sample ID: 280-17133-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	3.3	J	5.6	0.89	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	3.5	J	5.9	0.98	ng/L	1		8270C	Total/NA
Acenaphthene	3.1	J	5.7	0.50	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	2.2	J	4.3	0.92	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	1.7	J	2.5	1.2	ng/L	1		8270C	Total/NA
Benzo[e]pyrene	1.1	J	4.3	1.1	ng/L	1		8270C	Total/NA
Benzo[b]fluoranthene	2.5	J	4.7	1.4	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	1.1	J	5.2	0.75	ng/L	1		8270C	Total/NA
Benzo[k]fluoranthene	2.6	J	4.1	1.2	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	3.2	J	6.2	1.2	ng/L	1		8270C	Total/NA
Carbazole	5.2		3.8	0.72	ng/L	1		8270C	Total/NA
Chrysene	3.7	J	5.6	1.2	ng/L	1		8270C	Total/NA
Dibenz(a,h)anthracene	2.9	J	5.9	1.0	ng/L	1		8270C	Total/NA
Dibenzofuran	1.1	J	5.7	0.99	ng/L	1		8270C	Total/NA
Fluoranthene	4.8		4.6	1.7	ng/L	1		8270C	Total/NA
Fluorene	2.4	J	4.1	0.85	ng/L	1		8270C	Total/NA
Indene	4.1	J	4.7	3.3	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	2.5	J	5.4	1.3	ng/L	1		8270C	Total/NA
Naphthalene	12		8.6	1.1	ng/L	1		8270C	Total/NA
Phenanthrene	5.4	J	6.3	3.2	ng/L	1		8270C	Total/NA
Pyrene	5.6		4.2	0.99	ng/L	1		8270C	Total/NA
Biphenyl	2.0	J	5.6	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: W408-06162011

Lab Sample ID: 280-17133-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	2.1	J	4.9	0.69	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.3	J	5.5	0.87	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	2.6	J	5.8	0.96	ng/L	1		8270C	Total/NA
Acenaphthene	2.0	J	5.6	0.49	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	1.2	J	6.1	1.1	ng/L	1		8270C	Total/NA
Chrysene	1.2	J	5.5	1.2	ng/L	1		8270C	Total/NA
Fluoranthene	6.9		4.5	1.7	ng/L	1		8270C	Total/NA
Fluorene	2.1	J	4.0	0.83	ng/L	1		8270C	Total/NA
Naphthalene	6.3	J	8.4	1.1	ng/L	1		8270C	Total/NA
Phenanthrene	7.4		6.2	3.1	ng/L	1		8270C	Total/NA
Pyrene	8.8		4.1	0.97	ng/L	1		8270C	Total/NA
Biphenyl	1.3	J	5.5	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: W122-06162011

Lab Sample ID: 280-17133-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	2.2	J	4.8	0.67	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.4	J	5.3	0.85	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	2.1	J	5.6	0.93	ng/L	1		8270C	Total/NA
Acenaphthene	0.83	J	5.4	0.48	ng/L	1		8270C	Total/NA
Acenaphthylene	1.3	J	4.6	0.73	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	1.3	J	2.4	1.2	ng/L	1		8270C	Total/NA
Benzo[b]fluoranthene	1.4	J	4.5	1.3	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	2.3	J	5.9	1.1	ng/L	1		8270C	Total/NA
Fluoranthene	2.1	J	4.4	1.6	ng/L	1		8270C	Total/NA
Fluorene	1.0	J	3.9	0.81	ng/L	1		8270C	Total/NA
Indole	1.7	J	4.5	1.6	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	1.4	J	5.1	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: W122-06162011 (Continued) **Lab Sample ID: 280-17133-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	5.7	J	8.2	1.1	ng/L	1		8270C	Total/NA
Pyrene	2.0	J	4.0	0.94	ng/L	1		8270C	Total/NA
Biphenyl	1.5	J	5.3	1.0	ng/L	1		8270C	Total/NA

Method Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compound (GC/MS SIM LL)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-17133-1	W48-06142011	Water	06/14/11 10:30	06/17/11 09:30
280-17133-2	W129-06142011	Water	06/14/11 12:40	06/17/11 09:30
280-17133-3	W129DUP-06142011	Water	06/14/11 12:45	06/17/11 09:30
280-17133-4	W129FB-06142011	Water	06/14/11 12:30	06/17/11 09:30
280-17133-5	W129FBD-06142011	Water	06/14/11 12:35	06/17/11 09:30
280-17133-6	W33R-06142011	Water	06/14/11 15:05	06/17/11 09:30
280-17133-7	W414-06142011	Water	06/14/11 16:45	06/17/11 09:30
280-17133-8	W14-06142011	Water	06/14/11 14:50	06/17/11 09:30
280-17133-9	W409-06152011	Water	06/15/11 14:20	06/17/11 09:30
280-17133-10	W411-06152011	Water	06/15/11 11:15	06/17/11 09:30
280-17133-11	W412-06152011	Water	06/15/11 12:30	06/17/11 09:30
280-17133-12	W408-06162011	Water	06/16/11 12:15	06/17/11 09:30
280-17133-13	W122-06162011	Water	06/16/11 14:05	06/17/11 09:30

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W48-06142011
Date Collected: 06/14/11 10:30
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-1
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**1.0**	**J**	5.5	0.70	ng/L		06/18/11 13:45	07/07/11 12:52	1
2,3-Dihydroindene	**4.2**	**J**	5.1	0.72	ng/L		06/18/11 13:45	07/07/11 12:52	1
1-Methylnaphthalene	**1.5**	**J**	5.7	0.91	ng/L		06/18/11 13:45	07/07/11 12:52	1
2-Methylnaphthalene	**1.6**	**J ***	6.0	1.0	ng/L		06/18/11 13:45	07/07/11 12:52	1
Acenaphthene	**85**		5.8	0.51	ng/L		06/18/11 13:45	07/07/11 12:52	1
Acenaphthylene	ND		4.9	0.79	ng/L		06/18/11 13:45	07/07/11 12:52	1
Acridine	**11**		6.7	6.7	ng/L		06/18/11 13:45	07/07/11 12:52	1
Anthracene	**5.2**		4.3	0.82	ng/L		06/18/11 13:45	07/07/11 12:52	1
Benzo[a]anthracene	ND		4.4	0.94	ng/L		06/18/11 13:45	07/07/11 12:52	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		06/18/11 13:45	07/07/11 12:52	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		06/18/11 13:45	07/07/11 12:52	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		06/18/11 13:45	07/07/11 12:52	1
Benzo(b)thiophene	**7.4**		5.3	0.77	ng/L		06/18/11 13:45	07/07/11 12:52	1
Benzo[k]fluoranthene	ND		4.2	1.3	ng/L		06/18/11 13:45	07/07/11 12:52	1
Benzo[g,h,i]perylene	ND		6.4	1.2	ng/L		06/18/11 13:45	07/07/11 12:52	1
Carbazole	**1.9**	**J**	3.9	0.74	ng/L		06/18/11 13:45	07/07/11 12:52	1
Chrysene	ND		5.7	1.3	ng/L		06/18/11 13:45	07/07/11 12:52	1
Dibenz(a,h)anthracene	ND		6.0	1.1	ng/L		06/18/11 13:45	07/07/11 12:52	1
Dibenzofuran	ND		5.8	1.0	ng/L		06/18/11 13:45	07/07/11 12:52	1
Dibenzothiophene	ND		4.2	1.0	ng/L		06/18/11 13:45	07/07/11 12:52	1
Fluoranthene	ND		4.7	1.7	ng/L		06/18/11 13:45	07/07/11 12:52	1
Fluorene	ND		4.2	0.87	ng/L		06/18/11 13:45	07/07/11 12:52	1
Indene	**25**		4.8	3.4	ng/L		06/18/11 13:45	07/07/11 12:52	1
Indole	ND		4.8	1.8	ng/L		06/18/11 13:45	07/07/11 12:52	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		06/18/11 13:45	07/07/11 12:52	1
Naphthalene	**4.0**	**J**	8.8	1.2	ng/L		06/18/11 13:45	07/07/11 12:52	1
Perylene	ND		3.9	3.9	ng/L		06/18/11 13:45	07/07/11 12:52	1
Phenanthrene	ND		6.5	3.3	ng/L		06/18/11 13:45	07/07/11 12:52	1
Pyrene	**3.2**	**J**	4.3	1.0	ng/L		06/18/11 13:45	07/07/11 12:52	1
Quinoline	ND		9.2	5.8	ng/L		06/18/11 13:45	07/07/11 12:52	1
Biphenyl	ND		5.7	1.1	ng/L		06/18/11 13:45	07/07/11 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*81*		*23 - 84*	*06/18/11 13:45*	*07/07/11 12:52*	*1*
Chrysene-d12 (Surr)	*40*		*28 - 101*	*06/18/11 13:45*	*07/07/11 12:52*	*1*
Naphthalene-d8 (Surr)	*75*		*22 - 97*	*06/18/11 13:45*	*07/07/11 12:52*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W129-06142011
Date Collected: 06/14/11 12:40
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.6	0.71	ng/L		06/18/11 13:45	07/07/11 13:28	1
1-Methylnaphthalene	**2.9**	**J**	5.8	0.93	ng/L		06/18/11 13:45	07/07/11 13:28	1
2-Methylnaphthalene	**4.9**	**J ***	6.2	1.0	ng/L		06/18/11 13:45	07/07/11 13:28	1
Acenaphthene	**1.5**	**J**	5.9	0.52	ng/L		06/18/11 13:45	07/07/11 13:28	1
Acenaphthylene	ND		5.0	0.80	ng/L		06/18/11 13:45	07/07/11 13:28	1
Acridine	ND		6.8	6.8	ng/L		06/18/11 13:45	07/07/11 13:28	1
Anthracene	**1.2**	**J**	4.4	0.83	ng/L		06/18/11 13:45	07/07/11 13:28	1
Benzo[a]anthracene	**1.9**	**J**	4.5	0.96	ng/L		06/18/11 13:45	07/07/11 13:28	1
Benzo[a]pyrene	**2.5**	**J**	2.6	1.3	ng/L		06/18/11 13:45	07/07/11 13:28	1
Benzo[e]pyrene	**1.9**	**J**	4.5	1.2	ng/L		06/18/11 13:45	07/07/11 13:28	1
Benzo[b]fluoranthene	**4.8**	**J K**	4.9	1.4	ng/L		06/18/11 13:45	07/07/11 13:28	1
Benzo(b)thiophene	**8.0**		5.4	0.78	ng/L		06/18/11 13:45	07/07/11 13:28	1
Benzo[k]fluoranthene	ND	K	4.3	1.3	ng/L		06/18/11 13:45	07/07/11 13:28	1
Benzo[g,h,i]perylene	**2.7**	**J**	6.5	1.2	ng/L		06/18/11 13:45	07/07/11 13:28	1
Carbazole	**2.9**	**J**	4.0	0.75	ng/L		06/18/11 13:45	07/07/11 13:28	1
Chrysene	**2.8**	**J**	5.8	1.3	ng/L		06/18/11 13:45	07/07/11 13:28	1
Dibenz(a,h)anthracene	ND		6.2	1.1	ng/L		06/18/11 13:45	07/07/11 13:28	1
Dibenzofuran	**1.7**	**J**	5.9	1.0	ng/L		06/18/11 13:45	07/07/11 13:28	1
Dibenzothiophene	ND		4.3	1.0	ng/L		06/18/11 13:45	07/07/11 13:28	1
Fluoranthene	**7.5**		4.8	1.8	ng/L		06/18/11 13:45	07/07/11 13:28	1
Fluorene	**2.3**	**J**	4.3	0.89	ng/L		06/18/11 13:45	07/07/11 13:28	1
Indene	ND		4.9	3.4	ng/L		06/18/11 13:45	07/07/11 13:28	1
Indole	ND		4.9	1.8	ng/L		06/18/11 13:45	07/07/11 13:28	1
Indeno[1,2,3-cd]pyrene	**2.1**	**J**	5.6	1.3	ng/L		06/18/11 13:45	07/07/11 13:28	1
Naphthalene	**20**		9.0	1.2	ng/L		06/18/11 13:45	07/07/11 13:28	1
Perylene	ND		4.0	4.0	ng/L		06/18/11 13:45	07/07/11 13:28	1
Phenanthrene	**8.5**		6.6	3.3	ng/L		06/18/11 13:45	07/07/11 13:28	1
Pyrene	**5.2**		4.4	1.0	ng/L		06/18/11 13:45	07/07/11 13:28	1
Quinoline	ND		9.4	5.9	ng/L		06/18/11 13:45	07/07/11 13:28	1
Biphenyl	**1.5**	**J**	5.8	1.1	ng/L		06/18/11 13:45	07/07/11 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*58*		*23 - 84*	*06/18/11 13:45*	*07/07/11 13:28*	*1*
Chrysene-d12 (Surr)	*13*	*X*	*28 - 101*	*06/18/11 13:45*	*07/07/11 13:28*	*1*
Naphthalene-d8 (Surr)	*54*		*22 - 97*	*06/18/11 13:45*	*07/07/11 13:28*	*1*

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dihydroindene	**460**		52	7.3	ng/L		06/18/11 13:45	07/08/11 12:23	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*45*	*D*	*23 - 84*	*06/18/11 13:45*	*07/08/11 12:23*	*10*
Chrysene-d12 (Surr)	*9*	*D*	*28 - 101*	*06/18/11 13:45*	*07/08/11 12:23*	*10*
Naphthalene-d8 (Surr)	*44*	*D*	*22 - 97*	*06/18/11 13:45*	*07/08/11 12:23*	*10*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W129DUP-06142011
Date Collected: 06/14/11 12:45
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.5	0.69	ng/L		06/18/11 13:45	07/07/11 15:18	1
1-Methylnaphthalene	**2.9**	**J**	5.7	0.91	ng/L		06/18/11 13:45	07/07/11 15:18	1
2-Methylnaphthalene	**4.5**	**J ***	6.0	1.0	ng/L		06/18/11 13:45	07/07/11 15:18	1
Acenaphthene	**1.7**	**J**	5.8	0.51	ng/L		06/18/11 13:45	07/07/11 15:18	1
Acenaphthylene	ND		4.9	0.79	ng/L		06/18/11 13:45	07/07/11 15:18	1
Acridine	ND		6.6	6.6	ng/L		06/18/11 13:45	07/07/11 15:18	1
Anthracene	**1.7**	**J**	4.3	0.82	ng/L		06/18/11 13:45	07/07/11 15:18	1
Benzo[a]anthracene	**3.6**	**J**	4.4	0.94	ng/L		06/18/11 13:45	07/07/11 15:18	1
Benzo[a]pyrene	**4.6**		2.5	1.3	ng/L		06/18/11 13:45	07/07/11 15:18	1
Benzo[e]pyrene	**3.2**	**J**	4.4	1.2	ng/L		06/18/11 13:45	07/07/11 15:18	1
Benzo[b]fluoranthene	**8.5**	**K**	4.8	1.4	ng/L		06/18/11 13:45	07/07/11 15:18	1
Benzo(b)thiophene	**8.3**		5.3	0.76	ng/L		06/18/11 13:45	07/07/11 15:18	1
Benzo[k]fluoranthene	ND	K	4.2	1.3	ng/L		06/18/11 13:45	07/07/11 15:18	1
Benzo[g,h,i]perylene	**4.2**	**J**	6.3	1.2	ng/L		06/18/11 13:45	07/07/11 15:18	1
Carbazole	**2.1**	**J**	3.9	0.73	ng/L		06/18/11 13:45	07/07/11 15:18	1
Chrysene	**5.2**	**J**	5.7	1.3	ng/L		06/18/11 13:45	07/07/11 15:18	1
Dibenz(a,h)anthracene	ND		6.0	1.1	ng/L		06/18/11 13:45	07/07/11 15:18	1
Dibenzofuran	**1.5**	**J**	5.8	1.0	ng/L		06/18/11 13:45	07/07/11 15:18	1
Dibenzothiophene	ND		4.2	1.0	ng/L		06/18/11 13:45	07/07/11 15:18	1
Fluoranthene	**13**		4.7	1.7	ng/L		06/18/11 13:45	07/07/11 15:18	1
Fluorene	**2.2**	**J**	4.2	0.87	ng/L		06/18/11 13:45	07/07/11 15:18	1
Indene	ND		4.8	3.3	ng/L		06/18/11 13:45	07/07/11 15:18	1
Indole	ND		4.8	1.8	ng/L		06/18/11 13:45	07/07/11 15:18	1
Indeno[1,2,3-cd]pyrene	**3.6**	**J**	5.5	1.3	ng/L		06/18/11 13:45	07/07/11 15:18	1
Naphthalene	**19**		8.8	1.2	ng/L		06/18/11 13:45	07/07/11 15:18	1
Perylene	ND		3.9	3.9	ng/L		06/18/11 13:45	07/07/11 15:18	1
Phenanthrene	**11**		6.4	3.3	ng/L		06/18/11 13:45	07/07/11 15:18	1
Pyrene	**9.1**		4.3	1.0	ng/L		06/18/11 13:45	07/07/11 15:18	1
Quinoline	ND		9.2	5.8	ng/L		06/18/11 13:45	07/07/11 15:18	1
Biphenyl	**2.2**	**J**	5.7	1.1	ng/L		06/18/11 13:45	07/07/11 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*70*		*23 - 84*	*06/18/11 13:45*	*07/07/11 15:18*	*1*
Chrysene-d12 (Surr)	*26*	*X*	*28 - 101*	*06/18/11 13:45*	*07/07/11 15:18*	*1*
Naphthalene-d8 (Surr)	*59*		*22 - 97*	*06/18/11 13:45*	*07/07/11 15:18*	*1*

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dihydroindene	**510**		51	7.1	ng/L		06/18/11 13:45	07/08/11 08:41	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*61*	*D*	*23 - 84*	*06/18/11 13:45*	*07/08/11 08:41*	*10*
Chrysene-d12 (Surr)	*18*	*D*	*28 - 101*	*06/18/11 13:45*	*07/08/11 08:41*	*10*
Naphthalene-d8 (Surr)	*52*	*D*	*22 - 97*	*06/18/11 13:45*	*07/08/11 08:41*	*10*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W129FB-06142011
Date Collected: 06/14/11 12:30
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		6.2	0.79	ng/L		06/18/11 13:45	07/07/11 15:55	1
2,3-Dihydroindene	**0.90**	**J**	5.8	0.81	ng/L		06/18/11 13:45	07/07/11 15:55	1
1-Methylnaphthalene	ND		6.5	1.0	ng/L		06/18/11 13:45	07/07/11 15:55	1
2-Methylnaphthalene	ND	*	6.8	1.1	ng/L		06/18/11 13:45	07/07/11 15:55	1
Acenaphthene	ND		6.6	0.58	ng/L		06/18/11 13:45	07/07/11 15:55	1
Acenaphthylene	**0.91**	**J**	5.5	0.89	ng/L		06/18/11 13:45	07/07/11 15:55	1
Acridine	ND		7.5	7.5	ng/L		06/18/11 13:45	07/07/11 15:55	1
Anthracene	ND		4.9	0.92	ng/L		06/18/11 13:45	07/07/11 15:55	1
Benzo[a]anthracene	ND		5.0	1.1	ng/L		06/18/11 13:45	07/07/11 15:55	1
Benzo[a]pyrene	ND		2.9	1.4	ng/L		06/18/11 13:45	07/07/11 15:55	1
Benzo[e]pyrene	ND		5.0	1.3	ng/L		06/18/11 13:45	07/07/11 15:55	1
Benzo[b]fluoranthene	ND		5.4	1.6	ng/L		06/18/11 13:45	07/07/11 15:55	1
Benzo(b)thiophene	ND		6.0	0.87	ng/L		06/18/11 13:45	07/07/11 15:55	1
Benzo[k]fluoranthene	ND		4.7	1.4	ng/L		06/18/11 13:45	07/07/11 15:55	1
Benzo[g,h,i]perylene	ND		7.2	1.4	ng/L		06/18/11 13:45	07/07/11 15:55	1
Carbazole	ND		4.4	0.83	ng/L		06/18/11 13:45	07/07/11 15:55	1
Chrysene	ND		6.5	1.4	ng/L		06/18/11 13:45	07/07/11 15:55	1
Dibenz(a,h)anthracene	ND		6.8	1.2	ng/L		06/18/11 13:45	07/07/11 15:55	1
Dibenzofuran	ND		6.6	1.1	ng/L		06/18/11 13:45	07/07/11 15:55	1
Dibenzothiophene	ND		4.7	1.1	ng/L		06/18/11 13:45	07/07/11 15:55	1
Fluoranthene	ND		5.3	2.0	ng/L		06/18/11 13:45	07/07/11 15:55	1
Fluorene	ND		4.7	0.98	ng/L		06/18/11 13:45	07/07/11 15:55	1
Indene	ND		5.4	3.8	ng/L		06/18/11 13:45	07/07/11 15:55	1
Indole	ND		5.4	2.0	ng/L		06/18/11 13:45	07/07/11 15:55	1
Indeno[1,2,3-cd]pyrene	ND		6.2	1.5	ng/L		06/18/11 13:45	07/07/11 15:55	1
Naphthalene	ND		9.9	1.3	ng/L		06/18/11 13:45	07/07/11 15:55	1
Perylene	ND		4.4	4.4	ng/L		06/18/11 13:45	07/07/11 15:55	1
Phenanthrene	ND		7.3	3.7	ng/L		06/18/11 13:45	07/07/11 15:55	1
Pyrene	ND		4.9	1.1	ng/L		06/18/11 13:45	07/07/11 15:55	1
Quinoline	ND		10	6.5	ng/L		06/18/11 13:45	07/07/11 15:55	1
Biphenyl	ND		6.5	1.2	ng/L		06/18/11 13:45	07/07/11 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*65*		*23 - 84*	*06/18/11 13:45*	*07/07/11 15:55*	*1*
Chrysene-d12 (Surr)	*66*		*28 - 101*	*06/18/11 13:45*	*07/07/11 15:55*	*1*
Naphthalene-d8 (Surr)	*66*		*22 - 97*	*06/18/11 13:45*	*07/07/11 15:55*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W129FBD-06142011
Date Collected: 06/14/11 12:35
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.8	0.73	ng/L		06/18/11 13:45	07/07/11 16:32	1
2,3-Dihydroindene	ND		5.3	0.75	ng/L		06/18/11 13:45	07/07/11 16:32	1
1-Methylnaphthalene	ND		6.0	0.95	ng/L		06/18/11 13:45	07/07/11 16:32	1
2-Methylnaphthalene	ND	*	6.3	1.0	ng/L		06/18/11 13:45	07/07/11 16:32	1
Acenaphthene	ND		6.1	0.53	ng/L		06/18/11 13:45	07/07/11 16:32	1
Acenaphthylene	ND		5.1	0.82	ng/L		06/18/11 13:45	07/07/11 16:32	1
Acridine	ND		6.9	6.9	ng/L		06/18/11 13:45	07/07/11 16:32	1
Anthracene	ND		4.5	0.85	ng/L		06/18/11 13:45	07/07/11 16:32	1
Benzo[a]anthracene	ND		4.6	0.98	ng/L		06/18/11 13:45	07/07/11 16:32	1
Benzo[a]pyrene	ND		2.7	1.3	ng/L		06/18/11 13:45	07/07/11 16:32	1
Benzo[e]pyrene	ND		4.6	1.2	ng/L		06/18/11 13:45	07/07/11 16:32	1
Benzo[b]fluoranthene	ND		5.0	1.5	ng/L		06/18/11 13:45	07/07/11 16:32	1
Benzo(b)thiophene	ND		5.5	0.80	ng/L		06/18/11 13:45	07/07/11 16:32	1
Benzo[k]fluoranthene	ND		4.4	1.3	ng/L		06/18/11 13:45	07/07/11 16:32	1
Benzo[g,h,i]perylene	ND		6.6	1.2	ng/L		06/18/11 13:45	07/07/11 16:32	1
Carbazole	ND		4.1	0.77	ng/L		06/18/11 13:45	07/07/11 16:32	1
Chrysene	ND		6.0	1.3	ng/L		06/18/11 13:45	07/07/11 16:32	1
Dibenz(a,h)anthracene	ND		6.3	1.1	ng/L		06/18/11 13:45	07/07/11 16:32	1
Dibenzofuran	ND		6.1	1.1	ng/L		06/18/11 13:45	07/07/11 16:32	1
Dibenzothiophene	ND		4.4	1.0	ng/L		06/18/11 13:45	07/07/11 16:32	1
Fluoranthene	ND		4.9	1.8	ng/L		06/18/11 13:45	07/07/11 16:32	1
Fluorene	ND		4.4	0.91	ng/L		06/18/11 13:45	07/07/11 16:32	1
Indene	ND		5.0	3.5	ng/L		06/18/11 13:45	07/07/11 16:32	1
Indole	ND		5.0	1.8	ng/L		06/18/11 13:45	07/07/11 16:32	1
Indeno[1,2,3-cd]pyrene	ND		5.8	1.3	ng/L		06/18/11 13:45	07/07/11 16:32	1
Naphthalene	ND		9.2	1.2	ng/L		06/18/11 13:45	07/07/11 16:32	1
Perylene	ND		4.1	4.1	ng/L		06/18/11 13:45	07/07/11 16:32	1
Phenanthrene	ND		6.7	3.4	ng/L		06/18/11 13:45	07/07/11 16:32	1
Pyrene	ND		4.5	1.1	ng/L		06/18/11 13:45	07/07/11 16:32	1
Quinoline	ND		9.6	6.0	ng/L		06/18/11 13:45	07/07/11 16:32	1
Biphenyl	ND		6.0	1.1	ng/L		06/18/11 13:45	07/07/11 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*64*		*23 - 84*	*06/18/11 13:45*	*07/07/11 16:32*	*1*
Chrysene-d12 (Surr)	*65*		*28 - 101*	*06/18/11 13:45*	*07/07/11 16:32*	*1*
Naphthalene-d8 (Surr)	*67*		*22 - 97*	*06/18/11 13:45*	*07/07/11 16:32*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W33R-06142011
Date Collected: 06/14/11 15:05
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.7	0.71	ng/L		06/18/11 13:45	07/07/11 17:08	1
2,3-Dihydroindene	**3.0**	**J**	5.2	0.73	ng/L		06/18/11 13:45	07/07/11 17:08	1
1-Methylnaphthalene	**1.6**	**J**	5.9	0.93	ng/L		06/18/11 13:45	07/07/11 17:08	1
2-Methylnaphthalene	**3.3**	**J ***	6.2	1.0	ng/L		06/18/11 13:45	07/07/11 17:08	1
Acenaphthene	ND		6.0	0.52	ng/L		06/18/11 13:45	07/07/11 17:08	1
Acenaphthylene	ND		5.0	0.81	ng/L		06/18/11 13:45	07/07/11 17:08	1
Acridine	ND		6.8	6.8	ng/L		06/18/11 13:45	07/07/11 17:08	1
Anthracene	ND		4.4	0.84	ng/L		06/18/11 13:45	07/07/11 17:08	1
Benzo[a]anthracene	ND		4.5	0.96	ng/L		06/18/11 13:45	07/07/11 17:08	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		06/18/11 13:45	07/07/11 17:08	1
Benzo[e]pyrene	ND		4.5	1.2	ng/L		06/18/11 13:45	07/07/11 17:08	1
Benzo[b]fluoranthene	ND		4.9	1.5	ng/L		06/18/11 13:45	07/07/11 17:08	1
Benzo(b)thiophene	ND		5.4	0.79	ng/L		06/18/11 13:45	07/07/11 17:08	1
Benzo[k]fluoranthene	ND		4.3	1.3	ng/L		06/18/11 13:45	07/07/11 17:08	1
Benzo[g,h,i]perylene	ND		6.5	1.2	ng/L		06/18/11 13:45	07/07/11 17:08	1
Carbazole	**2.3**	**J**	4.0	0.75	ng/L		06/18/11 13:45	07/07/11 17:08	1
Chrysene	ND		5.9	1.3	ng/L		06/18/11 13:45	07/07/11 17:08	1
Dibenz(a,h)anthracene	ND		6.2	1.1	ng/L		06/18/11 13:45	07/07/11 17:08	1
Dibenzofuran	**1.4**	**J**	6.0	1.0	ng/L		06/18/11 13:45	07/07/11 17:08	1
Dibenzothiophene	ND		4.3	1.0	ng/L		06/18/11 13:45	07/07/11 17:08	1
Fluoranthene	**1.9**	**J**	4.8	1.8	ng/L		06/18/11 13:45	07/07/11 17:08	1
Fluorene	**1.5**	**J**	4.3	0.89	ng/L		06/18/11 13:45	07/07/11 17:08	1
Indene	ND		4.9	3.4	ng/L		06/18/11 13:45	07/07/11 17:08	1
Indole	ND		4.9	1.8	ng/L		06/18/11 13:45	07/07/11 17:08	1
Indeno[1,2,3-cd]pyrene	ND		5.7	1.3	ng/L		06/18/11 13:45	07/07/11 17:08	1
Naphthalene	**9.7**		9.0	1.2	ng/L		06/18/11 13:45	07/07/11 17:08	1
Perylene	ND		4.0	4.0	ng/L		06/18/11 13:45	07/07/11 17:08	1
Phenanthrene	ND		6.6	3.4	ng/L		06/18/11 13:45	07/07/11 17:08	1
Pyrene	**1.8**	**J**	4.4	1.0	ng/L		06/18/11 13:45	07/07/11 17:08	1
Quinoline	ND		9.4	5.9	ng/L		06/18/11 13:45	07/07/11 17:08	1
Biphenyl	ND		5.9	1.1	ng/L		06/18/11 13:45	07/07/11 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*69*		*23 - 84*	*06/18/11 13:45*	*07/07/11 17:08*	*1*
Chrysene-d12 (Surr)	*16*	*X*	*28 - 101*	*06/18/11 13:45*	*07/07/11 17:08*	*1*
Naphthalene-d8 (Surr)	*68*		*22 - 97*	*06/18/11 13:45*	*07/07/11 17:08*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W414-06142011
Date Collected: 06/14/11 16:45
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		6.0	0.76	ng/L		06/18/11 13:45	07/07/11 17:45	1
2,3-Dihydroindene	**1.9**	**J**	5.6	0.78	ng/L		06/18/11 13:45	07/07/11 17:45	1
1-Methylnaphthalene	**1.3**	**J**	6.3	0.99	ng/L		06/18/11 13:45	07/07/11 17:45	1
2-Methylnaphthalene	**1.7**	**J ***	6.6	1.1	ng/L		06/18/11 13:45	07/07/11 17:45	1
Acenaphthene	ND		6.4	0.56	ng/L		06/18/11 13:45	07/07/11 17:45	1
Acenaphthylene	ND		5.4	0.86	ng/L		06/18/11 13:45	07/07/11 17:45	1
Acridine	ND		7.3	7.3	ng/L		06/18/11 13:45	07/07/11 17:45	1
Anthracene	ND		4.7	0.89	ng/L		06/18/11 13:45	07/07/11 17:45	1
Benzo[a]anthracene	ND		4.8	1.0	ng/L		06/18/11 13:45	07/07/11 17:45	1
Benzo[a]pyrene	ND		2.8	1.4	ng/L		06/18/11 13:45	07/07/11 17:45	1
Benzo[e]pyrene	ND		4.8	1.3	ng/L		06/18/11 13:45	07/07/11 17:45	1
Benzo[b]fluoranthene	ND		5.3	1.6	ng/L		06/18/11 13:45	07/07/11 17:45	1
Benzo(b)thiophene	ND		5.8	0.84	ng/L		06/18/11 13:45	07/07/11 17:45	1
Benzo[k]fluoranthene	ND		4.6	1.4	ng/L		06/18/11 13:45	07/07/11 17:45	1
Benzo[g,h,i]perylene	**3.7**	**J**	6.9	1.3	ng/L		06/18/11 13:45	07/07/11 17:45	1
Carbazole	ND		4.2	0.80	ng/L		06/18/11 13:45	07/07/11 17:45	1
Chrysene	ND		6.3	1.4	ng/L		06/18/11 13:45	07/07/11 17:45	1
Dibenz(a,h)anthracene	ND		6.6	1.2	ng/L		06/18/11 13:45	07/07/11 17:45	1
Dibenzofuran	ND		6.4	1.1	ng/L		06/18/11 13:45	07/07/11 17:45	1
Dibenzothiophene	ND		4.6	1.1	ng/L		06/18/11 13:45	07/07/11 17:45	1
Fluoranthene	ND		5.1	1.9	ng/L		06/18/11 13:45	07/07/11 17:45	1
Fluorene	ND		4.6	0.95	ng/L		06/18/11 13:45	07/07/11 17:45	1
Indene	ND		5.3	3.7	ng/L		06/18/11 13:45	07/07/11 17:45	1
Indole	ND		5.3	1.9	ng/L		06/18/11 13:45	07/07/11 17:45	1
Indeno[1,2,3-cd]pyrene	ND		6.0	1.4	ng/L		06/18/11 13:45	07/07/11 17:45	1
Naphthalene	**7.3**	**J**	9.6	1.3	ng/L		06/18/11 13:45	07/07/11 17:45	1
Perylene	ND		4.3	4.3	ng/L		06/18/11 13:45	07/07/11 17:45	1
Phenanthrene	ND		7.0	3.6	ng/L		06/18/11 13:45	07/07/11 17:45	1
Pyrene	**30**		4.7	1.1	ng/L		06/18/11 13:45	07/07/11 17:45	1
Quinoline	ND		10	6.3	ng/L		06/18/11 13:45	07/07/11 17:45	1
Biphenyl	**4.6**	**J**	6.3	1.2	ng/L		06/18/11 13:45	07/07/11 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*61*		*23 - 84*	*06/18/11 13:45*	*07/07/11 17:45*	*1*
Chrysene-d12 (Surr)	*41*		*28 - 101*	*06/18/11 13:45*	*07/07/11 17:45*	*1*
Naphthalene-d8 (Surr)	*75*		*22 - 97*	*06/18/11 13:45*	*07/07/11 17:45*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W14-06142011
Date Collected: 06/14/11 14:50
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-8
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		6.1	0.77	ng/L		06/18/11 13:45	07/07/11 18:21	1
2,3-Dihydroindene	**1.4**	**J**	5.6	0.79	ng/L		06/18/11 13:45	07/07/11 18:21	1
1-Methylnaphthalene	**1.4**	**J**	6.3	1.0	ng/L		06/18/11 13:45	07/07/11 18:21	1
2-Methylnaphthalene	**1.6**	**J ***	6.7	1.1	ng/L		06/18/11 13:45	07/07/11 18:21	1
Acenaphthene	**1.3**	**J**	6.4	0.56	ng/L		06/18/11 13:45	07/07/11 18:21	1
Acenaphthylene	ND		5.4	0.87	ng/L		06/18/11 13:45	07/07/11 18:21	1
Acridine	ND		7.3	7.3	ng/L		06/18/11 13:45	07/07/11 18:21	1
Anthracene	**5.4**		4.7	0.90	ng/L		06/18/11 13:45	07/07/11 18:21	1
Benzo[a]anthracene	**5.8**		4.8	1.0	ng/L		06/18/11 13:45	07/07/11 18:21	1
Benzo[a]pyrene	**7.2**		2.8	1.4	ng/L		06/18/11 13:45	07/07/11 18:21	1
Benzo[e]pyrene	**9.3**		4.8	1.3	ng/L		06/18/11 13:45	07/07/11 18:21	1
Benzo[b]fluoranthene	**16**		5.3	1.6	ng/L		06/18/11 13:45	07/07/11 18:21	1
Benzo(b)thiophene	ND		5.9	0.85	ng/L		06/18/11 13:45	07/07/11 18:21	1
Benzo[k]fluoranthene	ND		4.6	1.4	ng/L		06/18/11 13:45	07/07/11 18:21	1
Benzo[g,h,i]perylene	**15**		7.0	1.3	ng/L		06/18/11 13:45	07/07/11 18:21	1
Carbazole	**4.4**		4.3	0.81	ng/L		06/18/11 13:45	07/07/11 18:21	1
Chrysene	**12**		6.3	1.4	ng/L		06/18/11 13:45	07/07/11 18:21	1
Dibenz(a,h)anthracene	**2.2**	**J**	6.7	1.2	ng/L		06/18/11 13:45	07/07/11 18:21	1
Dibenzofuran	**1.1**	**J**	6.4	1.1	ng/L		06/18/11 13:45	07/07/11 18:21	1
Dibenzothiophene	ND		4.6	1.1	ng/L		06/18/11 13:45	07/07/11 18:21	1
Fluoranthene	**30**		5.2	1.9	ng/L		06/18/11 13:45	07/07/11 18:21	1
Fluorene	**1.0**	**J**	4.6	0.96	ng/L		06/18/11 13:45	07/07/11 18:21	1
Indene	ND		5.3	3.7	ng/L		06/18/11 13:45	07/07/11 18:21	1
Indole	ND		5.3	2.0	ng/L		06/18/11 13:45	07/07/11 18:21	1
Indeno[1,2,3-cd]pyrene	**8.3**		6.1	1.4	ng/L		06/18/11 13:45	07/07/11 18:21	1
Naphthalene	**5.0**	**J**	9.7	1.3	ng/L		06/18/11 13:45	07/07/11 18:21	1
Perylene	ND		4.3	4.3	ng/L		06/18/11 13:45	07/07/11 18:21	1
Phenanthrene	**8.6**		7.1	3.6	ng/L		06/18/11 13:45	07/07/11 18:21	1
Pyrene	**27**		4.7	1.1	ng/L		06/18/11 13:45	07/07/11 18:21	1
Quinoline	**8.3**	**J**	10	6.4	ng/L		06/18/11 13:45	07/07/11 18:21	1
Biphenyl	ND		6.3	1.2	ng/L		06/18/11 13:45	07/07/11 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*66*		*23 - 84*	*06/18/11 13:45*	*07/07/11 18:21*	*1*
Chrysene-d12 (Surr)	*26*	*X*	*28 - 101*	*06/18/11 13:45*	*07/07/11 18:21*	*1*
Naphthalene-d8 (Surr)	*57*		*22 - 97*	*06/18/11 13:45*	*07/07/11 18:21*	*1*

Client Sample ID: W409-06152011
Date Collected: 06/15/11 14:20
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-9
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	2.0	J	5.8	0.73	ng/L		06/18/11 13:45	07/07/11 18:58	1
1-Methylnaphthalene	49		6.0	0.96	ng/L		06/18/11 13:45	07/07/11 18:58	1
2-Methylnaphthalene	6.0	J *	6.3	1.1	ng/L		06/18/11 13:45	07/07/11 18:58	1
Acenaphthylene	470		5.2	0.83	ng/L		06/18/11 13:45	07/07/11 18:58	1
Acridine	23		7.0	7.0	ng/L		06/18/11 13:45	07/07/11 18:58	1
Anthracene	180		4.5	0.86	ng/L		06/18/11 13:45	07/07/11 18:58	1
Benzo[a]anthracene	ND		4.6	0.99	ng/L		06/18/11 13:45	07/07/11 18:58	1
Benzo[a]pyrene	ND		2.7	1.3	ng/L		06/18/11 13:45	07/07/11 18:58	1
Benzo[e]pyrene	ND		4.6	1.2	ng/L		06/18/11 13:45	07/07/11 18:58	1
Benzo[b]fluoranthene	ND		5.0	1.5	ng/L		06/18/11 13:45	07/07/11 18:58	1
Benzo[k]fluoranthene	ND		4.4	1.3	ng/L		06/18/11 13:45	07/07/11 18:58	1
Benzo[g,h,i]perylene	ND		6.7	1.3	ng/L		06/18/11 13:45	07/07/11 18:58	1
Chrysene	ND		6.0	1.3	ng/L		06/18/11 13:45	07/07/11 18:58	1
Dibenz(a,h)anthracene	ND		6.3	1.1	ng/L		06/18/11 13:45	07/07/11 18:58	1
Dibenzofuran	52		6.1	1.1	ng/L		06/18/11 13:45	07/07/11 18:58	1
Dibenzothiophene	180		4.4	1.1	ng/L		06/18/11 13:45	07/07/11 18:58	1
Indole	ND		5.0	1.9	ng/L		06/18/11 13:45	07/07/11 18:58	1
Indeno[1,2,3-cd]pyrene	ND		5.8	1.4	ng/L		06/18/11 13:45	07/07/11 18:58	1
Naphthalene	67		9.2	1.2	ng/L		06/18/11 13:45	07/07/11 18:58	1
Perylene	ND		4.1	4.1	ng/L		06/18/11 13:45	07/07/11 18:58	1
Pyrene	200		4.5	1.1	ng/L		06/18/11 13:45	07/07/11 18:58	1
Quinoline	ND		9.7	6.1	ng/L		06/18/11 13:45	07/07/11 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*65*		*23 - 84*	*06/18/11 13:45*	*07/07/11 18:58*	*1*
Chrysene-d12 (Surr)	*21*	*X*	*28 - 101*	*06/18/11 13:45*	*07/07/11 18:58*	*1*
Naphthalene-d8 (Surr)	*63*		*22 - 97*	*06/18/11 13:45*	*07/07/11 18:58*	*1*

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dihydroindene	3700		130	19	ng/L		06/18/11 13:45	07/08/11 10:31	25
Acenaphthene	3100		150	13	ng/L		06/18/11 13:45	07/08/11 10:31	25
Benzo(b)thiophene	730		140	20	ng/L		06/18/11 13:45	07/08/11 10:31	25
Carbazole	900		100	19	ng/L		06/18/11 13:45	07/08/11 10:31	25
Fluoranthene	440		120	45	ng/L		06/18/11 13:45	07/08/11 10:31	25
Fluorene	1500		110	23	ng/L		06/18/11 13:45	07/08/11 10:31	25
Indene	330		130	88	ng/L		06/18/11 13:45	07/08/11 10:31	25
Phenanthrene	2600		170	86	ng/L		06/18/11 13:45	07/08/11 10:31	25
Biphenyl	760		150	28	ng/L		06/18/11 13:45	07/08/11 10:31	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*54*	*D*	*23 - 84*	*06/18/11 13:45*	*07/08/11 10:31*	*25*
Chrysene-d12 (Surr)	*18*	*D*	*28 - 101*	*06/18/11 13:45*	*07/08/11 10:31*	*25*
Naphthalene-d8 (Surr)	*51*	*D*	*22 - 97*	*06/18/11 13:45*	*07/08/11 10:31*	*25*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W411-06152011
Date Collected: 06/15/11 11:15
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-10
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		6.0	0.75	ng/L		06/18/11 13:45	07/07/11 19:34	1
2,3-Dihydroindene	**2.2**	**J**	5.5	0.78	ng/L		06/18/11 13:45	07/07/11 19:34	1
1-Methylnaphthalene	ND		6.2	0.99	ng/L		06/18/11 13:45	07/07/11 19:34	1
2-Methylnaphthalene	**1.3**	**J ***	6.5	1.1	ng/L		06/18/11 13:45	07/07/11 19:34	1
Acenaphthene	ND		6.3	0.55	ng/L		06/18/11 13:45	07/07/11 19:34	1
Acenaphthylene	**1.5**	**J**	5.3	0.85	ng/L		06/18/11 13:45	07/07/11 19:34	1
Acridine	ND		7.2	7.2	ng/L		06/18/11 13:45	07/07/11 19:34	1
Anthracene	**2.1**	**J**	4.7	0.89	ng/L		06/18/11 13:45	07/07/11 19:34	1
Benzo[a]anthracene	ND		4.8	1.0	ng/L		06/18/11 13:45	07/07/11 19:34	1
Benzo[a]pyrene	ND		2.8	1.4	ng/L		06/18/11 13:45	07/07/11 19:34	1
Benzo[e]pyrene	ND		4.8	1.3	ng/L		06/18/11 13:45	07/07/11 19:34	1
Benzo[b]fluoranthene	ND		5.2	1.5	ng/L		06/18/11 13:45	07/07/11 19:34	1
Benzo(b)thiophene	ND		5.8	0.83	ng/L		06/18/11 13:45	07/07/11 19:34	1
Benzo[k]fluoranthene	ND		4.6	1.4	ng/L		06/18/11 13:45	07/07/11 19:34	1
Benzo[g,h,i]perylene	ND		6.9	1.3	ng/L		06/18/11 13:45	07/07/11 19:34	1
Carbazole	**2.4**	**J**	4.2	0.80	ng/L		06/18/11 13:45	07/07/11 19:34	1
Chrysene	ND		6.2	1.4	ng/L		06/18/11 13:45	07/07/11 19:34	1
Dibenz(a,h)anthracene	ND		6.5	1.2	ng/L		06/18/11 13:45	07/07/11 19:34	1
Dibenzofuran	ND		6.3	1.1	ng/L		06/18/11 13:45	07/07/11 19:34	1
Dibenzothiophene	ND		4.6	1.1	ng/L		06/18/11 13:45	07/07/11 19:34	1
Fluoranthene	**2.2**	**J**	5.1	1.9	ng/L		06/18/11 13:45	07/07/11 19:34	1
Fluorene	ND		4.6	0.94	ng/L		06/18/11 13:45	07/07/11 19:34	1
Indene	ND		5.2	3.6	ng/L		06/18/11 13:45	07/07/11 19:34	1
Indole	**6.7**		5.2	1.9	ng/L		06/18/11 13:45	07/07/11 19:34	1
Indeno[1,2,3-cd]pyrene	ND		6.0	1.4	ng/L		06/18/11 13:45	07/07/11 19:34	1
Naphthalene	**5.4**	**J**	9.5	1.3	ng/L		06/18/11 13:45	07/07/11 19:34	1
Perylene	ND		4.2	4.2	ng/L		06/18/11 13:45	07/07/11 19:34	1
Phenanthrene	ND		7.0	3.6	ng/L		06/18/11 13:45	07/07/11 19:34	1
Pyrene	**1.9**	**J**	4.7	1.1	ng/L		06/18/11 13:45	07/07/11 19:34	1
Quinoline	ND		10	6.3	ng/L		06/18/11 13:45	07/07/11 19:34	1
Biphenyl	ND		6.2	1.2	ng/L		06/18/11 13:45	07/07/11 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*62*		*23 - 84*	*06/18/11 13:45*	*07/07/11 19:34*	*1*
Chrysene-d12 (Surr)	*18*	*X*	*28 - 101*	*06/18/11 13:45*	*07/07/11 19:34*	*1*
Naphthalene-d8 (Surr)	*61*		*22 - 97*	*06/18/11 13:45*	*07/07/11 19:34*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W412-06152011
Date Collected: 06/15/11 12:30
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-11
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		06/22/11 14:25	06/29/11 18:08	1
2,3-Dihydroindene	**15**		5.0	0.70	ng/L		06/22/11 14:25	06/29/11 18:08	1
1-Methylnaphthalene	**3.3**	**J**	5.6	0.89	ng/L		06/22/11 14:25	06/29/11 18:08	1
2-Methylnaphthalene	**3.5**	**J**	5.9	0.98	ng/L		06/22/11 14:25	06/29/11 18:08	1
Acenaphthene	**3.1**	**J**	5.7	0.50	ng/L		06/22/11 14:25	06/29/11 18:08	1
Acenaphthylene	ND		4.8	0.77	ng/L		06/22/11 14:25	06/29/11 18:08	1
Acridine	ND	*	6.5	6.5	ng/L		06/22/11 14:25	06/29/11 18:08	1
Anthracene	ND		4.2	0.80	ng/L		06/22/11 14:25	06/29/11 18:08	1
Benzo[a]anthracene	**2.2**	**J**	4.3	0.92	ng/L		06/22/11 14:25	06/29/11 18:08	1
Benzo[a]pyrene	**1.7**	**J**	2.5	1.2	ng/L		06/22/11 14:25	06/29/11 18:08	1
Benzo[e]pyrene	**1.1**	**J**	4.3	1.1	ng/L		06/22/11 14:25	06/29/11 18:08	1
Benzo[b]fluoranthene	**2.5**	**J**	4.7	1.4	ng/L		06/22/11 14:25	06/29/11 18:08	1
Benzo(b)thiophene	**1.1**	**J**	5.2	0.75	ng/L		06/22/11 14:25	06/29/11 18:08	1
Benzo[k]fluoranthene	**2.6**	**J**	4.1	1.2	ng/L		06/22/11 14:25	06/29/11 18:08	1
Benzo[g,h,i]perylene	**3.2**	**J**	6.2	1.2	ng/L		06/22/11 14:25	06/29/11 18:08	1
Carbazole	**5.2**		3.8	0.72	ng/L		06/22/11 14:25	06/29/11 18:08	1
Chrysene	**3.7**	**J**	5.6	1.2	ng/L		06/22/11 14:25	06/29/11 18:08	1
Dibenz(a,h)anthracene	**2.9**	**J**	5.9	1.0	ng/L		06/22/11 14:25	06/29/11 18:08	1
Dibenzofuran	**1.1**	**J**	5.7	0.99	ng/L		06/22/11 14:25	06/29/11 18:08	1
Dibenzothiophene	ND		4.1	0.98	ng/L		06/22/11 14:25	06/29/11 18:08	1
Fluoranthene	**4.8**		4.6	1.7	ng/L		06/22/11 14:25	06/29/11 18:08	1
Fluorene	**2.4**	**J**	4.1	0.85	ng/L		06/22/11 14:25	06/29/11 18:08	1
Indene	**4.1**	**J**	4.7	3.3	ng/L		06/22/11 14:25	06/29/11 18:08	1
Indole	ND		4.7	1.7	ng/L		06/22/11 14:25	06/29/11 18:08	1
Indeno[1,2,3-cd]pyrene	**2.5**	**J**	5.4	1.3	ng/L		06/22/11 14:25	06/29/11 18:08	1
Naphthalene	**12**		8.6	1.1	ng/L		06/22/11 14:25	06/29/11 18:08	1
Perylene	ND		3.8	3.8	ng/L		06/22/11 14:25	06/29/11 18:08	1
Phenanthrene	**5.4**	**J**	6.3	3.2	ng/L		06/22/11 14:25	06/29/11 18:08	1
Pyrene	**5.6**		4.2	0.99	ng/L		06/22/11 14:25	06/29/11 18:08	1
Quinoline	ND	*	9.0	5.7	ng/L		06/22/11 14:25	06/29/11 18:08	1
Biphenyl	**2.0**	**J**	5.6	1.1	ng/L		06/22/11 14:25	06/29/11 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*67*		*23 - 84*	*06/22/11 14:25*	*06/29/11 18:08*	*1*
Chrysene-d12 (Surr)	*25*	*X*	*28 - 101*	*06/22/11 14:25*	*06/29/11 18:08*	*1*
Naphthalene-d8 (Surr)	*61*		*22 - 97*	*06/22/11 14:25*	*06/29/11 18:08*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W408-06162011
Date Collected: 06/16/11 12:15
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-12
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.3	0.67	ng/L		06/22/11 14:25	06/29/11 18:46	1
2,3-Dihydroindene	**2.1**	**J**	4.9	0.69	ng/L		06/22/11 14:25	06/29/11 18:46	1
1-Methylnaphthalene	**1.3**	**J**	5.5	0.87	ng/L		06/22/11 14:25	06/29/11 18:46	1
2-Methylnaphthalene	**2.6**	**J**	5.8	0.96	ng/L		06/22/11 14:25	06/29/11 18:46	1
Acenaphthene	**2.0**	**J**	5.6	0.49	ng/L		06/22/11 14:25	06/29/11 18:46	1
Acenaphthylene	ND		4.7	0.75	ng/L		06/22/11 14:25	06/29/11 18:46	1
Acridine	ND	*	6.4	6.4	ng/L		06/22/11 14:25	06/29/11 18:46	1
Anthracene	ND		4.1	0.78	ng/L		06/22/11 14:25	06/29/11 18:46	1
Benzo[a]anthracene	ND		4.2	0.90	ng/L		06/22/11 14:25	06/29/11 18:46	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/22/11 14:25	06/29/11 18:46	1
Benzo[e]pyrene	ND		4.2	1.1	ng/L		06/22/11 14:25	06/29/11 18:46	1
Benzo[b]fluoranthene	ND		4.6	1.4	ng/L		06/22/11 14:25	06/29/11 18:46	1
Benzo(b)thiophene	ND		5.1	0.74	ng/L		06/22/11 14:25	06/29/11 18:46	1
Benzo[k]fluoranthene	ND		4.0	1.2	ng/L		06/22/11 14:25	06/29/11 18:46	1
Benzo[g,h,i]perylene	**1.2**	**J**	6.1	1.1	ng/L		06/22/11 14:25	06/29/11 18:46	1
Carbazole	ND		3.7	0.71	ng/L		06/22/11 14:25	06/29/11 18:46	1
Chrysene	**1.2**	**J**	5.5	1.2	ng/L		06/22/11 14:25	06/29/11 18:46	1
Dibenz(a,h)anthracene	ND		5.8	1.0	ng/L		06/22/11 14:25	06/29/11 18:46	1
Dibenzofuran	ND		5.6	0.97	ng/L		06/22/11 14:25	06/29/11 18:46	1
Dibenzothiophene	ND		4.0	0.96	ng/L		06/22/11 14:25	06/29/11 18:46	1
Fluoranthene	**6.9**		4.5	1.7	ng/L		06/22/11 14:25	06/29/11 18:46	1
Fluorene	**2.1**	**J**	4.0	0.83	ng/L		06/22/11 14:25	06/29/11 18:46	1
Indene	ND		4.6	3.2	ng/L		06/22/11 14:25	06/29/11 18:46	1
Indole	ND		4.6	1.7	ng/L		06/22/11 14:25	06/29/11 18:46	1
Indeno[1,2,3-cd]pyrene	ND		5.3	1.2	ng/L		06/22/11 14:25	06/29/11 18:46	1
Naphthalene	**6.3**	**J**	8.4	1.1	ng/L		06/22/11 14:25	06/29/11 18:46	1
Perylene	ND		3.7	3.7	ng/L		06/22/11 14:25	06/29/11 18:46	1
Phenanthrene	**7.4**		6.2	3.1	ng/L		06/22/11 14:25	06/29/11 18:46	1
Pyrene	**8.8**		4.1	0.97	ng/L		06/22/11 14:25	06/29/11 18:46	1
Quinoline	ND	*	8.8	5.5	ng/L		06/22/11 14:25	06/29/11 18:46	1
Biphenyl	**1.3**	**J**	5.5	1.0	ng/L		06/22/11 14:25	06/29/11 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*71*		*23 - 84*	*06/22/11 14:25*	*06/29/11 18:46*	*1*
Chrysene-d12 (Surr)	*44*		*28 - 101*	*06/22/11 14:25*	*06/29/11 18:46*	*1*
Naphthalene-d8 (Surr)	*68*		*22 - 97*	*06/22/11 14:25*	*06/29/11 18:46*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W122-06162011
Date Collected: 06/16/11 14:05
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-13
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		06/22/11 14:25	06/29/11 19:23	1
2,3-Dihydroindene	**2.2**	**J**	4.8	0.67	ng/L		06/22/11 14:25	06/29/11 19:23	1
1-Methylnaphthalene	**1.4**	**J**	5.3	0.85	ng/L		06/22/11 14:25	06/29/11 19:23	1
2-Methylnaphthalene	**2.1**	**J**	5.6	0.93	ng/L		06/22/11 14:25	06/29/11 19:23	1
Acenaphthene	**0.83**	**J**	5.4	0.48	ng/L		06/22/11 14:25	06/29/11 19:23	1
Acenaphthylene	**1.3**	**J**	4.6	0.73	ng/L		06/22/11 14:25	06/29/11 19:23	1
Acridine	ND	*	6.2	6.2	ng/L		06/22/11 14:25	06/29/11 19:23	1
Anthracene	ND		4.0	0.76	ng/L		06/22/11 14:25	06/29/11 19:23	1
Benzo[a]anthracene	ND		4.1	0.87	ng/L		06/22/11 14:25	06/29/11 19:23	1
Benzo[a]pyrene	**1.3**	**J**	2.4	1.2	ng/L		06/22/11 14:25	06/29/11 19:23	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		06/22/11 14:25	06/29/11 19:23	1
Benzo[b]fluoranthene	**1.4**	**J**	4.5	1.3	ng/L		06/22/11 14:25	06/29/11 19:23	1
Benzo(b)thiophene	ND		4.9	0.71	ng/L		06/22/11 14:25	06/29/11 19:23	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		06/22/11 14:25	06/29/11 19:23	1
Benzo[g,h,i]perylene	**2.3**	**J**	5.9	1.1	ng/L		06/22/11 14:25	06/29/11 19:23	1
Carbazole	ND		3.6	0.68	ng/L		06/22/11 14:25	06/29/11 19:23	1
Chrysene	ND		5.3	1.2	ng/L		06/22/11 14:25	06/29/11 19:23	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		06/22/11 14:25	06/29/11 19:23	1
Dibenzofuran	ND		5.4	0.94	ng/L		06/22/11 14:25	06/29/11 19:23	1
Dibenzothiophene	ND		3.9	0.93	ng/L		06/22/11 14:25	06/29/11 19:23	1
Fluoranthene	**2.1**	**J**	4.4	1.6	ng/L		06/22/11 14:25	06/29/11 19:23	1
Fluorene	**1.0**	**J**	3.9	0.81	ng/L		06/22/11 14:25	06/29/11 19:23	1
Indene	ND		4.5	3.1	ng/L		06/22/11 14:25	06/29/11 19:23	1
Indole	**1.7**	**J**	4.5	1.6	ng/L		06/22/11 14:25	06/29/11 19:23	1
Indeno[1,2,3-cd]pyrene	**1.4**	**J**	5.1	1.2	ng/L		06/22/11 14:25	06/29/11 19:23	1
Naphthalene	**5.7**	**J**	8.2	1.1	ng/L		06/22/11 14:25	06/29/11 19:23	1
Perylene	ND		3.6	3.6	ng/L		06/22/11 14:25	06/29/11 19:23	1
Phenanthrene	ND		6.0	3.1	ng/L		06/22/11 14:25	06/29/11 19:23	1
Pyrene	**2.0**	**J**	4.0	0.94	ng/L		06/22/11 14:25	06/29/11 19:23	1
Quinoline	ND	*	8.6	5.4	ng/L		06/22/11 14:25	06/29/11 19:23	1
Biphenyl	**1.5**	**J**	5.3	1.0	ng/L		06/22/11 14:25	06/29/11 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*69*		*23 - 84*	*06/22/11 14:25*	*06/29/11 19:23*	*1*
Chrysene-d12 (Surr)	*42*		*28 - 101*	*06/22/11 14:25*	*06/29/11 19:23*	*1*
Naphthalene-d8 (Surr)	*59*		*22 - 97*	*06/22/11 14:25*	*06/29/11 19:23*	*1*

Surrogate Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		FD10	sene-d12 (S	thalene-d8						
Lab Sample ID	Client Sample ID	(23-84)	(28-101)	(22-97)						
280-17133-1	W48-06142011	81	40	75						
280-17133-2	W129-06142011	58	13 X	54						
280-17133-2 - DL	W129-06142011	45 D	9 D	44 D						
280-17133-2 MS	W129-06142011	74	29	66						
280-17133-2 MSD	W129-06142011	67	28	58						
280-17133-3	W129DUP-06142011	70	26 X	59						
280-17133-3 - DL	W129DUP-06142011	61 D	18 D	52 D						
280-17133-4	W129FB-06142011	65	66	66						
280-17133-5	W129FBD-06142011	64	65	67						
280-17133-6	W33R-06142011	69	16 X	68						
280-17133-7	W414-06142011	61	41	75						
280-17133-8	W14-06142011	66	26 X	57						
280-17133-9	W409-06152011	65	21 X	63						
280-17133-9 - DL	W409-06152011	54 D	18 D	51 D						
280-17133-10	W411-06152011	62	18 X	61						
280-17133-11	W412-06152011	67	25 X	61						
280-17133-12	W408-06162011	71	44	68						
280-17133-13	W122-06162011	69	42	59						
LCS 280-72761/2-A	Lab Control Sample	73	72	68						
LCS 280-73251/2-A	Lab Control Sample	58	57	59						
LCSD 280-73251/3-A	Lab Control Sample Dup	78	78	75						
MB 280-72761/1-A	Method Blank	24	65	77						
MB 280-73251/1-A	Method Blank	78	75	79						

Surrogate Legend

FD10 = Fluorene-d10 (Surr)

Chrysene-d12 (Surr) = Chrysene-d12 (Surr)

Naphthalene-d8 (Surr) = Naphthalene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Lab Sample ID: MB 280-72761/1-A
Matrix: Water
Analysis Batch: 75518

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72761

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		06/18/11 13:45	07/07/11 09:12	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		06/18/11 13:45	07/07/11 09:12	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		06/18/11 13:45	07/07/11 09:12	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		06/18/11 13:45	07/07/11 09:12	1
Acenaphthene	ND		5.7	0.50	ng/L		06/18/11 13:45	07/07/11 09:12	1
Acenaphthylene	ND		4.8	0.77	ng/L		06/18/11 13:45	07/07/11 09:12	1
Acridine	ND		6.5	6.5	ng/L		06/18/11 13:45	07/07/11 09:12	1
Anthracene	ND		4.2	0.80	ng/L		06/18/11 13:45	07/07/11 09:12	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		06/18/11 13:45	07/07/11 09:12	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/18/11 13:45	07/07/11 09:12	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/18/11 13:45	07/07/11 09:12	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		06/18/11 13:45	07/07/11 09:12	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		06/18/11 13:45	07/07/11 09:12	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		06/18/11 13:45	07/07/11 09:12	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		06/18/11 13:45	07/07/11 09:12	1
Carbazole	ND		3.8	0.72	ng/L		06/18/11 13:45	07/07/11 09:12	1
Chrysene	ND		5.6	1.2	ng/L		06/18/11 13:45	07/07/11 09:12	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		06/18/11 13:45	07/07/11 09:12	1
Dibenzofuran	ND		5.7	0.99	ng/L		06/18/11 13:45	07/07/11 09:12	1
Dibenzothiophene	ND		4.1	0.98	ng/L		06/18/11 13:45	07/07/11 09:12	1
Fluoranthene	ND		4.6	1.7	ng/L		06/18/11 13:45	07/07/11 09:12	1
Fluorene	ND		4.1	0.85	ng/L		06/18/11 13:45	07/07/11 09:12	1
Indene	ND		4.7	3.3	ng/L		06/18/11 13:45	07/07/11 09:12	1
Indole	ND		4.7	1.7	ng/L		06/18/11 13:45	07/07/11 09:12	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		06/18/11 13:45	07/07/11 09:12	1
Naphthalene	ND		8.6	1.1	ng/L		06/18/11 13:45	07/07/11 09:12	1
Perylene	ND		3.8	3.8	ng/L		06/18/11 13:45	07/07/11 09:12	1
Phenanthrene	ND		6.3	3.2	ng/L		06/18/11 13:45	07/07/11 09:12	1
Pyrene	ND		4.2	0.99	ng/L		06/18/11 13:45	07/07/11 09:12	1
Quinoline	ND		9.0	5.7	ng/L		06/18/11 13:45	07/07/11 09:12	1
Biphenyl	ND		5.6	1.1	ng/L		06/18/11 13:45	07/07/11 09:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*24*		*23 - 84*	*06/18/11 13:45*	*07/07/11 09:12*	*1*
Chrysene-d12 (Surr)	*65*		*28 - 101*	*06/18/11 13:45*	*07/07/11 09:12*	*1*
Naphthalene-d8 (Surr)	*77*		*22 - 97*	*06/18/11 13:45*	*07/07/11 09:12*	*1*

Lab Sample ID: LCS 280-72761/2-A
Matrix: Water
Analysis Batch: 75518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	75.0	51.7		ng/L		69	30 - 150
2,3-Dihydroindene	75.0	48.6		ng/L		65	30 - 150
1-Methylnaphthalene	75.0	70.7		ng/L		94	30 - 150
2-Methylnaphthalene	75.0	73.4	*	ng/L		98	25 - 95
3-Methylcholanthrene	75.0	12.1	*	ng/L		16	30 - 150
Acenaphthene	75.0	55.2		ng/L		74	30 - 150
Acenaphthylene	75.0	48.2		ng/L		64	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-72761/2-A
Matrix: Water
Analysis Batch: 75518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acridine	75.0	24.1		ng/L		32	30 - 150
Anthracene	75.0	49.0		ng/L		65	30 - 150
Benzo[a]anthracene	75.0	49.4		ng/L		66	30 - 150
Benzo[a]pyrene	75.0	50.0		ng/L		67	30 - 150
Benzo[e]pyrene	75.0	53.6		ng/L		71	37 - 105
Benzo[b]fluoranthene	75.0	50.4		ng/L		67	30 - 150
Benzo(b)thiophene	75.0	51.4		ng/L		69	30 - 150
Benzo[k]fluoranthene	75.0	61.2		ng/L		82	30 - 150
Benzo[g,h,i]perylene	75.0	58.5		ng/L		78	30 - 150
Carbazole	75.0	49.9		ng/L		66	30 - 150
Chrysene	75.0	60.6		ng/L		81	20 - 136
Dibenz(a,h)anthracene	75.0	57.1		ng/L		76	30 - 150
Dibenzofuran	75.0	56.8		ng/L		76	30 - 150
Dibenzothiophene	75.0	55.8		ng/L		74	30 - 150
Fluoranthene	75.0	64.3		ng/L		86	30 - 150
Fluorene	75.0	56.5		ng/L		75	34 - 96
Indene	75.0	48.3		ng/L		64	22 - 86
Indole	75.0	41.9		ng/L		56	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	56.0		ng/L		75	30 - 150
Naphthalene	75.0	68.3		ng/L		91	27 - 95
Perylene	75.0	40.9		ng/L		55	30 - 150
Phenanthrene	75.0	63.5		ng/L		85	30 - 150
Pyrene	75.0	56.4		ng/L		75	30 - 150
Quinoline	75.0	53.3		ng/L		71	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	16.2	*	ng/L		22	30 - 150
Biphenyl	75.0	53.3		ng/L		71	30 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*73*		*23 - 84*
Chrysene-d12 (Surr)	*72*		*28 - 101*
Naphthalene-d8 (Surr)	*68*		*22 - 97*

Lab Sample ID: 280-17133-2 MS
Matrix: Water
Analysis Batch: 75518

Client Sample ID: W129-06142011
Prep Type: Total/NA
Prep Batch: 72761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	ND		76.3	49.2		ng/L		64	30 - 150
2,3-Dihydroindene	500		76.3	579	E 4	ng/L		100	30 - 150
1-Methylnaphthalene	2.9	J	76.3	58.4		ng/L		73	30 - 150
2-Methylnaphthalene	4.9	J *	76.3	59.7		ng/L		72	25 - 95
3-Methylcholanthrene	ND		76.3	6.19	F	ng/L		8	30 - 150
Acenaphthene	1.5	J	76.3	57.2		ng/L		73	30 - 150
Acenaphthylene	ND		76.3	54.7		ng/L		72	30 - 150
Acridine	ND		76.3	70.1		ng/L		92	30 - 150
Anthracene	1.2	J	76.3	64.0		ng/L		82	30 - 150
Benzo[a]anthracene	1.9	J	76.3	22.5	F	ng/L		27	30 - 150
Benzo[a]pyrene	2.5	J	76.3	9.80	F	ng/L		10	30 - 150
Benzo[e]pyrene	1.9	J	76.3	9.00	F	ng/L		9	37 - 105

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-17133-2 MS
Matrix: Water
Analysis Batch: 75518

Client Sample ID: W129-06142011
Prep Type: Total/NA
Prep Batch: 72761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	4.8	J K	76.3	9.87	F	ng/L		7	30 - 150
Benzo(b)thiophene	8.0		76.3	59.3		ng/L		67	30 - 150
Benzo[k]fluoranthene	ND	K	76.3	10.5	F	ng/L		14	30 - 150
Benzo[g,h,i]perylene	2.7	J	76.3	6.66	F	ng/L		5	30 - 150
Carbazole	2.9	J	76.3	66.6		ng/L		83	30 - 150
Chrysene	2.8	J	76.3	25.8		ng/L		30	20 - 136
Dibenz(a,h)anthracene	ND		76.3	4.62	J F	ng/L		6	30 - 150
Dibenzofuran	1.7	J	76.3	60.3		ng/L		77	30 - 150
Dibenzothiophene	ND		76.3	61.5		ng/L		81	30 - 150
Fluoranthene	7.5		76.3	64.8		ng/L		75	30 - 150
Fluorene	2.3	J	76.3	61.6		ng/L		78	34 - 96
Indene	ND		76.3	52.9		ng/L		69	22 - 86
Indole	ND		76.3	62.7		ng/L		82	30 - 150
Indeno[1,2,3-cd]pyrene	2.1	J	76.3	6.30	F	ng/L		6	30 - 150
Naphthalene	20		76.3	74.3		ng/L		71	27 - 95
Perylene	ND		76.3	8.50	F	ng/L		11	30 - 150
Phenanthrene	8.5		76.3	70.8		ng/L		82	30 - 150
Pyrene	5.2		76.3	56.0		ng/L		67	30 - 150
Quinoline	ND		76.3	57.0		ng/L		75	20 - 112
7,12-Dimethylbenz(a)anthracene	ND		76.3	18.4	F	ng/L		24	30 - 150
Biphenyl	1.5	J	76.3	53.6		ng/L		68	30 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*74*		*23 - 84*
Chrysene-d12 (Surr)	*29*		*28 - 101*
Naphthalene-d8 (Surr)	*66*		*22 - 97*

Lab Sample ID: 280-17133-2 MSD
Matrix: Water
Analysis Batch: 75518

Client Sample ID: W129-06142011
Prep Type: Total/NA
Prep Batch: 72761

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	ND		85.0	48.2		ng/L		57	30 - 150	2	50
2,3-Dihydroindene	500		85.0	555	E 4	ng/L		62	30 - 150	4	50
1-Methylnaphthalene	2.9	J	85.0	54.8		ng/L		61	30 - 150	6	50
2-Methylnaphthalene	4.9	J *	85.0	56.2		ng/L		60	25 - 95	6	50
3-Methylcholanthrene	ND		85.0	7.48	F	ng/L		9	30 - 150	19	50
Acenaphthene	1.5	J	85.0	56.1		ng/L		64	30 - 150	2	50
Acenaphthylene	ND		85.0	54.4		ng/L		64	30 - 150	0	50
Acridine	ND		85.0	74.4		ng/L		88	30 - 150	6	50
Anthracene	1.2	J	85.0	69.5		ng/L		80	30 - 150	8	50
Benzo[a]anthracene	1.9	J	85.0	26.9	F	ng/L		29	30 - 150	18	50
Benzo[a]pyrene	2.5	J	85.0	12.3	F	ng/L		12	30 - 150	23	50
Benzo[e]pyrene	1.9	J	85.0	8.73	F	ng/L		8	37 - 105	3	50
Benzo[b]fluoranthene	4.8	J K	85.0	12.4	F	ng/L		9	30 - 150	23	50
Benzo(b)thiophene	8.0		85.0	58.2		ng/L		59	30 - 150	2	50
Benzo[k]fluoranthene	ND	K	85.0	15.9	F	ng/L		19	30 - 150	41	50
Benzo[g,h,i]perylene	2.7	J	85.0	11.5	F	ng/L		10	30 - 150	53	50
Carbazole	2.9	J	85.0	72.0		ng/L		81	30 - 150	8	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-17133-2 MSD
Matrix: Water
Analysis Batch: 75518

Client Sample ID: W129-06142011
Prep Type: Total/NA
Prep Batch: 72761

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	2.8	J	85.0	31.2		ng/L		33	20 - 136	19	50
Dibenz(a,h)anthracene	ND		85.0	11.7	F	ng/L		14	30 - 150	87	50
Dibenzofuran	1.7	J	85.0	59.7		ng/L		68	30 - 150	1	50
Dibenzothiophene	ND		85.0	64.2		ng/L		75	30 - 150	4	50
Fluoranthene	7.5		85.0	67.5		ng/L		71	30 - 150	4	50
Fluorene	2.3	J	85.0	62.5		ng/L		71	34 - 96	2	50
Indene	ND		85.0	51.6		ng/L		61	22 - 86	2	50
Indole	ND		85.0	62.2		ng/L		73	30 - 150	1	50
Indeno[1,2,3-cd]pyrene	2.1	J	85.0	11.6	F	ng/L		11	30 - 150	59	50
Naphthalene	20		85.0	70.7		ng/L		59	27 - 95	5	50
Perylene	ND		85.0	9.44	F	ng/L		11	30 - 150	11	50
Phenanthrene	8.5		85.0	73.6		ng/L		77	30 - 150	4	50
Pyrene	5.2		85.0	59.2		ng/L		64	30 - 150	6	50
Quinoline	ND		85.0	55.8		ng/L		66	20 - 112	2	50
7,12-Dimethylbenz(a)anthracene	ND		85.0	21.0	F	ng/L		25	30 - 150	13	50
Biphenyl	1.5	J	85.0	53.2		ng/L		61	30 - 150	1	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*67*		*23 - 84*
Chrysene-d12 (Surr)	*28*		*28 - 101*
Naphthalene-d8 (Surr)	*58*		*22 - 97*

Lab Sample ID: MB 280-73251/1-A
Matrix: Water
Analysis Batch: 74572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		06/22/11 14:25	06/29/11 13:04	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		06/22/11 14:25	06/29/11 13:04	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		06/22/11 14:25	06/29/11 13:04	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		06/22/11 14:25	06/29/11 13:04	1
Acenaphthene	ND		5.7	0.50	ng/L		06/22/11 14:25	06/29/11 13:04	1
Acenaphthylene	ND		4.8	0.77	ng/L		06/22/11 14:25	06/29/11 13:04	1
Acridine	ND		6.5	6.5	ng/L		06/22/11 14:25	06/29/11 13:04	1
Anthracene	ND		4.2	0.80	ng/L		06/22/11 14:25	06/29/11 13:04	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		06/22/11 14:25	06/29/11 13:04	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		06/22/11 14:25	06/29/11 13:04	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		06/22/11 14:25	06/29/11 13:04	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		06/22/11 14:25	06/29/11 13:04	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		06/22/11 14:25	06/29/11 13:04	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		06/22/11 14:25	06/29/11 13:04	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		06/22/11 14:25	06/29/11 13:04	1
Carbazole	ND		3.8	0.72	ng/L		06/22/11 14:25	06/29/11 13:04	1
Chrysene	ND		5.6	1.2	ng/L		06/22/11 14:25	06/29/11 13:04	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		06/22/11 14:25	06/29/11 13:04	1
Dibenzofuran	ND		5.7	0.99	ng/L		06/22/11 14:25	06/29/11 13:04	1
Dibenzothiophene	ND		4.1	0.98	ng/L		06/22/11 14:25	06/29/11 13:04	1
Fluoranthene	ND		4.6	1.7	ng/L		06/22/11 14:25	06/29/11 13:04	1
Fluorene	ND		4.1	0.85	ng/L		06/22/11 14:25	06/29/11 13:04	1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: MB 280-73251/1-A
Matrix: Water
Analysis Batch: 74572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indene	ND		4.7	3.3	ng/L		06/22/11 14:25	06/29/11 13:04	1
Indole	ND		4.7	1.7	ng/L		06/22/11 14:25	06/29/11 13:04	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		06/22/11 14:25	06/29/11 13:04	1
Naphthalene	ND		8.6	1.1	ng/L		06/22/11 14:25	06/29/11 13:04	1
Perylene	ND		3.8	3.8	ng/L		06/22/11 14:25	06/29/11 13:04	1
Phenanthrene	ND		6.3	3.2	ng/L		06/22/11 14:25	06/29/11 13:04	1
Pyrene	ND		4.2	0.99	ng/L		06/22/11 14:25	06/29/11 13:04	1
Quinoline	ND		9.0	5.7	ng/L		06/22/11 14:25	06/29/11 13:04	1
Biphenyl	ND		5.6	1.1	ng/L		06/22/11 14:25	06/29/11 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*78*		*23 - 84*	*06/22/11 14:25*	*06/29/11 13:04*	*1*
Chrysene-d12 (Surr)	*75*		*28 - 101*	*06/22/11 14:25*	*06/29/11 13:04*	*1*
Naphthalene-d8 (Surr)	*79*		*22 - 97*	*06/22/11 14:25*	*06/29/11 13:04*	*1*

Lab Sample ID: LCS 280-73251/2-A
Matrix: Water
Analysis Batch: 74572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	75.0	48.4		ng/L		64	30 - 150
2,3-Dihydroindene	75.0	43.6		ng/L		58	30 - 150
1-Methylnaphthalene	75.0	47.3		ng/L		63	30 - 150
2-Methylnaphthalene	75.0	46.8		ng/L		62	25 - 95
3-Methylcholanthrene	75.0	24.1		ng/L		32	30 - 150
Acenaphthene	75.0	48.7		ng/L		65	30 - 150
Acenaphthylene	75.0	46.6		ng/L		62	30 - 150
Acridine	75.0	13.0	*	ng/L		17	30 - 150
Anthracene	75.0	45.1		ng/L		60	30 - 150
Benzo[a]anthracene	75.0	44.0		ng/L		59	30 - 150
Benzo[a]pyrene	75.0	41.3		ng/L		55	30 - 150
Benzo[e]pyrene	75.0	43.9		ng/L		59	37 - 105
Benzo[b]fluoranthene	75.0	43.5		ng/L		58	30 - 150
Benzo(b)thiophene	75.0	49.5		ng/L		66	30 - 150
Benzo[k]fluoranthene	75.0	45.2		ng/L		60	30 - 150
Benzo[g,h,i]perylene	75.0	42.6		ng/L		57	30 - 150
Carbazole	75.0	47.7		ng/L		64	30 - 150
Chrysene	75.0	47.1		ng/L		63	20 - 136
Dibenz(a,h)anthracene	75.0	39.2		ng/L		52	30 - 150
Dibenzofuran	75.0	48.3		ng/L		64	30 - 150
Dibenzothiophene	75.0	48.9		ng/L		65	30 - 150
Fluoranthene	75.0	52.0		ng/L		69	30 - 150
Fluorene	75.0	48.9		ng/L		65	34 - 96
Indene	75.0	45.9		ng/L		61	22 - 86
Indole	75.0	48.5		ng/L		65	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	41.0		ng/L		55	30 - 150
Naphthalene	75.0	49.7		ng/L		66	27 - 95
Perylene	75.0	40.9		ng/L		55	30 - 150
Phenanthrene	75.0	49.8		ng/L		66	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-73251/2-A
Matrix: Water
Analysis Batch: 74572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pyrene	75.0	46.7		ng/L		62	30 - 150
Quinoline	75.0	34.5		ng/L		46	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	14.2	*	ng/L		19	30 - 150
Biphenyl	75.0	46.5		ng/L		62	30 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*58*		*23 - 84*
Chrysene-d12 (Surr)	*57*		*28 - 101*
Naphthalene-d8 (Surr)	*59*		*22 - 97*

Lab Sample ID: LCSD 280-73251/3-A
Matrix: Water
Analysis Batch: 74572

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73251

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	75.0	59.0		ng/L		79	30 - 150	20	50
2,3-Dihydroindene	75.0	53.4		ng/L		71	30 - 150	20	50
1-Methylnaphthalene	75.0	66.9		ng/L		89	30 - 150	34	50
2-Methylnaphthalene	75.0	66.2		ng/L		88	25 - 95	34	50
3-Methylcholanthrene	75.0	38.3		ng/L		51	30 - 150	45	50
Acenaphthene	75.0	63.2		ng/L		84	30 - 150	26	50
Acenaphthylene	75.0	58.6		ng/L		78	30 - 150	23	50
Acridine	75.0	12.6	*	ng/L		17	30 - 150	3	50
Anthracene	75.0	64.8		ng/L		86	30 - 150	36	50
Benzo[a]anthracene	75.0	60.5		ng/L		81	30 - 150	31	50
Benzo[a]pyrene	75.0	58.9		ng/L		78	30 - 150	35	50
Benzo[e]pyrene	75.0	60.7		ng/L		81	37 - 105	32	50
Benzo[b]fluoranthene	75.0	56.6		ng/L		75	30 - 150	26	50
Benzo(b)thiophene	75.0	60.7		ng/L		81	30 - 150	20	50
Benzo[k]fluoranthene	75.0	67.7		ng/L		90	30 - 150	40	50
Benzo[g,h,i]perylene	75.0	62.4		ng/L		83	30 - 150	38	50
Carbazole	75.0	63.0		ng/L		84	30 - 150	28	50
Chrysene	75.0	62.8		ng/L		84	20 - 136	29	50
Dibenz(a,h)anthracene	75.0	62.2		ng/L		83	30 - 150	45	50
Dibenzofuran	75.0	60.0		ng/L		80	30 - 150	22	50
Dibenzothiophene	75.0	65.8		ng/L		88	30 - 150	29	50
Fluoranthene	75.0	71.8		ng/L		96	30 - 150	32	50
Fluorene	75.0	64.8		ng/L		86	34 - 96	28	50
Indene	75.0	56.6		ng/L		75	22 - 86	21	50
Indole	75.0	55.2		ng/L		74	30 - 150	13	50
Indeno[1,2,3-cd]pyrene	75.0	62.1		ng/L		83	30 - 150	41	50
Naphthalene	75.0	64.3		ng/L		86	27 - 95	26	50
Perylene	75.0	53.6		ng/L		71	30 - 150	27	50
Phenanthrene	75.0	67.9		ng/L		90	30 - 150	31	50
Pyrene	75.0	63.8		ng/L		85	30 - 150	31	50
Quinoline	75.0	15.7	*	ng/L		21	20 - 112	75	50
7,12-Dimethylbenz(a)anthracene	75.0	27.5	*	ng/L		37	30 - 150	64	50
Biphenyl	75.0	59.4		ng/L		79	30 - 150	24	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCSD 280-73251/3-A
Matrix: Water
Analysis Batch: 74572

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73251

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Fluorene-d10 (Surr)	*78*		*23 - 84*
Chrysene-d12 (Surr)	*78*		*28 - 101*
Naphthalene-d8 (Surr)	*75*		*22 - 97*

GC/MS Semi VOA

Prep Batch: 72761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-17133-1	W48-06142011	Total/NA	Water	3520C	
280-17133-2	W129-06142011	Total/NA	Water	3520C	
280-17133-2 - DL	W129-06142011	Total/NA	Water	3520C	
280-17133-2 MS	W129-06142011	Total/NA	Water	3520C	
280-17133-2 MSD	W129-06142011	Total/NA	Water	3520C	
280-17133-3	W129DUP-06142011	Total/NA	Water	3520C	
280-17133-3 - DL	W129DUP-06142011	Total/NA	Water	3520C	
280-17133-4	W129FB-06142011	Total/NA	Water	3520C	
280-17133-5	W129FBD-06142011	Total/NA	Water	3520C	
280-17133-6	W33R-06142011	Total/NA	Water	3520C	
280-17133-7	W414-06142011	Total/NA	Water	3520C	
280-17133-8	W14-06142011	Total/NA	Water	3520C	
280-17133-9	W409-06152011	Total/NA	Water	3520C	
280-17133-9 - DL	W409-06152011	Total/NA	Water	3520C	
280-17133-10	W411-06152011	Total/NA	Water	3520C	
LCS 280-72761/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-72761/1-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 73251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-17133-11	W412-06152011	Total/NA	Water	3520C	
280-17133-12	W408-06162011	Total/NA	Water	3520C	
280-17133-13	W122-06162011	Total/NA	Water	3520C	
LCS 280-73251/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 280-73251/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 280-73251/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 74572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-17133-11	W412-06152011	Total/NA	Water	8270C	73251
280-17133-12	W408-06162011	Total/NA	Water	8270C	73251
280-17133-13	W122-06162011	Total/NA	Water	8270C	73251
LCS 280-73251/2-A	Lab Control Sample	Total/NA	Water	8270C	73251
LCSD 280-73251/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	73251
MB 280-73251/1-A	Method Blank	Total/NA	Water	8270C	73251

Analysis Batch: 75518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-17133-1	W48-06142011	Total/NA	Water	8270C	72761
280-17133-2	W129-06142011	Total/NA	Water	8270C	72761
280-17133-2 MS	W129-06142011	Total/NA	Water	8270C	72761
280-17133-2 MSD	W129-06142011	Total/NA	Water	8270C	72761
280-17133-3	W129DUP-06142011	Total/NA	Water	8270C	72761
280-17133-4	W129FB-06142011	Total/NA	Water	8270C	72761
280-17133-5	W129FBD-06142011	Total/NA	Water	8270C	72761
280-17133-6	W33R-06142011	Total/NA	Water	8270C	72761
280-17133-7	W414-06142011	Total/NA	Water	8270C	72761
280-17133-8	W14-06142011	Total/NA	Water	8270C	72761
280-17133-9	W409-06152011	Total/NA	Water	8270C	72761
280-17133-10	W411-06152011	Total/NA	Water	8270C	72761
LCS 280-72761/2-A	Lab Control Sample	Total/NA	Water	8270C	72761
MB 280-72761/1-A	Method Blank	Total/NA	Water	8270C	72761

GC/MS Semi VOA (Continued)

Analysis Batch: 75707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-17133-2 - DL	W129-06142011	Total/NA	Water	8270C	72761
280-17133-3 - DL	W129DUP-06142011	Total/NA	Water	8270C	72761
280-17133-9 - DL	W409-06152011	Total/NA	Water	8270C	72761

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W48-06142011
Date Collected: 06/14/11 10:30
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3904.6 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 12:52	DPI	TAL DEN

Client Sample ID: W129-06142011
Date Collected: 06/14/11 12:40
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3834.5 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 13:28	DPI	TAL DEN
Total/NA	Prep	3520C	DL		3834.5 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C	DL	10			75707	07/08/11 12:23	DPI	TAL DEN

Client Sample ID: W129DUP-06142011
Date Collected: 06/14/11 12:45
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3922.3 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 15:18	DPI	TAL DEN
Total/NA	Prep	3520C	DL		3922.3 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C	DL	10			75707	07/08/11 08:41	DPI	TAL DEN

Client Sample ID: W129FB-06142011
Date Collected: 06/14/11 12:30
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3460.1 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 15:55	DPI	TAL DEN

Client Sample ID: W129FBD-06142011
Date Collected: 06/14/11 12:35
Date Received: 06/17/11 09:30

Lab Sample ID: 280-17133-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3749.5 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 16:32	DPI	TAL DEN

Client Sample ID: W33R-06142011

Lab Sample ID: 280-17133-6

Date Collected: 06/14/11 15:05

Matrix: Water

Date Received: 06/17/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3821.4 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 17:08	DPI	TAL DEN

Client Sample ID: W414-06142011

Lab Sample ID: 280-17133-7

Date Collected: 06/14/11 16:45

Matrix: Water

Date Received: 06/17/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3578.3 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 17:45	DPI	TAL DEN

Client Sample ID: W14-06142011

Lab Sample ID: 280-17133-8

Date Collected: 06/14/11 14:50

Matrix: Water

Date Received: 06/17/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3548.4 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 18:21	DPI	TAL DEN

Client Sample ID: W409-06152011

Lab Sample ID: 280-17133-9

Date Collected: 06/15/11 14:20

Matrix: Water

Date Received: 06/17/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3723.7 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 18:58	DPI	TAL DEN
Total/NA	Prep	3520C	DL		3723.7 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C	DL	25			75707	07/08/11 10:31	DPI	TAL DEN

Client Sample ID: W411-06152011

Lab Sample ID: 280-17133-10

Date Collected: 06/15/11 11:15

Matrix: Water

Date Received: 06/17/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3604.2 mL	1000 uL	72761	06/18/11 13:45	JCV	TAL DEN
Total/NA	Analysis	8270C		1			75518	07/07/11 19:34	DPI	TAL DEN

Client Sample ID: W412-06152011

Lab Sample ID: 280-17133-11

Date Collected: 06/15/11 12:30

Matrix: Water

Date Received: 06/17/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3983.0 mL	1000 uL	73251	06/22/11 14:25	TJA	TAL DEN
Total/NA	Analysis	8270C		1			74572	06/29/11 18:08	DPI	TAL DEN

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Client Sample ID: W408-06162011

Lab Sample ID: 280-17133-12

Date Collected: 06/16/11 12:15

Matrix: Water

Date Received: 06/17/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4079.7 mL	1000 uL	73251	06/22/11 14:25	TJA	TAL DEN
Total/NA	Analysis	8270C		1			74572	06/29/11 18:46	DPI	TAL DEN

Client Sample ID: W122-06162011

Lab Sample ID: 280-17133-13

Date Collected: 06/16/11 14:05

Matrix: Water

Date Received: 06/17/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4208.4 mL	1000 uL	73251	06/22/11 14:25	TJA	TAL DEN
Total/NA	Analysis	8270C		1			74572	06/29/11 19:23	DPI	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	40730
TestAmerica Denver	Alaska (UST)	State Program	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas DEQ	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAC	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAC	7	E-10166
TestAmerica Denver	Louisiana	NELAC	6	30785
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAC	1	205310
TestAmerica Denver	New Jersey	NELAC	2	CO004
TestAmerica Denver	New Mexico	State Program	6	N/A
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina DENR	State Program	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Tennessee	State Program	4	TN02944
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	Federal		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia DEP	State Program	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Sampler ID _____

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client: City of St. Louis Park (AECOM)	Project Manager: Drew Tarara	Date: 6/1/11	Chain of Custody Number: 141450
Address: 7305 Oxford St.	Telephone Number (Area Code)/Fax Number: 9651 367 2335	Lab Number	Page 1 of 2
City: St. Louis Park / State: MN / Zip Code: 55416	Site Contact: Scott Anderson	Lab Contact: Lisa U.	
Project Name and Location (State): Reilly - SLP	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PAH PPT	Special Instructions/ Conditions of Receipt
W48-06142011	6/14/11	1030		X			6						X	
W129-0614 2011		1240												
W129 Dup-06142011		1245												
W129 FB-06142011		1230												
W129 FBD-06142011		1235												
W129MS-06142011		1250												
W129MSD-06142011		1255												
W33R-0614 2011		1505												
W414-0614 2011		1645												
W14-0614 2011	↓	1450												
W409-0615 2011	6/15/11	1420												
W411-0615 2011	↓	1115		↓			↓						↓	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/16/11	1615	1. Received By	6/17/11	0820
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Sampler ID _____ 3.0°C 2.3

Temperature on Receipt 2.8 1.6

1.7 1.3

Drinking Water? Yes ☐ No ☐ 1.1 2.4

2.5 2.9 N-6174

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client: City of St. Louis Park (AECOM)	Project Manager: Drew Tarara	Date:	Chain of Custody Number: 141448
Address: 7305 Oxford	Telephone Number (Area Code)/Fax Number: 651 367 2335	Lab Number:	Page 2 of 2
City: St. Louis Park / State: MN / Zip Code: 55416	Site Contact: Scott Anderson	Lab Contact: Lisa U.	
Project Name and Location (State): Reilly - SLP	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PAH PPT	Special Instructions/ Conditions of Receipt
W412-06152011	6/15/11	1230		X			6						X	
W408-06162011	6/16/11	1215		↓			↓						↓	
W122-06162011	↓	1405		↓			↓						↓	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	6/16/11	1615	1. Received By	6/17/11	0930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-17133-1

Login Number: 17133

List Source: TestAmerica Denver

List Number: 1

Creator: Philipp, Nicholas A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	1 of 18 1xLiter amber bottles received broken for W129-06142011. Suff. vol.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Detection Limit Exceptions Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-17133-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8270C	Water	2,3-Benzofuran	ng/L	5.4	20
8270C	Water	2,3-Dihydroindene	ng/L	5.0	20
8270C	Water	1-Methylnaphthalene	ng/L	5.6	20
8270C	Water	2-Methylnaphthalene	ng/L	5.9	20
8270C	Water	Acenaphthene	ng/L	5.7	20
8270C	Water	Acenaphthylene	ng/L	4.8	20
8270C	Water	Acridine	ng/L	6.5	20
8270C	Water	Anthracene	ng/L	4.2	20
8270C	Water	Benzo[a]anthracene	ng/L	4.3	20
8270C	Water	Benzo[a]pyrene	ng/L	2.5	20
8270C	Water	Benzo[e]pyrene	ng/L	4.3	20
8270C	Water	Benzo[b]fluoranthene	ng/L	4.7	20
8270C	Water	Benzo(b)thiophene	ng/L	5.2	20
8270C	Water	Benzo[k]fluoranthene	ng/L	4.1	20
8270C	Water	Benzo[g,h,i]perylene	ng/L	6.2	20
8270C	Water	Carbazole	ng/L	3.8	20
8270C	Water	Chrysene	ng/L	5.6	20
8270C	Water	Dibenz(a,h)anthracene	ng/L	5.9	20
8270C	Water	Dibenzofuran	ng/L	5.7	20
8270C	Water	Dibenzothiophene	ng/L	4.1	20
8270C	Water	Fluoranthene	ng/L	4.6	20
8270C	Water	Fluorene	ng/L	4.1	20
8270C	Water	Indene	ng/L	4.7	20
8270C	Water	Indole	ng/L	4.7	20
8270C	Water	Indeno[1,2,3-cd]pyrene	ng/L	5.4	20
8270C	Water	Naphthalene	ng/L	8.6	20
8270C	Water	Perylene	ng/L	3.8	20
8270C	Water	Phenanthrene	ng/L	6.3	20
8270C	Water	Pyrene	ng/L	4.2	20
8270C	Water	Quinoline	ng/L	9.0	20
8270C	Water	Biphenyl	ng/L	5.6	20

DATA VALIDATION

FOR

GROUNDWATER and GAC TREATMENT SYSTEM MONITORING
REILLY N.P.L. SITE
SAINT LOUIS PARK, MINNESOTTA

ORGANIC ANALYSIS DATA
PAHs in Water
Laboratory Job No. 280-17133-1

Analyses Performed

By:

Test America Denver
Arvada, Colorado

For:

Summit Envirosolutions, Inc.
1217 Bandana Boulevard North
St. Paul, Minnesota 55108

Data Validation By:

ddms, inc.
St. Paul, Minnesota

March 14, 2012

Reilly\280-17133-1SV

EXECUTIVE SUMMARY

Validation of the semivolatile organics analysis data prepared by Test America for 11 aqueous samples and two field blanks from the Reilly N.P.L. Site has been completed by ddms, inc. (ddms). The data were reported by the laboratory under Job No. 280-17133-1 in a single data package. The following samples were reported:

W48-06142011	W129-06142011	W129DUP-06142011
W129FB-06142011	W129FBD-06142011	W33R-06142011
W414-06142011	W14-06142011	W409-06152011
W411-06152011	W412-06152011	W408-06162011
W122-06162011		

Based on the validation effort, all results were determined to be valid as reported, with the following exceptions:

- Results for benzo[a]anthracene, benzo[a]pyrene, and perylene were qualified as estimated low (L,UJ), and benzo[e]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[g,h,i]perylene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene in all field samples, were qualified as estimated low (L) for detects and rejected (R) for non-detects.

- Results for acridine and quinoline in samples W412-06152011, W408-06162011, and W122-06162011 were qualified as estimated (UJ).

- Results for acenaphthylene in samples W411-061511 and W122-06162011 and 2,3-dihydroindene in samples W48-06142011, W33R-06142011, W414-06142011, W14-06142011, W411-06152011, W408-06162011, and W122-06162011 were qualified as not detected (U) at the reporting limit.

Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report.

Brief explanations of the reasons for the actions taken above can be found in Section XIII.

Documentation issues are discussed in Section XII.

This report should be considered part of the data package for all future distributions of the semivolatiles data.

INTRODUCTION

Analyses were performed in accordance with USEPA Method 8270C SIM. This methodology does not stipulate a reporting format, however, upon request the laboratory provided a "CLP-type" data package. ddms' review was performed in accordance with the EPA's Region 5 Document "Standard Operating Procedure For Data Review Of Semivolatile Organic Compound Analysis By Gas Chromatography/Mass Spectrometry (GC/MS); CRL Method GEN010 / Version 9.0" and the Quality Assurance Project Plan (QAPP) for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly N.P.L. Site, St. Louis Park, Minnesota" June 2010. Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the referenced methods. An initial assumption is that the data package is presented in accordance with the CLP requirements (or "CLP-like," as in this case). It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the EPA Region 5 document as follows:

U = The compound was analyzed for, but was not detected above the reported sample quantitation limit.

J = The compound was positively identified; the associated numerical value is the approximate concentration of the compound in the sample.

K = The identification of the compound is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value.

L = The identification of the compound is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.

MI = This flag applies when a compound has matrix interferences.

N = The analysis indicates the presence of a compound for which there is presumptive evidence to make a “tentative identification”.

NJ= The analysis indicates the presence of a compound that has been “tentatively identified” and the associated numerical value represent its approximate concentration.

UJ= The compound was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the compound in the sample.

R= The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence of absence of the compound cannot be verified.

Two facts should be noted by all data users. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the compound is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, **no concentration is guaranteed to be accurate even if all associated quality control is acceptable.** Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation and Sample Integrity

A copy of the applicable chain of custody (COC) record was included in the data package, documenting sample collection dates of June 14, 15, and 16, 2011. The samples were shipped via courier and received by the laboratory on June 17, 2011. The temperature of the coolers on receipt at the laboratory was noted on the COC and was acceptable (1.1 to 3.0^{o} C; criteria 4^{o} C $\pm$ 2^{o} C). One of the 1 L amber bottles was received at the laboratory broken for sample W129-06142011. Sufficient volume remained for analysis. All samples were extracted on June 18 and 22, 2011, which is within the 7 day holding time for aqueous samples. All sample extracts were analyzed on June 29 and July 7, 8, 2011, which is within the 40-day holding time for sample extracts.

II. GC/MS Instrument Performance Check

The samples were analyzed on one GC/MS system, identified as "MSS_F". Four perfluorotributylamine (FC-43) instrument performance checks were run in association with these samples, representing each 12-hour period during which the samples or associated standards were analyzed. All of the performance checks were documented and were acceptable.

III. Calibration

There were significantly more compounds in the standards than target compounds. Only the data supporting those compounds reported in the Form Is were reviewed by the validator. Documentation was provided for all of the compounds on which manual integration was performed. All manual integration appeared to have been appropriately performed.

A. Initial Calibration (IC)

One 7-point IC was performed on June 9, 2011 for all of the target compounds with the exception of fluoranthene and benzo[g,h,i]perylene with a 6-point IC Documentation of all individual IC standards was provided by the laboratory and relative response factors (RRFs) as well as percent relative standard deviation (%RSD) values were correctly calculated and accurately reported. All reported RRF values were greater than the method-specific minimum acceptance criterion of 0.05, and all %RSD values were below the maximum acceptance limit of 30 percent as defined in the QAPP. An initial calibration verification standard was analyzed immediately after the IC. All percent difference (%D) values and RRFs were acceptable. It should be noted that the ICV contained only 21 of the 31 target compounds. No data were qualified on this basis.

B. Continuing Calibration (CC)

Three CC standards were run on June 29, July 7, and July 8, 2011, in support of all the target compounds. All %D results were within the acceptance limits (35%) as defined in the QAPP.

IV. Blanks

Two laboratory method blanks and two field blanks were analyzed in support of these samples. Acenaphthylene and 2,3-dihydroindene were detected at 0.91 and 0.90 ng/L in field blank W129FB-06142011. Results for acenaphthylene in samples W411-061511 and W122-06162011 and 2,3-dihydroindene in samples W48-06142011, W33R-06142011, W414-06142011, W14-06142011, W411-06152011, W408-06162011, and W122-06162011 were qualified as not detected (U) at the reporting limit due to sample concentrations detected within five-times the concentration found in the blank. No other target analytes were detected in the blanks.

V. Surrogate Compound Recovery

Recoveries of all surrogate compounds were correctly calculated, accurately reported, and within acceptance limits with the exception of chrysene-d12 in undiluted samples W129-06142011, W129DUP-06142011, W33R-06142011, W14-06142011, W409-06152011, W411-06152011, and W412-06152011 which fell below the QAPP QC acceptance criteria but greater than 10% recovery (%R). Based on EPA's Region 5 document for review of semivolatile organics, qualification is required if two or more surrogate recoveries from any one fraction are less than the lower control limit but greater than 10%. No data were qualified on this basis.

VI. Spike Analysis

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed on sample W129-061411. Percent recoveries (%R) and RPD values were acceptable except as summarized below:

Compound	MS %R	MSD %R	RPD*	QC limits %R (RPD)	Action (Detects/Non-detects)
2,3-Dihydroindene	100	62	47	30-150 (25)	NA**
Benzo[a]anthracene	27	29	9	30-150 (25)	L/UJ
Benzo[a]pyrene	10	12	24	30-150 (25)	L/UJ
Benzo[e]pyrene	9	8	15	37-105 (25)	L/R
Benzo[b]fluoranthene	7	9	30	30-150 (25)	L/R
Benzo[k]fluoranthene	8	13	54	30-150 (25)	L/R
Benzo[g,h,i]perylene	5	10	66	30-150 (25)	L/R
Dibenz[a,h]anthracene	6	14	78	30-150 (25)	L/R
Indeno[1,2,3-cd]pyrene	6	11	68	30-150 (25)	L/R
Perylene	11	11	0	30-150 (25)	L/UJ

* based on amount recovered.
* *no action: sample amount is greater than 4 times the spike level.

Results for benzo[a]anthracene, benzo[a]pyrene, and perylene were qualified as estimated low (L,UJ), and benzo[e]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[g,h,i]perylene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene in all field samples, were qualified as estimated low (L) for detects and rejected (R) for non-detects due to unacceptable MS/MSD %R and RPD results.

B. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

Results for one LCS and one LCS/LCSD pair were provided in the data package. All recoveries were acceptable with the exception of 2-methylnaphthalene (98% R; 25-95 QC limits), acridine (17/17%R; 30-150% QC limits), and quinoline (75%RPD; ±50% QC limit). Based on professional judgment, results for 2-methylnaphthalene were not qualified in any samples and results for acridine and quinoline in samples W412-06152011, W408-06162011, and W122-06162011 were qualified as estimated (UJ) due unacceptable LCS/LCSD %R and RPD results.

VII. Field Duplicate

Sample W129DUP-06142011 was collected as a field duplicate of sample W129-06142011 and sample W129FBD-06142011was collected as a field duplicate of sample W129FB-06142011. All RPDs were within quality control limits (≤ 25% if both samples are >5X RL) for both field duplicate pairs.

VIII. Internal Standard Performance

All internal standard areas and retention times were within quality control limits for the applicable analyses.

IX. Target Compound Identification

Acceptable ion chromatograms were provided for each of the compounds detected in these samples.

X. Compound Quantitation and Reporting Limits (RL)

Target compound concentrations and reporting limits were correctly calculated and accurately reported for all samples with the exception of the reporting limit for fluoranthene and the reported value for benzo[k]fluoranthene. The reporting limit was equivalent to the concentration of the lowest calibration standard from the IC. The laboratory eliminated the low level standard from the IC for fluoranthene but did not adjust the reporting limit on the organic analysis report sheets. The actual reporting limit was calculated by the validator and replaced on the report sheets. The reported value for benzo[k]fluoranthene was calculated from the same chromatographic peak reported as benzo[b]fluoranthene. The laboratory was notified on March 2, 2012 and the error was corrected and revised data was forwarded March 5, 2012. The laboratory appropriately applied “J” qualifiers to concentrations that were less than the reporting limit but greater than the method detection limit (MDL). All laboratory-reported MDLs were less than the project RL goals with the exception of acridine and perylene with the project RL goal at 6.2 and 3.3ng/L and the MDL at 6.5 and 3.8ng/L respectively.

XI. System Performance

The analytical system appears to have been working satisfactorily at the time of these analyses, based on evaluation of the available raw data.

XII. Documentation

The chain-of-custody record was present and accurately completed for the samples reported in this data package. The following documentation issues were observed:

- RPDs could not be reproduced for the MS/MSD data,
- The RLs for fluoranthene were reported incorrectly.

The laboratory was contacted on February 29, 2012, regarding the MS/MSD RPD results. The issue was unresolved and the RPD results were recalculated by the validator. This will not affect the reported data but may become a problem at litigation.

XIII. Overall Assessment

Based on the validation effort, all results were determined to be valid as reported, with the following exceptions:

- Results for benzo[a]anthracene, benzo[a]pyrene, and perylene were qualified as estimated low (L,UJ), and benzo[e]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[g,h,i]perylene, dibenz[a,h]anthracene , and indeno[1,2,3-cd]pyrene, in all field samples, were qualified as estimated low (L) for detects and rejected (R) for non-detects due to unacceptable MS/MSD %R and RPD results.

- Results for acridine and quinoline in samples W412-06152011, W408-06162011, and W122-06162011 were qualified as estimated (UJ) due unacceptable LCS/LCSD %R and RPD results.

- Results for acenaphthylene in samples W411-061511 and W122-06162011 and 2,3-dihydroindene in samples W48-06142011, W33R-06142011, W414-06142011, W14-06142011, W411-06152011, W408-06162011, and W122-06162011 were qualified as not detected (U) at the reporting limit due to due to sample concentrations detected within five-times the concentration found in the blank.

Documentation issues observed in the data package are described in Section XII.

This validation report should be considered part of the data package for all future distributions of the semivolatiles data.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-20302-1
Client Project/Site: CSLP - Reilly Tar & Chemical

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, Minnesota 55426

Attn: Scott Anderson

Authorized for release by:
10/13/2011 05:15:06 PM
Corinne Krier
Project Mgmt. Assistant
corinne.krier@testamericainc.com

Designee for

Lisa Uriell
Project Manager I
lisa.uriell@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Table of Contents

Job ID: 280-20302-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-20302-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
Sixteen samples were received under chain of custody on June 17, 2011. The samples were received at temperatures of 3.2°C, 4.2°C, 5.1°C, 3.1°C, 3.3°C, 3.9°C, 3.7°C, 4.1°C, 4.4°C, 2.3°C, 3.2°C, 2.8°C, 4.5°C and 4.6°C.

The Relinquished by date and time were not present on the Chains of Custody. The client was notified on September 15, 2011.

No other anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C
All sample holding times were met.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to limited sample volume, sample SLP10TACIDFRACTION-091311 (280-20302-7) had an initial aliquot volume of 982.5 mL. This is below the nominal aliquot volume of 4000 mL. Therefore, the analysis of sample SLP10TACIDFRACTION-091311 (280-20302-7) had to be performed with elevated detection limits. The reporting limits have been adjusted relative to the initial volume available.

No other anomalies were noted.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to limited sample volume, the following samples had an initial aliquot volume below the nominal aliquot volume of 4000 mL. Therefore, the analysis of these samples had to be performed with elevated detection limits. The reporting limits have been adjusted relative to the dilutions required.

SLP10TEXTENDED-091311 (280-20302-1) had an initial volume of 3946.8 mL
SLP12-091311 (280-20302-2) had an initial volume of 3904.9 mL
SLP4-091311 (280-20302-3) had an initial volume of 3904.9 mL
W48-091311 (280-20302-4) had an initial volume of 3922.8 mL
SLP6-091311 (280-20302-5) had an initial volume of 3899.6 mL
W119-091311 (280-20302-6) had an initial volume of 3915.8 mL
SLP10T-091311 (280-20302-8) had an initial volume of 3921.7 mL
SLP10-091311 (280-20302-9) had an initial volume of 3912.6 mL

Job ID: 280-20302-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

SLP11-091311 (280-20302-10) had an initial volume of 3557.1 mL
SLP11DUP-091311 (280-20302-11) had an initial volume of 3618 mL
SLP11FB-091311 (280-20302-12) had an initial volume of 3881.4 mL
SLP11FBD-091311 (280-20302-13) had an initial volume of 3785.8 mL
W401-091411 (280-20302-14) had an initial volume of 3574.3 mL
W402-091411 (280-20302-15) had an initial volume of 3817 mL
W403-091411 (280-20302-16) had an initial volume of 3809.2 mL

Surrogate Fluorene-d10 and/or Chrysene-d12 were recovered outside the QC control limits in the following samples, as detailed below. Matrix interference was not obvious. Upon re-aliquoting and reanalyzing, the surrogate recovery outlier was still present. Re-extraction was not possible due to insufficient remaining sample volume; therefore, the data is reported as is.

SLP10TEXTENDED-091311 (280-20302-1) recovered Chrysene-d12 at 16% (limits 28-101%)
SLP4-091311 (280-20302-3) recovered Chrysene-d12 at 25% (limits 28-101%)
W48-091311 (280-20302-4) recovered Chrysene-d12 at 24% (limits 28-101%)
SLP6-091311 (280-20302-5), recovered Chrysene-d12 at 26% (limits 28-101%)
SLP11FB-091311 (280-20302-12) recovered Fuorene-d10 at 91% (limits 23-84%)
W401-091411 (280-20302-14) recovered Chrysene-d12 at 16% (limits 28-101%)
W403-091411 (280-20302-16) recovered Chrysene-d12 at 24% (limits 28-101%)

Low levels of 2-Methylnaphthalene, Benzo[a]anthracene, Benzo[k]fluoranthene, Benzo[g,h,i]perylene, Dibenz(a,h)anthracene, Naphthalene and Pyrene are present in the method blank associated with prep batch 280-86361. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”. Usability of the sample data is not compromised.

Low levels of Acenaphthene are present in the method blank associated with prep batch 280-71519. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”. Usability of the sample data is not compromised.

Low levels of Acenaphtene, Benzo[a]anthracene, Benzo[a]pyrene, Benzo[e]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene are present in the method blank associated with prep batch 280-87039. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”.

Additionally, levels of Dibenzothiopene and Benzo[k]fluoranthene are present in the method blank associated with prep batch 280-87039 at levels above the RL. The associated positive results in the analytical report have been flagged with “B”. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is.

The LCS/LCSD associated with prep batch 280-86361 exhibited percent recoveries and/or RPD data outside the QC control limits for Acridine, Benzo[k]fluoranthene, Chrysene, 7,12-Dimethylbenz(a)anthracene, and Quinoline. The LCS/LCSD were re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

The LCS associated with prep batch 280-86676 exhibited percent recoveries outside the QC control limits for Acridine at 18% (limits 30-150%) and Naphthalene at 98% (27-95%). The LCS was re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

The LCS/LCSD associated with prep batch 280-87039 exhibited percent recoveries outside the QC control limits for Acridine and Naphthalene. Additionally, the surrogate Fluorene-d10 was recovered above QC control limits in the LCS. The LCS/LCSD were re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

Job ID: 280-20302-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

Additionally, the LCS/LCSD associated with prep batch 280-87039 exhibited the LCS percent recovery below the QC control limits for 7,12-Dimethylbenz(a)anthracene. This analyte is not a compound of interest for this project; therefore, corrective action was deemed unnecessary. The LCS/LCSD was reanalyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume.

The MS/MSD associated with prep batch 280-86676 was performed using sample SLP11-091311 (280-20302-10), as requested. MS/MSD exhibited 11 of the 33 Matrix Spike compound recoveries and 1 of the 3 surrogate recoveries outside the control limits. MS/MSD exhibited 10 of the 33 Matrix Spike Duplicate compound recoveries outside the control limits. The MS/MSD exhibited 3 of the 33 Relative Percent Difference (RPD) data outside the control limits. The MS/MSD exhibited percent recoveries and/or RPD data outside the control limits for the compounds listed below. Details of the specific analyte recoveries can found in the Matrix Spike Sample Recovery and Data Reports.

3-Methylcholanthrene	Acridine	Benzo[a]pyrene		
Benzo[e]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene		
Benzo[ghi]perylene	Dibenzo(a,h)anthracene	Indene	Indeno[1,2,3-cd]pyrene	Naphthalene
Perylene		Fluorene-d10		

The method required MS/MSD could not be performed for prep batch 280-86361, due to insufficient sample volume.

The method required MS/MSD could not be performed for prep batch 280-87039, due to insufficient sample volume.

No other anomalies were noted.

Data Completeness for Method 8270C Acid Compounds

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below.

DATA COMPLETENES CALCULATION JOB 280-20302-1 ANALYSIS: Acid Compounds by SW846 8270C		
QC Parameter	**Data Planned**	**Valid Data Obtained**
Method Blank	11	11
MB Surrogates	5	5
FB/FBD	NA	NA
MS	16	16
MS Surrogates	6	6
MSD	16	16
MSD Surrogates	6	6
MS/MSD RPD	16	16
Sample/Dup. RPD	NA	NA
LCS	16	16
LCS Surrogates	6	6
Sample Surrogates	5	5
Samples and QC Internal Standard Area	15	15
TOTAL	**118**	**118**
% Completeness	**100.00%**	

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION
JOB: 280-20302-1
ANALYSIS: SW846-8270C SIM

QC Parameter	Data Planned	Valid Data Obtained
Method Blank	99	97
MB Surrogates	9	9
LCS/LCSD	35	29
LCS/LCSD Surrogates	15	14
FB/FBD	62	62
MS	7	4
MS Surrogates	3	3
MSD	7	6
MSD Surrogates	3	2
MS/MSD RPD	7	7
Sample/Dup. RPD	31	31
Sample Surrogates	45	38
Samples and QC Internal Standard Area	75	75
TOTAL	**398**	**377**
% Completeness	**94.7%**	

Sample Duplicate Calculation for Method 8270C SIM

Sample Duplicate RPD JOB 280-20302-1 Sample: SLP11-091311		DUP: SLP11DUP-091311			
Compound	**Result**	**Compound**	**Result**	**RPD**	**RPD>50%**
Acenaphthene	9.6	Acenaphthene	9.4	2.1	
Acenaphthylene	ND	Acenaphthylene	ND	0.0	
Acridine	ND	Acridine	ND	0.0	
Anthracene	ND	Anthracene	2.6	NC	
Benzo(a)anthracene	ND	Benzo(a)anthracene	ND	0.0	
Benzo(b)fluoranthene	ND	Benzo(b)fluoranthene	ND	0.0	
Benzo(k)fluoranthene	ND	Benzo(k)fluoranthene	ND	0.0	
2,3-Benzofuran	3.9	2,3-Benzofuran	4.4	12.0	
Benzo(ghi)perylene	ND	Benzo(ghi)perylene	ND	0.0	
Benzo(a)pyrene	ND	Benzo(a)pyrene	ND	0.0	
Benzo(e)pyrene	ND	Benzo(e)pyrene	ND	0.0	
Benzo(b)thiophene	9.9	Benzo(b)thiophene	9.0	9.5	
Biphenyl	ND	Biphenyl	ND	0.0	
Carbazole	2.2	Carbazole	2.0	9.5	
Chrysene	ND	Chrysene	ND	0.0	
Dibenz(a,h)anthracene	ND	Dibenz(a,h)anthracene	ND	0.0	
Dibenzofuran	ND	Dibenzofuran	ND	0.0	
Dibenzothiophene	ND	Dibenzothiophene	21	NC	
2,3-Dihydroindene	20	2,3-Dihydroindene	20	0.0	
Fluoranthene	ND	Fluoranthene	ND	0.0	
Fluorene	1.1	Fluorene	1.3	16.7	
Indene	19	Indene	21	10.0	
Indeno(1,2,3-cd)pyrene	ND	Indeno(1,2,3-cd)pyrene	ND	0.0	
Indole	ND	Indole	ND	0.0	
2-Methylnaphthalene	1.4	2-Methylnaphthalene	ND	NC	
1-Methylnaphthalene	3.3	1-Methylnaphthalene	2.8	16.4	
Naphthalene	22	Naphthalene	18	20.0	
Perylene	ND	Perylene	ND	0.0	
Phenanthrene	ND	Phenanthrene	ND	0.0	
Pyrene	ND	Pyrene	ND	0.0	
Quinoline	ND	Quinoline	ND	0.0	

RPD = Relative Percent Difference
ND = Compound not detected in the sample
p = RPD is outside of control limits
*NC = RPD not calculated, one positive result and one ND.
Considered acceptable if the positive result is less than 4x the RL.

Definitions/Glossary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP10TEXTENDED-091311 — Lab Sample ID: 280-20302-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	21		5.1	0.71	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	7.5		5.7	0.90	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	4.4	J B	6.0	0.99	ng/L	1		8270C	Total/NA
Acenaphthene	12		5.8	0.51	ng/L	1		8270C	Total/NA
Acenaphthylene	1.0	J	4.9	0.78	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	3.3	J B	4.4	0.93	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	6.7		2.5	1.3	ng/L	1		8270C	Total/NA
Benzo[e]pyrene	4.5		4.4	1.2	ng/L	1		8270C	Total/NA
Benzo[b]fluoranthene	4.0	J	4.8	1.4	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	1.7	J	5.3	0.76	ng/L	1		8270C	Total/NA
Benzo[k]fluoranthene	10	B *	4.2	1.3	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	13	B	6.3	1.2	ng/L	1		8270C	Total/NA
Chrysene	5.6	J B *	5.7	1.3	ng/L	1		8270C	Total/NA
Dibenz(a,h)anthracene	11	B	6.0	1.1	ng/L	1		8270C	Total/NA
Dibenzothiophene	20		4.2	0.99	ng/L	1		8270C	Total/NA
Fluorene	1.2	J	4.2	0.86	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	7.3		5.5	1.3	ng/L	1		8270C	Total/NA
Naphthalene	5.0	J B	8.7	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: SLP12-091311 — Lab Sample ID: 280-20302-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	1.5	J	5.1	0.72	ng/L	1		8270C	Total/NA
Naphthalene	2.1	J B	8.8	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: SLP4-091311 — Lab Sample ID: 280-20302-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	0.79	J	5.5	0.70	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	39		5.1	0.72	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.1	J B	6.0	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	49		5.8	0.51	ng/L	1		8270C	Total/NA
Acenaphthylene	3.4	J	4.9	0.79	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	5.6		5.3	0.77	ng/L	1		8270C	Total/NA
Carbazole	2.6	J	3.9	0.74	ng/L	1		8270C	Total/NA
Fluorene	1.2	J	4.2	0.87	ng/L	1		8270C	Total/NA
Indene	4.3	J	4.8	3.4	ng/L	1		8270C	Total/NA
Indole	2.0	J	4.8	1.8	ng/L	1		8270C	Total/NA
Naphthalene	4.0	J B	8.8	1.2	ng/L	1		8270C	Total/NA
Pyrene	5.0	B	4.3	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: W48-091311 — Lab Sample ID: 280-20302-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	1.2	J	5.5	0.69	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	6.1		5.1	0.71	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.9	J	5.7	0.91	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.9	J B	6.0	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	80		5.8	0.51	ng/L	1		8270C	Total/NA
Acenaphthylene	2.5	J	4.9	0.79	ng/L	1		8270C	Total/NA
Acridine	9.2	*	6.6	6.6	ng/L	1		8270C	Total/NA
Anthracene	3.6	J	4.3	0.82	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	1.2	J B	4.4	0.94	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	8.2		5.3	0.76	ng/L	1		8270C	Total/NA

Client Sample ID: W48-091311 (Continued) — Lab Sample ID: 280-20302-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	1.5	J * B	4.2	1.3	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	2.0	J B	6.3	1.2	ng/L	1		8270C	Total/NA
Carbazole	1.4	J	3.9	0.73	ng/L	1		8270C	Total/NA
Chrysene	1.8	J * B	5.7	1.3	ng/L	1		8270C	Total/NA
Dibenz(a,h)anthracene	1.2	J B	6.0	1.1	ng/L	1		8270C	Total/NA
Indene	25		4.8	3.3	ng/L	1		8270C	Total/NA
Indole	3.5	J	4.8	1.8	ng/L	1		8270C	Total/NA
Naphthalene	5.0	J B	8.8	1.2	ng/L	1		8270C	Total/NA
Pyrene	2.3	J B	4.3	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: SLP6-091311 — Lab Sample ID: 280-20302-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	0.82	J	5.5	0.70	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	54		5.1	0.72	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	2.3	J	5.7	0.91	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.4	J B	6.1	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	77		5.8	0.51	ng/L	1		8270C	Total/NA
Acenaphthylene	9.1		4.9	0.79	ng/L	1		8270C	Total/NA
Anthracene	2.3	J	4.3	0.82	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	12		5.3	0.77	ng/L	1		8270C	Total/NA
Carbazole	2.4	J	3.9	0.74	ng/L	1		8270C	Total/NA
Dibenzothiophene	1.7	J	4.2	1.0	ng/L	1		8270C	Total/NA
Fluoranthene	4.1	J	4.7	1.7	ng/L	1		8270C	Total/NA
Fluorene	0.93	J	4.2	0.87	ng/L	1		8270C	Total/NA
Indene	6.9		4.8	3.4	ng/L	1		8270C	Total/NA
Indole	3.4	J	4.8	1.8	ng/L	1		8270C	Total/NA
Naphthalene	5.0	J B	8.8	1.2	ng/L	1		8270C	Total/NA
Pyrene	4.6	B	4.3	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: W119-091311 — Lab Sample ID: 280-20302-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	4.9	J	5.1	0.72	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.4	J	5.7	0.91	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.2	J B	6.0	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	42		5.8	0.51	ng/L	1		8270C	Total/NA
Acenaphthylene	2.6	J	4.9	0.79	ng/L	1		8270C	Total/NA
Anthracene	3.5	J	4.3	0.82	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	1.5	J B	4.4	0.94	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	6.1		5.3	0.77	ng/L	1		8270C	Total/NA
Carbazole	1.5	J	3.9	0.74	ng/L	1		8270C	Total/NA
Chrysene	1.7	J * B	5.7	1.3	ng/L	1		8270C	Total/NA
Indene	11		4.8	3.4	ng/L	1		8270C	Total/NA
Indole	3.3	J	4.8	1.8	ng/L	1		8270C	Total/NA
Naphthalene	3.5	J B	8.8	1.2	ng/L	1		8270C	Total/NA
Pyrene	14	B	4.3	1.0	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TACIDFRACTION-091311 — Lab Sample ID: 280-20302-7

No Detections

Client Sample ID: SLP10T-091311 — Lab Sample ID: 280-20302-8

Client Sample ID: SLP10T-091311 (Continued) — Lab Sample ID: 280-20302-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	24		5.1	0.71	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	3.9	J	5.7	0.91	ng/L	1		8270C	Total/NA
Acenaphthene	13		5.8	0.51	ng/L	1		8270C	Total/NA
Acenaphthylene	0.84	J	4.9	0.79	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	2.6	J	5.3	0.76	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	1.3	J B	6.3	1.2	ng/L	1		8270C	Total/NA
Chrysene	1.4	J * B	5.7	1.3	ng/L	1		8270C	Total/NA
Fluorene	1.2	J	4.2	0.87	ng/L	1		8270C	Total/NA
Naphthalene	2.0	J B	8.8	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10-091311 — Lab Sample ID: 280-20302-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	75		5.1	0.72	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	32		5.7	0.91	ng/L	1		8270C	Total/NA
Acenaphthene	220		5.8	0.51	ng/L	1		8270C	Total/NA
Acenaphthylene	17		4.9	0.79	ng/L	1		8270C	Total/NA
Anthracene	0.97	J	4.3	0.82	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	1.3	J B	4.4	0.94	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	17		5.3	0.77	ng/L	1		8270C	Total/NA
Carbazole	9.0		3.9	0.74	ng/L	1		8270C	Total/NA
Chrysene	1.6	J * B	5.7	1.3	ng/L	1		8270C	Total/NA
Dibenzofuran	8.2		5.8	1.0	ng/L	1		8270C	Total/NA
Dibenzothiophene	10		4.2	1.0	ng/L	1		8270C	Total/NA
Fluoranthene	22		4.7	1.7	ng/L	1		8270C	Total/NA
Fluorene	49		4.2	0.87	ng/L	1		8270C	Total/NA
Indene	24		4.8	3.4	ng/L	1		8270C	Total/NA
Naphthalene	2.4	J B	8.8	1.2	ng/L	1		8270C	Total/NA
Phenanthrene	4.5	J	6.4	3.3	ng/L	1		8270C	Total/NA
Pyrene	44	B	4.3	1.0	ng/L	1		8270C	Total/NA
Biphenyl	1.5	J	5.7	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP11-091311 — Lab Sample ID: 280-20302-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	3.9	J	6.1	0.76	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	20		5.6	0.79	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	3.3	J	6.3	1.0	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.4	J	6.6	1.1	ng/L	1		8270C	Total/NA
Acenaphthene	9.6	B	6.4	0.56	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	9.9		5.8	0.84	ng/L	1		8270C	Total/NA
Carbazole	2.2	J	4.3	0.81	ng/L	1		8270C	Total/NA
Fluorene	1.1	J	4.6	0.96	ng/L	1		8270C	Total/NA
Indene	19		5.3	3.7	ng/L	1		8270C	Total/NA
Naphthalene	22	*	9.7	1.3	ng/L	1		8270C	Total/NA

Client Sample ID: SLP11DUP-091311 — Lab Sample ID: 280-20302-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	4.4	J	6.0	0.75	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	20		5.5	0.77	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	2.8	J	6.2	0.98	ng/L	1		8270C	Total/NA
Acenaphthene	9.4	B	6.3	0.55	ng/L	1		8270C	Total/NA
Anthracene	2.6	J	4.6	0.88	ng/L	1		8270C	Total/NA

Client Sample ID: SLP11DUP-091311 (Continued)

Lab Sample ID: 280-20302-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(b)thiophene	9.0		5.7	0.83	ng/L	1		8270C	Total/NA
Carbazole	2.0	J	4.2	0.80	ng/L	1		8270C	Total/NA
Dibenzothiophene	21		4.5	1.1	ng/L	1		8270C	Total/NA
Fluorene	1.3	J	4.5	0.94	ng/L	1		8270C	Total/NA
Indene	21		5.2	3.6	ng/L	1		8270C	Total/NA
Naphthalene	18	*	9.5	1.3	ng/L	1		8270C	Total/NA

Client Sample ID: SLP11FB-091311

Lab Sample ID: 280-20302-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	1.1	J	5.6	0.70	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	1.5	J	5.2	0.72	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	2.8	J	5.8	0.92	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	3.8	J	6.1	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	0.59	J B	5.9	0.52	ng/L	1		8270C	Total/NA
Acenaphthylene	3.5	J	4.9	0.79	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	5.8		5.4	0.77	ng/L	1		8270C	Total/NA
Dibenzothiophene	20		4.2	1.0	ng/L	1		8270C	Total/NA
Naphthalene	4.6	J *	8.9	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: SLP11FBD-091311

Lab Sample ID: 280-20302-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	1.1	J	5.7	0.72	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	2.2	J	5.3	0.74	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.5	J	5.9	0.94	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	2.7	J	6.2	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	0.61	J B	6.0	0.53	ng/L	1		8270C	Total/NA
Acenaphthylene	3.0	J	5.1	0.81	ng/L	1		8270C	Total/NA
Anthracene	0.85	J	4.4	0.85	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	5.9		5.5	0.79	ng/L	1		8270C	Total/NA
Dibenzothiophene	21		4.3	1.0	ng/L	1		8270C	Total/NA
Naphthalene	4.5	J *	9.1	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: W401-091411

Lab Sample ID: 280-20302-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	2.4	J	5.6	0.78	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.2	J	6.3	1.0	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.6	J	6.6	1.1	ng/L	1		8270C	Total/NA
Acenaphthene	6.1	J B	6.4	0.56	ng/L	1		8270C	Total/NA
Anthracene	0.90	J	4.7	0.90	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	6.5		5.8	0.84	ng/L	1		8270C	Total/NA
Carbazole	0.86	J	4.3	0.81	ng/L	1		8270C	Total/NA
Dibenzothiophene	22		4.6	1.1	ng/L	1		8270C	Total/NA
Naphthalene	3.3	J *	9.6	1.3	ng/L	1		8270C	Total/NA
Pyrene	3.4	J	4.7	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: W402-091411

Lab Sample ID: 280-20302-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	0.86	J	5.7	0.71	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	4.8	J	5.2	0.73	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	2.7	J	5.9	0.93	ng/L	1		8270C	Total/NA

Client Sample ID: W402-091411 (Continued)

Lab Sample ID: 280-20302-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	27		6.2	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	3.4	J B	6.0	0.52	ng/L	1		8270C	Total/NA
Acenaphthylene	2.2	J	5.0	0.81	ng/L	1		8270C	Total/NA
Anthracene	0.90	J	4.4	0.84	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	1.5	J	5.4	0.79	ng/L	1		8270C	Total/NA
Dibenzothiophene	21		4.3	1.0	ng/L	1		8270C	Total/NA
Naphthalene	7.3	J *	9.0	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: W403-091411

Lab Sample ID: 280-20302-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	11		5.7	0.71	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	3.4	J	5.3	0.74	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.2	J	6.2	1.0	ng/L	1		8270C	Total/NA
Acenaphthene	0.89	J B	6.0	0.53	ng/L	1		8270C	Total/NA
Acenaphthylene	1.8	J	5.0	0.81	ng/L	1		8270C	Total/NA
Anthracene	3.4	J	4.4	0.84	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	18	B	4.5	0.97	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	19	B	2.6	1.3	ng/L	1		8270C	Total/NA
Benzo[e]pyrene	4.0	J B	4.5	1.2	ng/L	1		8270C	Total/NA
Benzo[b]fluoranthene	18	B	4.9	1.5	ng/L	1		8270C	Total/NA
Benzo[k]fluoranthene	25	B	4.3	1.3	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	30	B	6.5	1.2	ng/L	1		8270C	Total/NA
Carbazole	2.7	J	4.0	0.76	ng/L	1		8270C	Total/NA
Chrysene	25		5.9	1.3	ng/L	1		8270C	Total/NA
Dibenz(a,h)anthracene	23	B	6.2	1.1	ng/L	1		8270C	Total/NA
Fluoranthene	14		4.8	1.8	ng/L	1		8270C	Total/NA
Fluorene	1.2	J	4.3	0.89	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	20	B	5.7	1.3	ng/L	1		8270C	Total/NA
Naphthalene	5.1	J *	9.0	1.2	ng/L	1		8270C	Total/NA
Phenanthrene	5.2	J	6.6	3.4	ng/L	1		8270C	Total/NA
Pyrene	12		4.4	1.0	ng/L	1		8270C	Total/NA

Method Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compound (GC/MS SIM LL)	SW846	TAL DEN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-20302-1	SLP10TEXTENDED-091311	Water	09/13/11 15:25	09/15/11 09:30
280-20302-2	SLP12-091311	Water	09/13/11 14:15	09/15/11 09:30
280-20302-3	SLP4-091311	Water	09/13/11 14:45	09/15/11 09:30
280-20302-4	W48-091311	Water	09/13/11 11:00	09/15/11 09:30
280-20302-5	SLP6-091311	Water	09/13/11 11:45	09/15/11 09:30
280-20302-6	W119-091311	Water	09/13/11 12:00	09/15/11 09:30
280-20302-7	SLP10TACIDFRACTION-091311	Water	09/13/11 15:20	09/15/11 09:30
280-20302-8	SLP10T-091311	Water	09/13/11 15:15	09/15/11 09:30
280-20302-9	SLP10-091311	Water	09/13/11 13:45	09/15/11 09:30
280-20302-10	SLP11-091311	Water	09/13/11 16:30	09/15/11 09:30
280-20302-11	SLP11DUP-091311	Water	09/13/11 16:35	09/15/11 09:30
280-20302-12	SLP11FB-091311	Water	09/13/11 16:20	09/15/11 09:30
280-20302-13	SLP11FBD-091311	Water	09/13/11 16:25	09/15/11 09:30
280-20302-14	W401-091411	Water	09/14/11 09:00	09/15/11 09:30
280-20302-15	W402-091411	Water	09/14/11 08:55	09/15/11 09:30
280-20302-16	W403-091411	Water	09/14/11 12:00	09/15/11 09:30

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP10TEXTENDED-091311
Date Collected: 09/13/11 15:25
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-1
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.5	0.69	ng/L		09/16/11 14:15	10/06/11 15:49	1
2,3-Dihydroindene	**21**		5.1	0.71	ng/L		09/16/11 14:15	10/06/11 15:49	1
1-Methylnaphthalene	**7.5**		5.7	0.90	ng/L		09/16/11 14:15	10/06/11 15:49	1
2-Methylnaphthalene	**4.4**	**J B**	6.0	0.99	ng/L		09/16/11 14:15	10/06/11 15:49	1
3-Methylcholanthrene	ND		5.1	5.1	ng/L		09/16/11 14:15	10/06/11 15:49	1
Acenaphthene	**12**		5.8	0.51	ng/L		09/16/11 14:15	10/06/11 15:49	1
Acenaphthylene	**1.0**	**J**	4.9	0.78	ng/L		09/16/11 14:15	10/06/11 15:49	1
Acridine	ND	*	6.6	6.6	ng/L		09/16/11 14:15	10/06/11 15:49	1
Anthracene	ND		4.3	0.81	ng/L		09/16/11 14:15	10/06/11 15:49	1
Benzo[a]anthracene	**3.3**	**J B**	4.4	0.93	ng/L		09/16/11 14:15	10/06/11 15:49	1
Benzo[a]pyrene	**6.7**		2.5	1.3	ng/L		09/16/11 14:15	10/06/11 15:49	1
Benzo[e]pyrene	**4.5**		4.4	1.2	ng/L		09/16/11 14:15	10/06/11 15:49	1
Benzo[b]fluoranthene	**4.0**	**J**	4.8	1.4	ng/L		09/16/11 14:15	10/06/11 15:49	1
Benzo(b)thiophene	**1.7**	**J**	5.3	0.76	ng/L		09/16/11 14:15	10/06/11 15:49	1
Benzo[k]fluoranthene	**10**	**B ***	4.2	1.3	ng/L		09/16/11 14:15	10/06/11 15:49	1
Benzo[g,h,i]perylene	**13**	**B**	6.3	1.2	ng/L		09/16/11 14:15	10/06/11 15:49	1
Carbazole	ND		3.9	0.73	ng/L		09/16/11 14:15	10/06/11 15:49	1
Chrysene	**5.6**	**J B ***	5.7	1.3	ng/L		09/16/11 14:15	10/06/11 15:49	1
Dibenz(a,h)anthracene	**11**	**B**	6.0	1.1	ng/L		09/16/11 14:15	10/06/11 15:49	1
Dibenzofuran	ND		5.8	1.0	ng/L		09/16/11 14:15	10/06/11 15:49	1
Dibenzothiophene	**20**		4.2	0.99	ng/L		09/16/11 14:15	10/06/11 15:49	1
Fluoranthene	ND		4.7	1.7	ng/L		09/16/11 14:15	10/06/11 15:49	1
Fluorene	**1.2**	**J**	4.2	0.86	ng/L		09/16/11 14:15	10/06/11 15:49	1
Indene	ND		4.8	3.3	ng/L		09/16/11 14:15	10/06/11 15:49	1
Indole	ND		4.8	1.8	ng/L		09/16/11 14:15	10/06/11 15:49	1
Indeno[1,2,3-cd]pyrene	**7.3**		5.5	1.3	ng/L		09/16/11 14:15	10/06/11 15:49	1
Naphthalene	**5.0**	**J B**	8.7	1.2	ng/L		09/16/11 14:15	10/06/11 15:49	1
Perylene	ND		3.9	3.9	ng/L		09/16/11 14:15	10/06/11 15:49	1
Phenanthrene	ND		6.4	3.3	ng/L		09/16/11 14:15	10/06/11 15:49	1
Pyrene	ND		4.3	1.0	ng/L		09/16/11 14:15	10/06/11 15:49	1
Quinoline	ND	*	9.1	5.7	ng/L		09/16/11 14:15	10/06/11 15:49	1
7,12-Dimethylbenz(a)anthracene	ND	*	2.8	2.3	ng/L		09/16/11 14:15	10/06/11 15:49	1
Biphenyl	ND		5.7	1.1	ng/L		09/16/11 14:15	10/06/11 15:49	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*64*		*23 - 84*	*09/16/11 14:15*	*10/06/11 15:49*	*1*
Chrysene-d12 (Surr)	*16*	*X*	*28 - 101*	*09/16/11 14:15*	*10/06/11 15:49*	*1*
Naphthalene-d8 (Surr)	*58*		*22 - 97*	*09/16/11 14:15*	*10/06/11 15:49*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP12-091311
Date Collected: 09/13/11 14:15
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.5	0.70	ng/L		09/16/11 14:15	10/06/11 16:25	1
2,3-Dihydroindene	**1.5**	**J**	5.1	0.72	ng/L		09/16/11 14:15	10/06/11 16:25	1
1-Methylnaphthalene	ND		5.7	0.91	ng/L		09/16/11 14:15	10/06/11 16:25	1
2-Methylnaphthalene	ND		6.0	1.0	ng/L		09/16/11 14:15	10/06/11 16:25	1
Acenaphthene	ND		5.8	0.51	ng/L		09/16/11 14:15	10/06/11 16:25	1
Acenaphthylene	ND		4.9	0.79	ng/L		09/16/11 14:15	10/06/11 16:25	1
Acridine	ND	*	6.7	6.7	ng/L		09/16/11 14:15	10/06/11 16:25	1
Anthracene	ND		4.3	0.82	ng/L		09/16/11 14:15	10/06/11 16:25	1
Benzo[a]anthracene	ND		4.4	0.94	ng/L		09/16/11 14:15	10/06/11 16:25	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		09/16/11 14:15	10/06/11 16:25	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		09/16/11 14:15	10/06/11 16:25	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		09/16/11 14:15	10/06/11 16:25	1
Benzo(b)thiophene	ND		5.3	0.77	ng/L		09/16/11 14:15	10/06/11 16:25	1
Benzo[k]fluoranthene	ND	*	4.2	1.3	ng/L		09/16/11 14:15	10/06/11 16:25	1
Benzo[g,h,i]perylene	ND		6.4	1.2	ng/L		09/16/11 14:15	10/06/11 16:25	1
Carbazole	ND		3.9	0.74	ng/L		09/16/11 14:15	10/06/11 16:25	1
Chrysene	ND	*	5.7	1.3	ng/L		09/16/11 14:15	10/06/11 16:25	1
Dibenz(a,h)anthracene	ND		6.0	1.1	ng/L		09/16/11 14:15	10/06/11 16:25	1
Dibenzofuran	ND		5.8	1.0	ng/L		09/16/11 14:15	10/06/11 16:25	1
Dibenzothiophene	ND		4.2	1.0	ng/L		09/16/11 14:15	10/06/11 16:25	1
Fluoranthene	ND		4.7	1.7	ng/L		09/16/11 14:15	10/06/11 16:25	1
Fluorene	ND		4.2	0.87	ng/L		09/16/11 14:15	10/06/11 16:25	1
Indene	ND		4.8	3.4	ng/L		09/16/11 14:15	10/06/11 16:25	1
Indole	ND		4.8	1.8	ng/L		09/16/11 14:15	10/06/11 16:25	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		09/16/11 14:15	10/06/11 16:25	1
Naphthalene	**2.1**	**J B**	8.8	1.2	ng/L		09/16/11 14:15	10/06/11 16:25	1
Perylene	ND		3.9	3.9	ng/L		09/16/11 14:15	10/06/11 16:25	1
Phenanthrene	ND		6.5	3.3	ng/L		09/16/11 14:15	10/06/11 16:25	1
Pyrene	ND		4.3	1.0	ng/L		09/16/11 14:15	10/06/11 16:25	1
Quinoline	ND	*	9.2	5.8	ng/L		09/16/11 14:15	10/06/11 16:25	1
Biphenyl	ND		5.7	1.1	ng/L		09/16/11 14:15	10/06/11 16:25	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*67*		*23 - 84*	*09/16/11 14:15*	*10/06/11 16:25*	*1*
Chrysene-d12 (Surr)	*32*		*28 - 101*	*09/16/11 14:15*	*10/06/11 16:25*	*1*
Naphthalene-d8 (Surr)	*59*		*22 - 97*	*09/16/11 14:15*	*10/06/11 16:25*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP4-091311
Date Collected: 09/13/11 14:45
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**0.79**	**J**	5.5	0.70	ng/L		09/16/11 14:15	10/06/11 17:01	1
2,3-Dihydroindene	**39**		5.1	0.72	ng/L		09/16/11 14:15	10/06/11 17:01	1
1-Methylnaphthalene	ND		5.7	0.91	ng/L		09/16/11 14:15	10/06/11 17:01	1
2-Methylnaphthalene	**1.1**	**J B**	6.0	1.0	ng/L		09/16/11 14:15	10/06/11 17:01	1
Acenaphthene	**49**		5.8	0.51	ng/L		09/16/11 14:15	10/06/11 17:01	1
Acenaphthylene	**3.4**	**J**	4.9	0.79	ng/L		09/16/11 14:15	10/06/11 17:01	1
Acridine	ND	*	6.7	6.7	ng/L		09/16/11 14:15	10/06/11 17:01	1
Anthracene	ND		4.3	0.82	ng/L		09/16/11 14:15	10/06/11 17:01	1
Benzo[a]anthracene	ND		4.4	0.94	ng/L		09/16/11 14:15	10/06/11 17:01	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		09/16/11 14:15	10/06/11 17:01	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		09/16/11 14:15	10/06/11 17:01	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		09/16/11 14:15	10/06/11 17:01	1
Benzo(b)thiophene	**5.6**		5.3	0.77	ng/L		09/16/11 14:15	10/06/11 17:01	1
Benzo[k]fluoranthene	ND	*	4.2	1.3	ng/L		09/16/11 14:15	10/06/11 17:01	1
Benzo[g,h,i]perylene	ND		6.4	1.2	ng/L		09/16/11 14:15	10/06/11 17:01	1
Carbazole	**2.6**	**J**	3.9	0.74	ng/L		09/16/11 14:15	10/06/11 17:01	1
Chrysene	ND	*	5.7	1.3	ng/L		09/16/11 14:15	10/06/11 17:01	1
Dibenz(a,h)anthracene	ND		6.0	1.1	ng/L		09/16/11 14:15	10/06/11 17:01	1
Dibenzofuran	ND		5.8	1.0	ng/L		09/16/11 14:15	10/06/11 17:01	1
Dibenzothiophene	ND		4.2	1.0	ng/L		09/16/11 14:15	10/06/11 17:01	1
Fluoranthene	ND		4.7	1.7	ng/L		09/16/11 14:15	10/06/11 17:01	1
Fluorene	**1.2**	**J**	4.2	0.87	ng/L		09/16/11 14:15	10/06/11 17:01	1
Indene	**4.3**	**J**	4.8	3.4	ng/L		09/16/11 14:15	10/06/11 17:01	1
Indole	**2.0**	**J**	4.8	1.8	ng/L		09/16/11 14:15	10/06/11 17:01	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		09/16/11 14:15	10/06/11 17:01	1
Naphthalene	**4.0**	**J B**	8.8	1.2	ng/L		09/16/11 14:15	10/06/11 17:01	1
Perylene	ND		3.9	3.9	ng/L		09/16/11 14:15	10/06/11 17:01	1
Phenanthrene	ND		6.5	3.3	ng/L		09/16/11 14:15	10/06/11 17:01	1
Pyrene	**5.0**	**B**	4.3	1.0	ng/L		09/16/11 14:15	10/06/11 17:01	1
Quinoline	ND	*	9.2	5.8	ng/L		09/16/11 14:15	10/06/11 17:01	1
Biphenyl	ND		5.7	1.1	ng/L		09/16/11 14:15	10/06/11 17:01	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*72*		*23 - 84*	*09/16/11 14:15*	*10/06/11 17:01*	*1*
Chrysene-d12 (Surr)	*25*	*X*	*28 - 101*	*09/16/11 14:15*	*10/06/11 17:01*	*1*
Naphthalene-d8 (Surr)	*77*		*22 - 97*	*09/16/11 14:15*	*10/06/11 17:01*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: W48-091311
Date Collected: 09/13/11 11:00
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	1.2	J	5.5	0.69	ng/L		09/16/11 14:15	10/06/11 17:37	1
2,3-Dihydroindene	6.1		5.1	0.71	ng/L		09/16/11 14:15	10/06/11 17:37	1
1-Methylnaphthalene	1.9	J	5.7	0.91	ng/L		09/16/11 14:15	10/06/11 17:37	1
2-Methylnaphthalene	1.9	J B	6.0	1.0	ng/L		09/16/11 14:15	10/06/11 17:37	1
Acenaphthene	80		5.8	0.51	ng/L		09/16/11 14:15	10/06/11 17:37	1
Acenaphthylene	2.5	J	4.9	0.79	ng/L		09/16/11 14:15	10/06/11 17:37	1
Acridine	9.2	*	6.6	6.6	ng/L		09/16/11 14:15	10/06/11 17:37	1
Anthracene	3.6	J	4.3	0.82	ng/L		09/16/11 14:15	10/06/11 17:37	1
Benzo[a]anthracene	1.2	J B	4.4	0.94	ng/L		09/16/11 14:15	10/06/11 17:37	1
Benzo[a]pyrene	ND		2.5	1.3	ng/L		09/16/11 14:15	10/06/11 17:37	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		09/16/11 14:15	10/06/11 17:37	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		09/16/11 14:15	10/06/11 17:37	1
Benzo(b)thiophene	8.2		5.3	0.76	ng/L		09/16/11 14:15	10/06/11 17:37	1
Benzo[k]fluoranthene	1.5	J * B	4.2	1.3	ng/L		09/16/11 14:15	10/06/11 17:37	1
Benzo[g,h,i]perylene	2.0	J B	6.3	1.2	ng/L		09/16/11 14:15	10/06/11 17:37	1
Carbazole	1.4	J	3.9	0.73	ng/L		09/16/11 14:15	10/06/11 17:37	1
Chrysene	1.8	J * B	5.7	1.3	ng/L		09/16/11 14:15	10/06/11 17:37	1
Dibenz(a,h)anthracene	1.2	J B	6.0	1.1	ng/L		09/16/11 14:15	10/06/11 17:37	1
Dibenzofuran	ND		5.8	1.0	ng/L		09/16/11 14:15	10/06/11 17:37	1
Dibenzothiophene	ND		4.2	1.0	ng/L		09/16/11 14:15	10/06/11 17:37	1
Fluoranthene	ND		4.7	1.7	ng/L		09/16/11 14:15	10/06/11 17:37	1
Fluorene	ND		4.2	0.87	ng/L		09/16/11 14:15	10/06/11 17:37	1
Indene	25		4.8	3.3	ng/L		09/16/11 14:15	10/06/11 17:37	1
Indole	3.5	J	4.8	1.8	ng/L		09/16/11 14:15	10/06/11 17:37	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		09/16/11 14:15	10/06/11 17:37	1
Naphthalene	5.0	J B	8.8	1.2	ng/L		09/16/11 14:15	10/06/11 17:37	1
Perylene	ND		3.9	3.9	ng/L		09/16/11 14:15	10/06/11 17:37	1
Phenanthrene	ND		6.4	3.3	ng/L		09/16/11 14:15	10/06/11 17:37	1
Pyrene	2.3	J B	4.3	1.0	ng/L		09/16/11 14:15	10/06/11 17:37	1
Quinoline	ND	*	9.2	5.8	ng/L		09/16/11 14:15	10/06/11 17:37	1
Biphenyl	ND		5.7	1.1	ng/L		09/16/11 14:15	10/06/11 17:37	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*69*		*23 - 84*	*09/16/11 14:15*	*10/06/11 17:37*	*1*
Chrysene-d12 (Surr)	*24*	*X*	*28 - 101*	*09/16/11 14:15*	*10/06/11 17:37*	*1*
Naphthalene-d8 (Surr)	*79*		*22 - 97*	*09/16/11 14:15*	*10/06/11 17:37*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP6-091311
Date Collected: 09/13/11 11:45
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**0.82**	**J**	5.5	0.70	ng/L		09/16/11 14:15	10/06/11 18:13	1
2,3-Dihydroindene	**54**		5.1	0.72	ng/L		09/16/11 14:15	10/06/11 18:13	1
1-Methylnaphthalene	**2.3**	**J**	5.7	0.91	ng/L		09/16/11 14:15	10/06/11 18:13	1
2-Methylnaphthalene	**1.4**	**J B**	6.1	1.0	ng/L		09/16/11 14:15	10/06/11 18:13	1
Acenaphthene	**77**		5.8	0.51	ng/L		09/16/11 14:15	10/06/11 18:13	1
Acenaphthylene	**9.1**		4.9	0.79	ng/L		09/16/11 14:15	10/06/11 18:13	1
Acridine	ND	*	6.7	6.7	ng/L		09/16/11 14:15	10/06/11 18:13	1
Anthracene	**2.3**	**J**	4.3	0.82	ng/L		09/16/11 14:15	10/06/11 18:13	1
Benzo[a]anthracene	ND		4.4	0.94	ng/L		09/16/11 14:15	10/06/11 18:13	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		09/16/11 14:15	10/06/11 18:13	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		09/16/11 14:15	10/06/11 18:13	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		09/16/11 14:15	10/06/11 18:13	1
Benzo(b)thiophene	**12**		5.3	0.77	ng/L		09/16/11 14:15	10/06/11 18:13	1
Benzo[k]fluoranthene	ND	*	4.2	1.3	ng/L		09/16/11 14:15	10/06/11 18:13	1
Benzo[g,h,i]perylene	ND		6.4	1.2	ng/L		09/16/11 14:15	10/06/11 18:13	1
Carbazole	**2.4**	**J**	3.9	0.74	ng/L		09/16/11 14:15	10/06/11 18:13	1
Chrysene	ND	*	5.7	1.3	ng/L		09/16/11 14:15	10/06/11 18:13	1
Dibenz(a,h)anthracene	ND		6.1	1.1	ng/L		09/16/11 14:15	10/06/11 18:13	1
Dibenzofuran	ND		5.8	1.0	ng/L		09/16/11 14:15	10/06/11 18:13	1
Dibenzothiophene	**1.7**	**J**	4.2	1.0	ng/L		09/16/11 14:15	10/06/11 18:13	1
Fluoranthene	**4.1**	**J**	4.7	1.7	ng/L		09/16/11 14:15	10/06/11 18:13	1
Fluorene	**0.93**	**J**	4.2	0.87	ng/L		09/16/11 14:15	10/06/11 18:13	1
Indene	**6.9**		4.8	3.4	ng/L		09/16/11 14:15	10/06/11 18:13	1
Indole	**3.4**	**J**	4.8	1.8	ng/L		09/16/11 14:15	10/06/11 18:13	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		09/16/11 14:15	10/06/11 18:13	1
Naphthalene	**5.0**	**J B**	8.8	1.2	ng/L		09/16/11 14:15	10/06/11 18:13	1
Perylene	ND		3.9	3.9	ng/L		09/16/11 14:15	10/06/11 18:13	1
Phenanthrene	ND		6.5	3.3	ng/L		09/16/11 14:15	10/06/11 18:13	1
Pyrene	**4.6**	**B**	4.3	1.0	ng/L		09/16/11 14:15	10/06/11 18:13	1
Quinoline	ND	*	9.2	5.8	ng/L		09/16/11 14:15	10/06/11 18:13	1
Biphenyl	ND		5.7	1.1	ng/L		09/16/11 14:15	10/06/11 18:13	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*71*		*23 - 84*	*09/16/11 14:15*	*10/06/11 18:13*	*1*
Chrysene-d12 (Surr)	*26*	*X*	*28 - 101*	*09/16/11 14:15*	*10/06/11 18:13*	*1*
Naphthalene-d8 (Surr)	*76*		*22 - 97*	*09/16/11 14:15*	*10/06/11 18:13*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: W119-091311
Date Collected: 09/13/11 12:00
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.5	0.69	ng/L		09/16/11 14:15	10/06/11 18:49	1
2,3-Dihydroindene	**4.9**	**J**	5.1	0.72	ng/L		09/16/11 14:15	10/06/11 18:49	1
1-Methylnaphthalene	**1.4**	**J**	5.7	0.91	ng/L		09/16/11 14:15	10/06/11 18:49	1
2-Methylnaphthalene	**1.2**	**J B**	6.0	1.0	ng/L		09/16/11 14:15	10/06/11 18:49	1
Acenaphthene	**42**		5.8	0.51	ng/L		09/16/11 14:15	10/06/11 18:49	1
Acenaphthylene	**2.6**	**J**	4.9	0.79	ng/L		09/16/11 14:15	10/06/11 18:49	1
Acridine	ND	*	6.6	6.6	ng/L		09/16/11 14:15	10/06/11 18:49	1
Anthracene	**3.5**	**J**	4.3	0.82	ng/L		09/16/11 14:15	10/06/11 18:49	1
Benzo[a]anthracene	**1.5**	**J B**	4.4	0.94	ng/L		09/16/11 14:15	10/06/11 18:49	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		09/16/11 14:15	10/06/11 18:49	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		09/16/11 14:15	10/06/11 18:49	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		09/16/11 14:15	10/06/11 18:49	1
Benzo(b)thiophene	**6.1**		5.3	0.77	ng/L		09/16/11 14:15	10/06/11 18:49	1
Benzo[k]fluoranthene	ND	*	4.2	1.3	ng/L		09/16/11 14:15	10/06/11 18:49	1
Benzo[g,h,i]perylene	ND		6.3	1.2	ng/L		09/16/11 14:15	10/06/11 18:49	1
Carbazole	**1.5**	**J**	3.9	0.74	ng/L		09/16/11 14:15	10/06/11 18:49	1
Chrysene	**1.7**	**J * B**	5.7	1.3	ng/L		09/16/11 14:15	10/06/11 18:49	1
Dibenz(a,h)anthracene	ND		6.0	1.1	ng/L		09/16/11 14:15	10/06/11 18:49	1
Dibenzofuran	ND		5.8	1.0	ng/L		09/16/11 14:15	10/06/11 18:49	1
Dibenzothiophene	ND		4.2	1.0	ng/L		09/16/11 14:15	10/06/11 18:49	1
Fluoranthene	ND		4.7	1.7	ng/L		09/16/11 14:15	10/06/11 18:49	1
Fluorene	ND		4.2	0.87	ng/L		09/16/11 14:15	10/06/11 18:49	1
Indene	**11**		4.8	3.4	ng/L		09/16/11 14:15	10/06/11 18:49	1
Indole	**3.3**	**J**	4.8	1.8	ng/L		09/16/11 14:15	10/06/11 18:49	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		09/16/11 14:15	10/06/11 18:49	1
Naphthalene	**3.5**	**J B**	8.8	1.2	ng/L		09/16/11 14:15	10/06/11 18:49	1
Perylene	ND		3.9	3.9	ng/L		09/16/11 14:15	10/06/11 18:49	1
Phenanthrene	ND		6.4	3.3	ng/L		09/16/11 14:15	10/06/11 18:49	1
Pyrene	**14**	**B**	4.3	1.0	ng/L		09/16/11 14:15	10/06/11 18:49	1
Quinoline	ND	*	9.2	5.8	ng/L		09/16/11 14:15	10/06/11 18:49	1
Biphenyl	ND		5.7	1.1	ng/L		09/16/11 14:15	10/06/11 18:49	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*83*		*23 - 84*	*09/16/11 14:15*	*10/06/11 18:49*	*1*
Chrysene-d12 (Surr)	*50*		*28 - 101*	*09/16/11 14:15*	*10/06/11 18:49*	*1*
Naphthalene-d8 (Surr)	*87*		*22 - 97*	*09/16/11 14:15*	*10/06/11 18:49*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP10TACIDFRACTION-091311
Date Collected: 09/13/11 15:20
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		10	2.0	ug/L		09/17/11 11:25	09/29/11 22:51	1
2-Chlorophenol	ND		10	2.0	ug/L		09/17/11 11:25	09/29/11 22:51	1
2,4-Dimethylphenol	ND		10	0.59	ug/L		09/17/11 11:25	09/29/11 22:51	1
2-Nitrophenol	ND		20	0.40	ug/L		09/17/11 11:25	09/29/11 22:51	1
2,4-Dichlorophenol	ND		10	0.65	ug/L		09/17/11 11:25	09/29/11 22:51	1
4-Chloro-3-methylphenol	ND		20	2.5	ug/L		09/17/11 11:25	09/29/11 22:51	1
2,4,6-Trichlorophenol	ND		20	0.30	ug/L		09/17/11 11:25	09/29/11 22:51	1
2,4-Dinitrophenol	ND		61	10	ug/L		09/17/11 11:25	09/29/11 22:51	1
4-Nitrophenol	ND		51	1.3	ug/L		09/17/11 11:25	09/29/11 22:51	1
4,6-Dinitro-2-methylphenol	ND		61	4.1	ug/L		09/17/11 11:25	09/29/11 22:51	1
Pentachlorophenol	ND		61	20	ug/L		09/17/11 11:25	09/29/11 22:51	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*76*		*51 - 120*	*09/17/11 11:25*	*09/29/11 22:51*	*1*
Phenol-d5	*80*		*51 - 120*	*09/17/11 11:25*	*09/29/11 22:51*	*1*
Nitrobenzene-d5	*82*		*48 - 120*	*09/17/11 11:25*	*09/29/11 22:51*	*1*
2-Fluorobiphenyl	*72*		*38 - 120*	*09/17/11 11:25*	*09/29/11 22:51*	*1*
Terphenyl-d14	*82*		*50 - 120*	*09/17/11 11:25*	*09/29/11 22:51*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP10T-091311
Date Collected: 09/13/11 15:15
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-8
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.5	0.69	ng/L		09/16/11 14:15	10/06/11 19:24	1
2,3-Dihydroindene	**24**		5.1	0.71	ng/L		09/16/11 14:15	10/06/11 19:24	1
1-Methylnaphthalene	**3.9**	**J**	5.7	0.91	ng/L		09/16/11 14:15	10/06/11 19:24	1
2-Methylnaphthalene	ND		6.0	1.0	ng/L		09/16/11 14:15	10/06/11 19:24	1
Acenaphthene	**13**		5.8	0.51	ng/L		09/16/11 14:15	10/06/11 19:24	1
Acenaphthylene	**0.84**	**J**	4.9	0.79	ng/L		09/16/11 14:15	10/06/11 19:24	1
Acridine	ND	*	6.6	6.6	ng/L		09/16/11 14:15	10/06/11 19:24	1
Anthracene	ND		4.3	0.82	ng/L		09/16/11 14:15	10/06/11 19:24	1
Benzo[a]anthracene	ND		4.4	0.94	ng/L		09/16/11 14:15	10/06/11 19:24	1
Benzo[a]pyrene	ND		2.5	1.3	ng/L		09/16/11 14:15	10/06/11 19:24	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		09/16/11 14:15	10/06/11 19:24	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		09/16/11 14:15	10/06/11 19:24	1
Benzo(b)thiophene	**2.6**	**J**	5.3	0.76	ng/L		09/16/11 14:15	10/06/11 19:24	1
Benzo[k]fluoranthene	ND	*	4.2	1.3	ng/L		09/16/11 14:15	10/06/11 19:24	1
Benzo[g,h,i]perylene	**1.3**	**J B**	6.3	1.2	ng/L		09/16/11 14:15	10/06/11 19:24	1
Carbazole	ND		3.9	0.73	ng/L		09/16/11 14:15	10/06/11 19:24	1
Chrysene	**1.4**	**J * B**	5.7	1.3	ng/L		09/16/11 14:15	10/06/11 19:24	1
Dibenz(a,h)anthracene	ND		6.0	1.1	ng/L		09/16/11 14:15	10/06/11 19:24	1
Dibenzofuran	ND		5.8	1.0	ng/L		09/16/11 14:15	10/06/11 19:24	1
Dibenzothiophene	ND		4.2	1.0	ng/L		09/16/11 14:15	10/06/11 19:24	1
Fluoranthene	ND		4.7	1.7	ng/L		09/16/11 14:15	10/06/11 19:24	1
Fluorene	**1.2**	**J**	4.2	0.87	ng/L		09/16/11 14:15	10/06/11 19:24	1
Indene	ND		4.8	3.3	ng/L		09/16/11 14:15	10/06/11 19:24	1
Indole	ND		4.8	1.8	ng/L		09/16/11 14:15	10/06/11 19:24	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		09/16/11 14:15	10/06/11 19:24	1
Naphthalene	**2.0**	**J B**	8.8	1.2	ng/L		09/16/11 14:15	10/06/11 19:24	1
Perylene	ND		3.9	3.9	ng/L		09/16/11 14:15	10/06/11 19:24	1
Phenanthrene	ND		6.4	3.3	ng/L		09/16/11 14:15	10/06/11 19:24	1
Pyrene	ND		4.3	1.0	ng/L		09/16/11 14:15	10/06/11 19:24	1
Quinoline	ND	*	9.2	5.8	ng/L		09/16/11 14:15	10/06/11 19:24	1
Biphenyl	ND		5.7	1.1	ng/L		09/16/11 14:15	10/06/11 19:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*71*		*23 - 84*	*09/16/11 14:15*	*10/06/11 19:24*	*1*
Chrysene-d12 (Surr)	*56*		*28 - 101*	*09/16/11 14:15*	*10/06/11 19:24*	*1*
Naphthalene-d8 (Surr)	*75*		*22 - 97*	*09/16/11 14:15*	*10/06/11 19:24*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP10-091311
Date Collected: 09/13/11 13:45
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-9
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.5	0.70	ng/L		09/16/11 14:15	10/06/11 20:00	1
2,3-Dihydroindene	**75**		5.1	0.72	ng/L		09/16/11 14:15	10/06/11 20:00	1
1-Methylnaphthalene	**32**		5.7	0.91	ng/L		09/16/11 14:15	10/06/11 20:00	1
2-Methylnaphthalene	ND		6.0	1.0	ng/L		09/16/11 14:15	10/06/11 20:00	1
Acenaphthene	**220**		5.8	0.51	ng/L		09/16/11 14:15	10/06/11 20:00	1
Acenaphthylene	**17**		4.9	0.79	ng/L		09/16/11 14:15	10/06/11 20:00	1
Acridine	ND	*	6.6	6.6	ng/L		09/16/11 14:15	10/06/11 20:00	1
Anthracene	**0.97**	**J**	4.3	0.82	ng/L		09/16/11 14:15	10/06/11 20:00	1
Benzo[a]anthracene	**1.3**	**J B**	4.4	0.94	ng/L		09/16/11 14:15	10/06/11 20:00	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		09/16/11 14:15	10/06/11 20:00	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		09/16/11 14:15	10/06/11 20:00	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		09/16/11 14:15	10/06/11 20:00	1
Benzo(b)thiophene	**17**		5.3	0.77	ng/L		09/16/11 14:15	10/06/11 20:00	1
Benzo[k]fluoranthene	ND	*	4.2	1.3	ng/L		09/16/11 14:15	10/06/11 20:00	1
Benzo[g,h,i]perylene	ND		6.3	1.2	ng/L		09/16/11 14:15	10/06/11 20:00	1
Carbazole	**9.0**		3.9	0.74	ng/L		09/16/11 14:15	10/06/11 20:00	1
Chrysene	**1.6**	**J * B**	5.7	1.3	ng/L		09/16/11 14:15	10/06/11 20:00	1
Dibenz(a,h)anthracene	ND		6.0	1.1	ng/L		09/16/11 14:15	10/06/11 20:00	1
Dibenzofuran	**8.2**		5.8	1.0	ng/L		09/16/11 14:15	10/06/11 20:00	1
Dibenzothiophene	**10**		4.2	1.0	ng/L		09/16/11 14:15	10/06/11 20:00	1
Fluoranthene	**22**		4.7	1.7	ng/L		09/16/11 14:15	10/06/11 20:00	1
Fluorene	**49**		4.2	0.87	ng/L		09/16/11 14:15	10/06/11 20:00	1
Indene	**24**		4.8	3.4	ng/L		09/16/11 14:15	10/06/11 20:00	1
Indole	ND		4.8	1.8	ng/L		09/16/11 14:15	10/06/11 20:00	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		09/16/11 14:15	10/06/11 20:00	1
Naphthalene	**2.4**	**J B**	8.8	1.2	ng/L		09/16/11 14:15	10/06/11 20:00	1
Perylene	ND		3.9	3.9	ng/L		09/16/11 14:15	10/06/11 20:00	1
Phenanthrene	**4.5**	**J**	6.4	3.3	ng/L		09/16/11 14:15	10/06/11 20:00	1
Pyrene	**44**	**B**	4.3	1.0	ng/L		09/16/11 14:15	10/06/11 20:00	1
Quinoline	ND	*	9.2	5.8	ng/L		09/16/11 14:15	10/06/11 20:00	1
Biphenyl	**1.5**	**J**	5.7	1.1	ng/L		09/16/11 14:15	10/06/11 20:00	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*66*		*23 - 84*	*09/16/11 14:15*	*10/06/11 20:00*	*1*
Chrysene-d12 (Surr)	*48*		*28 - 101*	*09/16/11 14:15*	*10/06/11 20:00*	*1*
Naphthalene-d8 (Surr)	*66*		*22 - 97*	*09/16/11 14:15*	*10/06/11 20:00*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP11-091311
Date Collected: 09/13/11 16:30
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-10
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	3.9	J	6.1	0.76	ng/L		09/18/11 15:45	10/06/11 20:36	1
2,3-Dihydroindene	20		5.6	0.79	ng/L		09/18/11 15:45	10/06/11 20:36	1
1-Methylnaphthalene	3.3	J	6.3	1.0	ng/L		09/18/11 15:45	10/06/11 20:36	1
2-Methylnaphthalene	1.4	J	6.6	1.1	ng/L		09/18/11 15:45	10/06/11 20:36	1
Acenaphthene	9.6	B	6.4	0.56	ng/L		09/18/11 15:45	10/06/11 20:36	1
Acenaphthylene	ND		5.4	0.87	ng/L		09/18/11 15:45	10/06/11 20:36	1
Acridine	ND	*	7.3	7.3	ng/L		09/18/11 15:45	10/06/11 20:36	1
Anthracene	ND		4.7	0.90	ng/L		09/18/11 15:45	10/06/11 20:36	1
Benzo[a]anthracene	ND		4.8	1.0	ng/L		09/18/11 15:45	10/06/11 20:36	1
Benzo[a]pyrene	ND		2.8	1.4	ng/L		09/18/11 15:45	10/06/11 20:36	1
Benzo[e]pyrene	ND		4.8	1.3	ng/L		09/18/11 15:45	10/06/11 20:36	1
Benzo[b]fluoranthene	ND		5.3	1.6	ng/L		09/18/11 15:45	10/06/11 20:36	1
Benzo(b)thiophene	9.9		5.8	0.84	ng/L		09/18/11 15:45	10/06/11 20:36	1
Benzo[k]fluoranthene	ND		4.6	1.4	ng/L		09/18/11 15:45	10/06/11 20:36	1
Benzo[g,h,i]perylene	ND		7.0	1.3	ng/L		09/18/11 15:45	10/06/11 20:36	1
Carbazole	2.2	J	4.3	0.81	ng/L		09/18/11 15:45	10/06/11 20:36	1
Chrysene	ND		6.3	1.4	ng/L		09/18/11 15:45	10/06/11 20:36	1
Dibenz(a,h)anthracene	ND		6.6	1.2	ng/L		09/18/11 15:45	10/06/11 20:36	1
Dibenzofuran	ND		6.4	1.1	ng/L		09/18/11 15:45	10/06/11 20:36	1
Dibenzothiophene	ND		4.6	1.1	ng/L		09/18/11 15:45	10/06/11 20:36	1
Fluoranthene	ND		5.2	1.9	ng/L		09/18/11 15:45	10/06/11 20:36	1
Fluorene	1.1	J	4.6	0.96	ng/L		09/18/11 15:45	10/06/11 20:36	1
Indene	19		5.3	3.7	ng/L		09/18/11 15:45	10/06/11 20:36	1
Indole	ND		5.3	1.9	ng/L		09/18/11 15:45	10/06/11 20:36	1
Indeno[1,2,3-cd]pyrene	ND		6.1	1.4	ng/L		09/18/11 15:45	10/06/11 20:36	1
Naphthalene	22	*	9.7	1.3	ng/L		09/18/11 15:45	10/06/11 20:36	1
Perylene	ND		4.3	4.3	ng/L		09/18/11 15:45	10/06/11 20:36	1
Phenanthrene	ND		7.1	3.6	ng/L		09/18/11 15:45	10/06/11 20:36	1
Pyrene	ND		4.7	1.1	ng/L		09/18/11 15:45	10/06/11 20:36	1
Quinoline	ND		10	6.4	ng/L		09/18/11 15:45	10/06/11 20:36	1
Biphenyl	ND		6.3	1.2	ng/L		09/18/11 15:45	10/06/11 20:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*82*		*23 - 84*	*09/18/11 15:45*	*10/06/11 20:36*	*1*
Chrysene-d12 (Surr)	*50*		*28 - 101*	*09/18/11 15:45*	*10/06/11 20:36*	*1*
Naphthalene-d8 (Surr)	*68*		*22 - 97*	*09/18/11 15:45*	*10/06/11 20:36*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP11DUP-091311
Date Collected: 09/13/11 16:35
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-11
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**4.4**	**J**	6.0	0.75	ng/L		09/18/11 15:45	10/06/11 22:24	1
2,3-Dihydroindene	**20**		5.5	0.77	ng/L		09/18/11 15:45	10/06/11 22:24	1
1-Methylnaphthalene	**2.8**	**J**	6.2	0.98	ng/L		09/18/11 15:45	10/06/11 22:24	1
2-Methylnaphthalene	ND		6.5	1.1	ng/L		09/18/11 15:45	10/06/11 22:24	1
Acenaphthene	**9.4**	**B**	6.3	0.55	ng/L		09/18/11 15:45	10/06/11 22:24	1
Acenaphthylene	ND		5.3	0.85	ng/L		09/18/11 15:45	10/06/11 22:24	1
Acridine	ND	*	7.2	7.2	ng/L		09/18/11 15:45	10/06/11 22:24	1
Anthracene	**2.6**	**J**	4.6	0.88	ng/L		09/18/11 15:45	10/06/11 22:24	1
Benzo[a]anthracene	ND		4.8	1.0	ng/L		09/18/11 15:45	10/06/11 22:24	1
Benzo[a]pyrene	ND		2.8	1.4	ng/L		09/18/11 15:45	10/06/11 22:24	1
Benzo[e]pyrene	ND		4.8	1.3	ng/L		09/18/11 15:45	10/06/11 22:24	1
Benzo[b]fluoranthene	ND		5.2	1.5	ng/L		09/18/11 15:45	10/06/11 22:24	1
Benzo(b)thiophene	**9.0**		5.7	0.83	ng/L		09/18/11 15:45	10/06/11 22:24	1
Benzo[k]fluoranthene	ND		4.5	1.4	ng/L		09/18/11 15:45	10/06/11 22:24	1
Benzo[g,h,i]perylene	ND		6.9	1.3	ng/L		09/18/11 15:45	10/06/11 22:24	1
Carbazole	**2.0**	**J**	4.2	0.80	ng/L		09/18/11 15:45	10/06/11 22:24	1
Chrysene	ND		6.2	1.4	ng/L		09/18/11 15:45	10/06/11 22:24	1
Dibenz(a,h)anthracene	ND		6.5	1.1	ng/L		09/18/11 15:45	10/06/11 22:24	1
Dibenzofuran	ND		6.3	1.1	ng/L		09/18/11 15:45	10/06/11 22:24	1
Dibenzothiophene	**21**		4.5	1.1	ng/L		09/18/11 15:45	10/06/11 22:24	1
Fluoranthene	ND		5.1	1.9	ng/L		09/18/11 15:45	10/06/11 22:24	1
Fluorene	**1.3**	**J**	4.5	0.94	ng/L		09/18/11 15:45	10/06/11 22:24	1
Indene	**21**		5.2	3.6	ng/L		09/18/11 15:45	10/06/11 22:24	1
Indole	ND		5.2	1.9	ng/L		09/18/11 15:45	10/06/11 22:24	1
Indeno[1,2,3-cd]pyrene	ND		6.0	1.4	ng/L		09/18/11 15:45	10/06/11 22:24	1
Naphthalene	**18**	*****	9.5	1.3	ng/L		09/18/11 15:45	10/06/11 22:24	1
Perylene	ND		4.2	4.2	ng/L		09/18/11 15:45	10/06/11 22:24	1
Phenanthrene	ND		7.0	3.5	ng/L		09/18/11 15:45	10/06/11 22:24	1
Pyrene	ND		4.6	1.1	ng/L		09/18/11 15:45	10/06/11 22:24	1
Quinoline	ND		10	6.2	ng/L		09/18/11 15:45	10/06/11 22:24	1
Biphenyl	ND		6.2	1.2	ng/L		09/18/11 15:45	10/06/11 22:24	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*74*		*23 - 84*	*09/18/11 15:45*	*10/06/11 22:24*	*1*
Chrysene-d12 (Surr)	*41*		*28 - 101*	*09/18/11 15:45*	*10/06/11 22:24*	*1*
Naphthalene-d8 (Surr)	*65*		*22 - 97*	*09/18/11 15:45*	*10/06/11 22:24*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP11FB-091311
Date Collected: 09/13/11 16:20
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-12
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**1.1**	**J**	5.6	0.70	ng/L		09/18/11 15:45	10/06/11 23:00	1
2,3-Dihydroindene	**1.5**	**J**	5.2	0.72	ng/L		09/18/11 15:45	10/06/11 23:00	1
1-Methylnaphthalene	**2.8**	**J**	5.8	0.92	ng/L		09/18/11 15:45	10/06/11 23:00	1
2-Methylnaphthalene	**3.8**	**J**	6.1	1.0	ng/L		09/18/11 15:45	10/06/11 23:00	1
Acenaphthene	**0.59**	**J B**	5.9	0.52	ng/L		09/18/11 15:45	10/06/11 23:00	1
Acenaphthylene	**3.5**	**J**	4.9	0.79	ng/L		09/18/11 15:45	10/06/11 23:00	1
Acridine	ND	*	6.7	6.7	ng/L		09/18/11 15:45	10/06/11 23:00	1
Anthracene	ND		4.3	0.82	ng/L		09/18/11 15:45	10/06/11 23:00	1
Benzo[a]anthracene	ND		4.4	0.95	ng/L		09/18/11 15:45	10/06/11 23:00	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		09/18/11 15:45	10/06/11 23:00	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		09/18/11 15:45	10/06/11 23:00	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		09/18/11 15:45	10/06/11 23:00	1
Benzo(b)thiophene	**5.8**		5.4	0.77	ng/L		09/18/11 15:45	10/06/11 23:00	1
Benzo[k]fluoranthene	ND		4.2	1.3	ng/L		09/18/11 15:45	10/06/11 23:00	1
Benzo[g,h,i]perylene	ND		6.4	1.2	ng/L		09/18/11 15:45	10/06/11 23:00	1
Carbazole	ND		3.9	0.74	ng/L		09/18/11 15:45	10/06/11 23:00	1
Chrysene	ND		5.8	1.3	ng/L		09/18/11 15:45	10/06/11 23:00	1
Dibenz(a,h)anthracene	ND		6.1	1.1	ng/L		09/18/11 15:45	10/06/11 23:00	1
Dibenzofuran	ND		5.9	1.0	ng/L		09/18/11 15:45	10/06/11 23:00	1
Dibenzothiophene	**20**		4.2	1.0	ng/L		09/18/11 15:45	10/06/11 23:00	1
Fluoranthene	ND		4.7	1.7	ng/L		09/18/11 15:45	10/06/11 23:00	1
Fluorene	ND		4.2	0.88	ng/L		09/18/11 15:45	10/06/11 23:00	1
Indene	ND		4.8	3.4	ng/L		09/18/11 15:45	10/06/11 23:00	1
Indole	ND		4.8	1.8	ng/L		09/18/11 15:45	10/06/11 23:00	1
Indeno[1,2,3-cd]pyrene	ND		5.6	1.3	ng/L		09/18/11 15:45	10/06/11 23:00	1
Naphthalene	**4.6**	**J ***	8.9	1.2	ng/L		09/18/11 15:45	10/06/11 23:00	1
Perylene	ND		3.9	3.9	ng/L		09/18/11 15:45	10/06/11 23:00	1
Phenanthrene	ND		6.5	3.3	ng/L		09/18/11 15:45	10/06/11 23:00	1
Pyrene	ND		4.3	1.0	ng/L		09/18/11 15:45	10/06/11 23:00	1
Quinoline	ND		9.3	5.8	ng/L		09/18/11 15:45	10/06/11 23:00	1
Biphenyl	ND		5.8	1.1	ng/L		09/18/11 15:45	10/06/11 23:00	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*91*	*X*	*23 - 84*	*09/18/11 15:45*	*10/06/11 23:00*	*1*
Chrysene-d12 (Surr)	*84*		*28 - 101*	*09/18/11 15:45*	*10/06/11 23:00*	*1*
Naphthalene-d8 (Surr)	*84*		*22 - 97*	*09/18/11 15:45*	*10/06/11 23:00*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP11FBD-091311
Date Collected: 09/13/11 16:25
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-13
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**1.1**	**J**	5.7	0.72	ng/L		09/18/11 15:45	10/06/11 23:37	1
2,3-Dihydroindene	**2.2**	**J**	5.3	0.74	ng/L		09/18/11 15:45	10/06/11 23:37	1
1-Methylnaphthalene	**1.5**	**J**	5.9	0.94	ng/L		09/18/11 15:45	10/06/11 23:37	1
2-Methylnaphthalene	**2.7**	**J**	6.2	1.0	ng/L		09/18/11 15:45	10/06/11 23:37	1
Acenaphthene	**0.61**	**J B**	6.0	0.53	ng/L		09/18/11 15:45	10/06/11 23:37	1
Acenaphthylene	**3.0**	**J**	5.1	0.81	ng/L		09/18/11 15:45	10/06/11 23:37	1
Acridine	ND	*	6.9	6.9	ng/L		09/18/11 15:45	10/06/11 23:37	1
Anthracene	**0.85**	**J**	4.4	0.85	ng/L		09/18/11 15:45	10/06/11 23:37	1
Benzo[a]anthracene	ND		4.5	0.97	ng/L		09/18/11 15:45	10/06/11 23:37	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		09/18/11 15:45	10/06/11 23:37	1
Benzo[e]pyrene	ND		4.5	1.2	ng/L		09/18/11 15:45	10/06/11 23:37	1
Benzo[b]fluoranthene	ND		5.0	1.5	ng/L		09/18/11 15:45	10/06/11 23:37	1
Benzo(b)thiophene	**5.9**		5.5	0.79	ng/L		09/18/11 15:45	10/06/11 23:37	1
Benzo[k]fluoranthene	ND		4.3	1.3	ng/L		09/18/11 15:45	10/06/11 23:37	1
Benzo[g,h,i]perylene	ND		6.6	1.2	ng/L		09/18/11 15:45	10/06/11 23:37	1
Carbazole	ND		4.0	0.76	ng/L		09/18/11 15:45	10/06/11 23:37	1
Chrysene	ND		5.9	1.3	ng/L		09/18/11 15:45	10/06/11 23:37	1
Dibenz(a,h)anthracene	ND		6.2	1.1	ng/L		09/18/11 15:45	10/06/11 23:37	1
Dibenzofuran	ND		6.0	1.0	ng/L		09/18/11 15:45	10/06/11 23:37	1
Dibenzothiophene	**21**		4.3	1.0	ng/L		09/18/11 15:45	10/06/11 23:37	1
Fluoranthene	ND		4.9	1.8	ng/L		09/18/11 15:45	10/06/11 23:37	1
Fluorene	ND		4.3	0.90	ng/L		09/18/11 15:45	10/06/11 23:37	1
Indene	ND		5.0	3.5	ng/L		09/18/11 15:45	10/06/11 23:37	1
Indole	ND		5.0	1.8	ng/L		09/18/11 15:45	10/06/11 23:37	1
Indeno[1,2,3-cd]pyrene	ND		5.7	1.3	ng/L		09/18/11 15:45	10/06/11 23:37	1
Naphthalene	**4.5**	**J ***	9.1	1.2	ng/L		09/18/11 15:45	10/06/11 23:37	1
Perylene	ND		4.0	4.0	ng/L		09/18/11 15:45	10/06/11 23:37	1
Phenanthrene	ND		6.7	3.4	ng/L		09/18/11 15:45	10/06/11 23:37	1
Pyrene	ND		4.4	1.0	ng/L		09/18/11 15:45	10/06/11 23:37	1
Quinoline	ND		9.5	6.0	ng/L		09/18/11 15:45	10/06/11 23:37	1
Biphenyl	ND		5.9	1.1	ng/L		09/18/11 15:45	10/06/11 23:37	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*80*		*23 - 84*	*09/18/11 15:45*	*10/06/11 23:37*	*1*
Chrysene-d12 (Surr)	*71*		*28 - 101*	*09/18/11 15:45*	*10/06/11 23:37*	*1*
Naphthalene-d8 (Surr)	*85*		*22 - 97*	*09/18/11 15:45*	*10/06/11 23:37*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: W401-091411
Date Collected: 09/14/11 09:00
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-14
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		6.0	0.76	ng/L		09/18/11 15:45	10/07/11 00:14	1
2,3-Dihydroindene	**2.4**	**J**	5.6	0.78	ng/L		09/18/11 15:45	10/07/11 00:14	1
1-Methylnaphthalene	**1.2**	**J**	6.3	1.0	ng/L		09/18/11 15:45	10/07/11 00:14	1
2-Methylnaphthalene	**1.6**	**J**	6.6	1.1	ng/L		09/18/11 15:45	10/07/11 00:14	1
Acenaphthene	**6.1**	**J B**	6.4	0.56	ng/L		09/18/11 15:45	10/07/11 00:14	1
Acenaphthylene	ND		5.4	0.86	ng/L		09/18/11 15:45	10/07/11 00:14	1
Acridine	ND	*	7.3	7.3	ng/L		09/18/11 15:45	10/07/11 00:14	1
Anthracene	**0.90**	**J**	4.7	0.90	ng/L		09/18/11 15:45	10/07/11 00:14	1
Benzo[a]anthracene	ND		4.8	1.0	ng/L		09/18/11 15:45	10/07/11 00:14	1
Benzo[a]pyrene	ND		2.8	1.4	ng/L		09/18/11 15:45	10/07/11 00:14	1
Benzo[e]pyrene	ND		4.8	1.3	ng/L		09/18/11 15:45	10/07/11 00:14	1
Benzo[b]fluoranthene	ND		5.3	1.6	ng/L		09/18/11 15:45	10/07/11 00:14	1
Benzo(b)thiophene	**6.5**		5.8	0.84	ng/L		09/18/11 15:45	10/07/11 00:14	1
Benzo[k]fluoranthene	ND		4.6	1.4	ng/L		09/18/11 15:45	10/07/11 00:14	1
Benzo[g,h,i]perylene	ND		6.9	1.3	ng/L		09/18/11 15:45	10/07/11 00:14	1
Carbazole	**0.86**	**J**	4.3	0.81	ng/L		09/18/11 15:45	10/07/11 00:14	1
Chrysene	ND		6.3	1.4	ng/L		09/18/11 15:45	10/07/11 00:14	1
Dibenz(a,h)anthracene	ND		6.6	1.2	ng/L		09/18/11 15:45	10/07/11 00:14	1
Dibenzofuran	ND		6.4	1.1	ng/L		09/18/11 15:45	10/07/11 00:14	1
Dibenzothiophene	**22**		4.6	1.1	ng/L		09/18/11 15:45	10/07/11 00:14	1
Fluoranthene	ND		5.1	1.9	ng/L		09/18/11 15:45	10/07/11 00:14	1
Fluorene	ND		4.6	0.95	ng/L		09/18/11 15:45	10/07/11 00:14	1
Indene	ND		5.3	3.7	ng/L		09/18/11 15:45	10/07/11 00:14	1
Indole	ND		5.3	1.9	ng/L		09/18/11 15:45	10/07/11 00:14	1
Indeno[1,2,3-cd]pyrene	ND		6.0	1.4	ng/L		09/18/11 15:45	10/07/11 00:14	1
Naphthalene	**3.3**	**J ***	9.6	1.3	ng/L		09/18/11 15:45	10/07/11 00:14	1
Perylene	ND		4.3	4.3	ng/L		09/18/11 15:45	10/07/11 00:14	1
Phenanthrene	ND		7.1	3.6	ng/L		09/18/11 15:45	10/07/11 00:14	1
Pyrene	**3.4**	**J**	4.7	1.1	ng/L		09/18/11 15:45	10/07/11 00:14	1
Quinoline	ND		10	6.3	ng/L		09/18/11 15:45	10/07/11 00:14	1
Biphenyl	ND		6.3	1.2	ng/L		09/18/11 15:45	10/07/11 00:14	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*79*		*23 - 84*	*09/18/11 15:45*	*10/07/11 00:14*	*1*
Chrysene-d12 (Surr)	*16*	*X*	*28 - 101*	*09/18/11 15:45*	*10/07/11 00:14*	*1*
Naphthalene-d8 (Surr)	*90*		*22 - 97*	*09/18/11 15:45*	*10/07/11 00:14*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: W402-091411
Date Collected: 09/14/11 08:55
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-15
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**0.86**	**J**	5.7	0.71	ng/L		09/18/11 15:45	10/07/11 00:51	1
2,3-Dihydroindene	**4.8**	**J**	5.2	0.73	ng/L		09/18/11 15:45	10/07/11 00:51	1
1-Methylnaphthalene	**2.7**	**J**	5.9	0.93	ng/L		09/18/11 15:45	10/07/11 00:51	1
2-Methylnaphthalene	**27**		6.2	1.0	ng/L		09/18/11 15:45	10/07/11 00:51	1
Acenaphthene	**3.4**	**J B**	6.0	0.52	ng/L		09/18/11 15:45	10/07/11 00:51	1
Acenaphthylene	**2.2**	**J**	5.0	0.81	ng/L		09/18/11 15:45	10/07/11 00:51	1
Acridine	ND	*	6.8	6.8	ng/L		09/18/11 15:45	10/07/11 00:51	1
Anthracene	**0.90**	**J**	4.4	0.84	ng/L		09/18/11 15:45	10/07/11 00:51	1
Benzo[a]anthracene	ND		4.5	0.96	ng/L		09/18/11 15:45	10/07/11 00:51	1
Benzo[a]pyrene	ND		2.6	1.3	ng/L		09/18/11 15:45	10/07/11 00:51	1
Benzo[e]pyrene	ND		4.5	1.2	ng/L		09/18/11 15:45	10/07/11 00:51	1
Benzo[b]fluoranthene	ND		4.9	1.5	ng/L		09/18/11 15:45	10/07/11 00:51	1
Benzo(b)thiophene	**1.5**	**J**	5.4	0.79	ng/L		09/18/11 15:45	10/07/11 00:51	1
Benzo[k]fluoranthene	ND		4.3	1.3	ng/L		09/18/11 15:45	10/07/11 00:51	1
Benzo[g,h,i]perylene	ND		6.5	1.2	ng/L		09/18/11 15:45	10/07/11 00:51	1
Carbazole	ND		4.0	0.75	ng/L		09/18/11 15:45	10/07/11 00:51	1
Chrysene	ND		5.9	1.3	ng/L		09/18/11 15:45	10/07/11 00:51	1
Dibenz(a,h)anthracene	ND		6.2	1.1	ng/L		09/18/11 15:45	10/07/11 00:51	1
Dibenzofuran	ND		6.0	1.0	ng/L		09/18/11 15:45	10/07/11 00:51	1
Dibenzothiophene	**21**		4.3	1.0	ng/L		09/18/11 15:45	10/07/11 00:51	1
Fluoranthene	ND		4.8	1.8	ng/L		09/18/11 15:45	10/07/11 00:51	1
Fluorene	ND		4.3	0.89	ng/L		09/18/11 15:45	10/07/11 00:51	1
Indene	ND		4.9	3.4	ng/L		09/18/11 15:45	10/07/11 00:51	1
Indole	ND		4.9	1.8	ng/L		09/18/11 15:45	10/07/11 00:51	1
Indeno[1,2,3-cd]pyrene	ND		5.7	1.3	ng/L		09/18/11 15:45	10/07/11 00:51	1
Naphthalene	**7.3**	**J ***	9.0	1.2	ng/L		09/18/11 15:45	10/07/11 00:51	1
Perylene	ND		4.0	4.0	ng/L		09/18/11 15:45	10/07/11 00:51	1
Phenanthrene	ND		6.6	3.4	ng/L		09/18/11 15:45	10/07/11 00:51	1
Pyrene	ND		4.4	1.0	ng/L		09/18/11 15:45	10/07/11 00:51	1
Quinoline	ND		9.4	5.9	ng/L		09/18/11 15:45	10/07/11 00:51	1
Biphenyl	ND		5.9	1.1	ng/L		09/18/11 15:45	10/07/11 00:51	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*81*		*23 - 84*	*09/18/11 15:45*	*10/07/11 00:51*	*1*
Chrysene-d12 (Surr)	*31*		*28 - 101*	*09/18/11 15:45*	*10/07/11 00:51*	*1*
Naphthalene-d8 (Surr)	*75*		*22 - 97*	*09/18/11 15:45*	*10/07/11 00:51*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: W403-091411
Date Collected: 09/14/11 12:00
Date Received: 09/15/11 09:30

Lab Sample ID: 280-20302-16
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	11		5.7	0.71	ng/L		09/20/11 18:38	10/06/11 14:36	1
2,3-Dihydroindene	3.4	J	5.3	0.74	ng/L		09/20/11 18:38	10/06/11 14:36	1
1-Methylnaphthalene	ND		5.9	0.93	ng/L		09/20/11 18:38	10/06/11 14:36	1
2-Methylnaphthalene	1.2	J	6.2	1.0	ng/L		09/20/11 18:38	10/06/11 14:36	1
Acenaphthene	0.89	J B	6.0	0.53	ng/L		09/20/11 18:38	10/06/11 14:36	1
Acenaphthylene	1.8	J	5.0	0.81	ng/L		09/20/11 18:38	10/06/11 14:36	1
Acridine	ND	*	6.8	6.8	ng/L		09/20/11 18:38	10/06/11 14:36	1
Anthracene	3.4	J	4.4	0.84	ng/L		09/20/11 18:38	10/06/11 14:36	1
Benzo[a]anthracene	18	B	4.5	0.97	ng/L		09/20/11 18:38	10/06/11 14:36	1
Benzo[a]pyrene	19	B	2.6	1.3	ng/L		09/20/11 18:38	10/06/11 14:36	1
Benzo[e]pyrene	4.0	J B	4.5	1.2	ng/L		09/20/11 18:38	10/06/11 14:36	1
Benzo[b]fluoranthene	18	B	4.9	1.5	ng/L		09/20/11 18:38	10/06/11 14:36	1
Benzo(b)thiophene	ND		5.5	0.79	ng/L		09/20/11 18:38	10/06/11 14:36	1
Benzo[k]fluoranthene	25	B	4.3	1.3	ng/L		09/20/11 18:38	10/06/11 14:36	1
Benzo[g,h,i]perylene	30	B	6.5	1.2	ng/L		09/20/11 18:38	10/06/11 14:36	1
Carbazole	2.7	J	4.0	0.76	ng/L		09/20/11 18:38	10/06/11 14:36	1
Chrysene	25		5.9	1.3	ng/L		09/20/11 18:38	10/06/11 14:36	1
Dibenz(a,h)anthracene	23	B	6.2	1.1	ng/L		09/20/11 18:38	10/06/11 14:36	1
Dibenzofuran	ND		6.0	1.0	ng/L		09/20/11 18:38	10/06/11 14:36	1
Dibenzothiophene	ND		4.3	1.0	ng/L		09/20/11 18:38	10/06/11 14:36	1
Fluoranthene	14		4.8	1.8	ng/L		09/20/11 18:38	10/06/11 14:36	1
Fluorene	1.2	J	4.3	0.89	ng/L		09/20/11 18:38	10/06/11 14:36	1
Indene	ND		4.9	3.4	ng/L		09/20/11 18:38	10/06/11 14:36	1
Indole	ND		4.9	1.8	ng/L		09/20/11 18:38	10/06/11 14:36	1
Indeno[1,2,3-cd]pyrene	20	B	5.7	1.3	ng/L		09/20/11 18:38	10/06/11 14:36	1
Naphthalene	5.1	J *	9.0	1.2	ng/L		09/20/11 18:38	10/06/11 14:36	1
Perylene	ND		4.0	4.0	ng/L		09/20/11 18:38	10/06/11 14:36	1
Phenanthrene	5.2	J	6.6	3.4	ng/L		09/20/11 18:38	10/06/11 14:36	1
Pyrene	12		4.4	1.0	ng/L		09/20/11 18:38	10/06/11 14:36	1
Quinoline	ND		9.5	5.9	ng/L		09/20/11 18:38	10/06/11 14:36	1
Biphenyl	ND		5.9	1.1	ng/L		09/20/11 18:38	10/06/11 14:36	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*61*		*23 - 84*	*09/20/11 18:38*	*10/06/11 14:36*	*1*
Chrysene-d12 (Surr)	*24*	*X*	*28 - 101*	*09/20/11 18:38*	*10/06/11 14:36*	*1*
Naphthalene-d8 (Surr)	*76*		*22 - 97*	*09/20/11 18:38*	*10/06/11 14:36*	*1*

Surrogate Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		FD10	sene-d12 (S	thalene-d8							
Lab Sample ID	Client Sample ID	(23-84)	(28-101)	(22-97)							
280-20302-1	SLP10TEXTENDED-091311	64	16 X	58							
280-20302-2	SLP12-091311	67	32	59							
280-20302-3	SLP4-091311	72	25 X	77							
280-20302-4	W48-091311	69	24 X	79							
280-20302-5	SLP6-091311	71	26 X	76							
280-20302-6	W119-091311	83	50	87							
280-20302-8	SLP10T-091311	71	56	75							
280-20302-9	SLP10-091311	66	48	66							
280-20302-10	SLP11-091311	82	50	68							
280-20302-10 MS	SLP11-091311	84	55	88							
280-20302-10 MSD	SLP11-091311	90 X	55	93							
280-20302-11	SLP11DUP-091311	74	41	65							
280-20302-12	SLP11FB-091311	91 X	84	84							
280-20302-13	SLP11FBD-091311	80	71	85							
280-20302-14	W401-091411	79	16 X	90							
280-20302-15	W402-091411	81	31	75							
280-20302-16	W403-091411	61	24 X	76							
LCS 280-86361/2-B	Lab Control Sample	54	75	61							
LCS 280-86676/2-A	Lab Control Sample	81	93	89							
LCS 280-87039/2-A	Lab Control Sample	87 X	98	90							
LCSD 280-86361/3-A	Lab Control Sample Dup	67	83	75							
LCSD 280-87039/3-A	Lab Control Sample Dup	76	88	81							
MB 280-86361/1-B	Method Blank	80	88	82							
MB 280-86676/1-A	Method Blank	80	91	66							
MB 280-87039/1-A	Method Blank	74	82	67							

Surrogate Legend

FD10 = Fluorene-d10 (Surr)
Chrysene-d12 (Surr) = Chrysene-d12 (Surr)
Naphthalene-d8 (Surr) = Naphthalene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		2FP	PHL	NBZ	FBP	TBP	TPH		
Lab Sample ID	Client Sample ID	(51-120)	(51-120)	(48-120)	(38-120)	(57-120)	(50-120)		
280-20302-7	SLP10TACIDFRACTION-091311	76	80	82	72		82		
LCS 280-86613/2-A	Lab Control Sample	74	77	76	56	95	87		
MB 280-86613/1-A	Method Blank	76	76	76	44	84	81		

Surrogate Legend

2FP = 2-Fluorophenol
PHL = Phenol-d5
NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
TPH = Terphenyl-d14

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-86613/1-A
Matrix: Water
Analysis Batch: 88621

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86613

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		10	2.0	ug/L		09/17/11 11:25	09/29/11 16:21	1
2-Chlorophenol	ND		10	2.0	ug/L		09/17/11 11:25	09/29/11 16:21	1
2,4-Dimethylphenol	ND		10	0.58	ug/L		09/17/11 11:25	09/29/11 16:21	1
2-Nitrophenol	ND		20	0.39	ug/L		09/17/11 11:25	09/29/11 16:21	1
2,4-Dichlorophenol	ND		10	0.64	ug/L		09/17/11 11:25	09/29/11 16:21	1
4-Chloro-3-methylphenol	ND		20	2.4	ug/L		09/17/11 11:25	09/29/11 16:21	1
2,4,6-Trichlorophenol	ND		20	0.29	ug/L		09/17/11 11:25	09/29/11 16:21	1
2,4-Dinitrophenol	ND		60	10	ug/L		09/17/11 11:25	09/29/11 16:21	1
4-Nitrophenol	ND		50	1.2	ug/L		09/17/11 11:25	09/29/11 16:21	1
4,6-Dinitro-2-methylphenol	ND		60	4.0	ug/L		09/17/11 11:25	09/29/11 16:21	1
Pentachlorophenol	ND		60	20	ug/L		09/17/11 11:25	09/29/11 16:21	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*76*		*51 - 120*	*09/17/11 11:25*	*09/29/11 16:21*	*1*
Phenol-d5	*76*		*51 - 120*	*09/17/11 11:25*	*09/29/11 16:21*	*1*
Nitrobenzene-d5	*76*		*48 - 120*	*09/17/11 11:25*	*09/29/11 16:21*	*1*
2-Fluorobiphenyl	*44*		*38 - 120*	*09/17/11 11:25*	*09/29/11 16:21*	*1*
Terphenyl-d14	*81*		*50 - 120*	*09/17/11 11:25*	*09/29/11 16:21*	*1*

Lab Sample ID: LCS 280-86613/2-A
Matrix: Water
Analysis Batch: 88621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86613

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Phenol	80.0	63.3		ug/L		79	52 - 120
2-Chlorophenol	80.0	59.6		ug/L		75	57 - 120
1,4-Dichlorobenzene	80.0	31.1		ug/L		39	27 - 120
2-Methylphenol	80.0	55.8		ug/L		70	50 - 120
N-Nitrosodi-n-propylamine	80.0	56.5		ug/L		71	50 - 120
1,2,4-Trichlorobenzene	80.0	29.5		ug/L		37	23 - 120
4-Chloro-3-methylphenol	80.0	64.1		ug/L		80	63 - 120
2-Methylnaphthalene	80.0	33.7		ug/L		42	32 - 120
2,4,6-Trichlorophenol	80.0	63.1		ug/L		79	52 - 120
Acenaphthene	80.0	51.0		ug/L		64	45 - 120
4-Nitrophenol	80.0	76.7		ug/L		96	49 - 124
2,4-Dinitrotoluene	80.0	77.4		ug/L		97	51 - 120
Pentachlorophenol	80.0	72.5		ug/L		91	40 - 120
Anthracene	80.0	68.0		ug/L		85	56 - 120
Carbazole	80.0	69.6		ug/L		87	48 - 120
Pyrene	80.0	68.1		ug/L		85	56 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*74*		*51 - 120*
Phenol-d5	*77*		*51 - 120*
Nitrobenzene-d5	*76*		*48 - 120*
2-Fluorobiphenyl	*56*		*38 - 120*
2,4,6-Tribromophenol	*95*		*57 - 120*
Terphenyl-d14	*87*		*50 - 120*

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Lab Sample ID: MB 280-86361/1-B
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		09/16/11 14:15	10/05/11 14:31	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		09/16/11 14:15	10/05/11 14:31	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		09/16/11 14:15	10/05/11 14:31	1
2-Methylnaphthalene	1.19	J	5.9	0.98	ng/L		09/16/11 14:15	10/05/11 14:31	1
3-Methylcholanthrene	ND		5.0	5.0	ng/L		09/16/11 14:15	10/05/11 14:31	1
Acenaphthene	ND		5.7	0.50	ng/L		09/16/11 14:15	10/05/11 14:31	1
Acenaphthylene	ND		4.8	0.77	ng/L		09/16/11 14:15	10/05/11 14:31	1
Acridine	ND		6.5	6.5	ng/L		09/16/11 14:15	10/05/11 14:31	1
Anthracene	ND		4.2	0.80	ng/L		09/16/11 14:15	10/05/11 14:31	1
Benzo[a]anthracene	1.10	J	4.3	0.92	ng/L		09/16/11 14:15	10/05/11 14:31	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		09/16/11 14:15	10/05/11 14:31	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		09/16/11 14:15	10/05/11 14:31	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		09/16/11 14:15	10/05/11 14:31	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		09/16/11 14:15	10/05/11 14:31	1
Benzo[k]fluoranthene	2.02	J	4.1	1.2	ng/L		09/16/11 14:15	10/05/11 14:31	1
Benzo[g,h,i]perylene	1.45	J	6.2	1.2	ng/L		09/16/11 14:15	10/05/11 14:31	1
Carbazole	ND		3.8	0.72	ng/L		09/16/11 14:15	10/05/11 14:31	1
Chrysene	1.93	J	5.6	1.2	ng/L		09/16/11 14:15	10/05/11 14:31	1
Dibenz(a,h)anthracene	1.28	J	5.9	1.0	ng/L		09/16/11 14:15	10/05/11 14:31	1
Dibenzofuran	ND		5.7	0.99	ng/L		09/16/11 14:15	10/05/11 14:31	1
Dibenzothiophene	ND		4.1	0.98	ng/L		09/16/11 14:15	10/05/11 14:31	1
Fluoranthene	ND		4.6	1.7	ng/L		09/16/11 14:15	10/05/11 14:31	1
Fluorene	ND		4.1	0.85	ng/L		09/16/11 14:15	10/05/11 14:31	1
Indene	ND		4.7	3.3	ng/L		09/16/11 14:15	10/05/11 14:31	1
Indole	ND		4.7	1.7	ng/L		09/16/11 14:15	10/05/11 14:31	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		09/16/11 14:15	10/05/11 14:31	1
Naphthalene	1.22	J	8.6	1.1	ng/L		09/16/11 14:15	10/05/11 14:31	1
Perylene	ND		3.8	3.8	ng/L		09/16/11 14:15	10/05/11 14:31	1
Phenanthrene	ND		6.3	3.2	ng/L		09/16/11 14:15	10/05/11 14:31	1
Pyrene	2.50	J	4.2	0.99	ng/L		09/16/11 14:15	10/05/11 14:31	1
Quinoline	ND		9.0	5.7	ng/L		09/16/11 14:15	10/05/11 14:31	1
7,12-Dimethylbenz(a)anthracene	ND		2.8	2.3	ng/L		09/16/11 14:15	10/05/11 14:31	1
Biphenyl	ND		5.6	1.1	ng/L		09/16/11 14:15	10/05/11 14:31	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*80*		*23 - 84*	*09/16/11 14:15*	*10/05/11 14:31*	*1*
Chrysene-d12 (Surr)	*88*		*28 - 101*	*09/16/11 14:15*	*10/05/11 14:31*	*1*
Naphthalene-d8 (Surr)	*82*		*22 - 97*	*09/16/11 14:15*	*10/05/11 14:31*	*1*

Lab Sample ID: LCS 280-86361/2-B
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3-Benzofuran	75.0	44.6		ng/L		59	30 - 150
2,3-Dihydroindene	75.0	40.0		ng/L		53	30 - 150
1-Methylnaphthalene	75.0	52.9		ng/L		71	30 - 150
2-Methylnaphthalene	75.0	46.8		ng/L		62	25 - 95
3-Methylcholanthrene	75.0	24.4		ng/L		33	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-86361/2-B
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Acenaphthene	75.0	48.5		ng/L		65	30 - 150
Acenaphthylene	75.0	41.5		ng/L		55	30 - 150
Acridine	75.0	ND	*	ng/L		4	30 - 150
Anthracene	75.0	47.9		ng/L		64	30 - 150
Benzo[a]anthracene	75.0	104		ng/L		139	30 - 150
Benzo[a]pyrene	75.0	84.0		ng/L		112	30 - 150
Benzo[e]pyrene	75.0	48.3		ng/L		64	37 - 105
Benzo[b]fluoranthene	75.0	92.1		ng/L		123	30 - 150
Benzo(b)thiophene	75.0	49.0		ng/L		65	30 - 150
Benzo[k]fluoranthene	75.0	116	*	ng/L		155	30 - 150
Benzo[g,h,i]perylene	75.0	94.9		ng/L		127	30 - 150
Carbazole	75.0	43.0		ng/L		57	30 - 150
Chrysene	75.0	127	*	ng/L		170	20 - 136
Dibenz(a,h)anthracene	75.0	107		ng/L		142	30 - 150
Dibenzofuran	75.0	43.0		ng/L		57	30 - 150
Dibenzothiophene	75.0	45.9		ng/L		61	30 - 150
Fluoranthene	75.0	54.0		ng/L		72	30 - 150
Fluorene	75.0	46.8		ng/L		62	34 - 96
Indene	75.0	42.4		ng/L		57	22 - 86
Indole	75.0	37.4		ng/L		50	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	89.3		ng/L		119	30 - 150
Naphthalene	75.0	54.7		ng/L		73	27 - 95
Perylene	75.0	29.4		ng/L		39	30 - 150
Phenanthrene	75.0	48.2		ng/L		64	30 - 150
Pyrene	75.0	50.6		ng/L		67	30 - 150
Quinoline	75.0	22.6		ng/L		30	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	13.4	*	ng/L		18	30 - 150
Biphenyl	75.0	43.6		ng/L		58	30 - 150

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*54*		*23 - 84*
Chrysene-d12 (Surr)	*75*		*28 - 101*
Naphthalene-d8 (Surr)	*61*		*22 - 97*

Lab Sample ID: LCSD 280-86361/3-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 86361

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	75.0	54.0		ng/L		72	30 - 150	19	50
2,3-Dihydroindene	75.0	46.5		ng/L		62	30 - 150	15	50
1-Methylnaphthalene	75.0	59.7		ng/L		80	30 - 150	12	50
2-Methylnaphthalene	75.0	51.8		ng/L		69	25 - 95	10	50
3-Methylcholanthrene	75.0	31.2		ng/L		42	30 - 150	24	50
Acenaphthene	75.0	56.1		ng/L		75	30 - 150	15	50
Acenaphthylene	75.0	50.9		ng/L		68	30 - 150	20	50
Acridine	75.0	11.6	*	ng/L		16	30 - 150	115	50
Anthracene	75.0	61.1		ng/L		82	30 - 150	24	50
Benzo[a]anthracene	75.0	102		ng/L		136	30 - 150	2	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCSD 280-86361/3-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 86361

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene			75.0	86.3		ng/L		115	30 - 150	3	50
Benzo[e]pyrene			75.0	56.0		ng/L		75	37 - 105	15	50
Benzo[b]fluoranthene			75.0	90.1		ng/L		120	30 - 150	2	50
Benzo(b)thiophene			75.0	59.6		ng/L		79	30 - 150	19	50
Benzo[k]fluoranthene			75.0	118	*	ng/L		157	30 - 150	1	50
Benzo[g,h,i]perylene			75.0	98.7		ng/L		132	30 - 150	4	50
Carbazole			75.0	49.5		ng/L		66	30 - 150	14	50
Chrysene			75.0	127	*	ng/L		169	20 - 136	0	50
Dibenz(a,h)anthracene			75.0	108		ng/L		144	30 - 150	1	50
Dibenzofuran			75.0	52.0		ng/L		69	30 - 150	19	50
Dibenzothiophene			75.0	56.4		ng/L		75	30 - 150	20	50
Fluoranthene			75.0	61.0		ng/L		81	30 - 150	12	50
Fluorene			75.0	56.5		ng/L		75	34 - 96	19	50
Indene			75.0	51.2		ng/L		68	22 - 86	19	50
Indole			75.0	46.6		ng/L		62	30 - 150	22	50
Indeno[1,2,3-cd]pyrene			75.0	88.6		ng/L		118	30 - 150	1	50
Naphthalene			75.0	59.2		ng/L		79	27 - 95	8	50
Perylene			75.0	42.4		ng/L		56	30 - 150	36	50
Phenanthrene			75.0	57.5		ng/L		77	30 - 150	18	50
Pyrene			75.0	59.2		ng/L		79	30 - 150	16	50
Quinoline			75.0	41.8	*	ng/L		56	20 - 112	59	50
7,12-Dimethylbenz(a)anthracene			75.0	13.8	*	ng/L		18	30 - 150	3	50
Biphenyl			75.0	53.4		ng/L		71	30 - 150	20	50

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*67*		*23 - 84*
Chrysene-d12 (Surr)	*83*		*28 - 101*
Naphthalene-d8 (Surr)	*75*		*22 - 97*

Lab Sample ID: MB 280-86676/1-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		09/18/11 15:45	10/05/11 17:34	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		09/18/11 15:45	10/05/11 17:34	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		09/18/11 15:45	10/05/11 17:34	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		09/18/11 15:45	10/05/11 17:34	1
3-Methylcholanthrene	ND		5.0	5.0	ng/L		09/18/11 15:45	10/05/11 17:34	1
Acenaphthene	2.65	J	5.7	0.50	ng/L		09/18/11 15:45	10/05/11 17:34	1
Acenaphthylene	ND		4.8	0.77	ng/L		09/18/11 15:45	10/05/11 17:34	1
Acridine	ND		6.5	6.5	ng/L		09/18/11 15:45	10/05/11 17:34	1
Anthracene	ND		4.2	0.80	ng/L		09/18/11 15:45	10/05/11 17:34	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		09/18/11 15:45	10/05/11 17:34	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		09/18/11 15:45	10/05/11 17:34	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		09/18/11 15:45	10/05/11 17:34	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		09/18/11 15:45	10/05/11 17:34	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		09/18/11 15:45	10/05/11 17:34	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		09/18/11 15:45	10/05/11 17:34	1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: MB 280-86676/1-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 86676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		09/18/11 15:45	10/05/11 17:34	1
Carbazole	ND		3.8	0.72	ng/L		09/18/11 15:45	10/05/11 17:34	1
Chrysene	ND		5.6	1.2	ng/L		09/18/11 15:45	10/05/11 17:34	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		09/18/11 15:45	10/05/11 17:34	1
Dibenzofuran	ND		5.7	0.99	ng/L		09/18/11 15:45	10/05/11 17:34	1
Dibenzothiophene	ND		4.1	0.98	ng/L		09/18/11 15:45	10/05/11 17:34	1
Fluoranthene	ND		4.6	1.7	ng/L		09/18/11 15:45	10/05/11 17:34	1
Fluorene	ND		4.1	0.85	ng/L		09/18/11 15:45	10/05/11 17:34	1
Indene	ND		4.7	3.3	ng/L		09/18/11 15:45	10/05/11 17:34	1
Indole	ND		4.7	1.7	ng/L		09/18/11 15:45	10/05/11 17:34	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		09/18/11 15:45	10/05/11 17:34	1
Naphthalene	ND		8.6	1.1	ng/L		09/18/11 15:45	10/05/11 17:34	1
Perylene	ND		3.8	3.8	ng/L		09/18/11 15:45	10/05/11 17:34	1
Phenanthrene	ND		6.3	3.2	ng/L		09/18/11 15:45	10/05/11 17:34	1
Pyrene	ND		4.2	0.99	ng/L		09/18/11 15:45	10/05/11 17:34	1
Quinoline	ND		9.0	5.7	ng/L		09/18/11 15:45	10/05/11 17:34	1
7,12-Dimethylbenz(a)anthracene	ND		2.8	2.3	ng/L		09/18/11 15:45	10/05/11 17:34	1
Biphenyl	ND		5.6	1.1	ng/L		09/18/11 15:45	10/05/11 17:34	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*80*		*23 - 84*	*09/18/11 15:45*	*10/05/11 17:34*	*1*
Chrysene-d12 (Surr)	*91*		*28 - 101*	*09/18/11 15:45*	*10/05/11 17:34*	*1*
Naphthalene-d8 (Surr)	*66*		*22 - 97*	*09/18/11 15:45*	*10/05/11 17:34*	*1*

Lab Sample ID: LCS 280-86676/2-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3-Benzofuran	75.0	66.2		ng/L		88	30 - 150
2,3-Dihydroindene	75.0	62.8		ng/L		84	30 - 150
1-Methylnaphthalene	75.0	74.9		ng/L		100	30 - 150
2-Methylnaphthalene	75.0	65.0		ng/L		87	25 - 95
3-Methylcholanthrene	75.0	48.1		ng/L		64	30 - 150
Acenaphthene	75.0	68.7		ng/L		92	30 - 150
Acenaphthylene	75.0	63.5		ng/L		85	30 - 150
Acridine	75.0	13.6	*	ng/L		18	30 - 150
Anthracene	75.0	67.6		ng/L		90	30 - 150
Benzo[a]anthracene	75.0	60.0		ng/L		80	30 - 150
Benzo[a]pyrene	75.0	61.5		ng/L		82	30 - 150
Benzo[e]pyrene	75.0	64.4		ng/L		86	37 - 105
Benzo[b]fluoranthene	75.0	62.8		ng/L		84	30 - 150
Benzo(b)thiophene	75.0	71.8		ng/L		96	30 - 150
Benzo[k]fluoranthene	75.0	69.6		ng/L		93	30 - 150
Benzo[g,h,i]perylene	75.0	57.4		ng/L		76	30 - 150
Carbazole	75.0	63.4		ng/L		85	30 - 150
Chrysene	75.0	77.4		ng/L		103	20 - 136
Dibenz(a,h)anthracene	75.0	53.8		ng/L		72	30 - 150
Dibenzofuran	75.0	61.8		ng/L		82	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-86676/2-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 86676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Dibenzothiophene	75.0	66.0		ng/L		88	30 - 150
Fluoranthene	75.0	67.1		ng/L		89	30 - 150
Fluorene	75.0	66.2		ng/L		88	34 - 96
Indene	75.0	63.8		ng/L		85	22 - 86
Indole	75.0	59.2		ng/L		79	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	53.4		ng/L		71	30 - 150
Naphthalene	75.0	73.3	*	ng/L		98	27 - 95
Perylene	75.0	63.5		ng/L		85	30 - 150
Phenanthrene	75.0	65.9		ng/L		88	30 - 150
Pyrene	75.0	64.2		ng/L		86	30 - 150
Quinoline	75.0	51.1		ng/L		68	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	50.9		ng/L		68	30 - 150
Biphenyl	75.0	64.9		ng/L		86	30 - 150

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*81*		*23 - 84*
Chrysene-d12 (Surr)	*93*		*28 - 101*
Naphthalene-d8 (Surr)	*89*		*22 - 97*

Lab Sample ID: 280-20302-10 MS
Matrix: Water
Analysis Batch: 89868

Client Sample ID: SLP11-091311
Prep Type: Total/NA
Prep Batch: 86676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3-Benzofuran	3.9	J	83.3	78.6		ng/L		90	30 - 150
2,3-Dihydroindene	20		83.3	92.4		ng/L		87	30 - 150
1-Methylnaphthalene	3.3	J	83.3	83.2		ng/L		96	30 - 150
2-Methylnaphthalene	1.4	J	83.3	68.5		ng/L		81	25 - 95
3-Methylcholanthrene	ND		83.3	8.11	F	ng/L		10	30 - 150
Acenaphthene	9.6	B	83.3	81.5		ng/L		86	30 - 150
Acenaphthylene	ND		83.3	68.5		ng/L		82	30 - 150
Acridine	ND	*	83.3	43.8		ng/L		53	30 - 150
Anthracene	ND		83.3	64.6		ng/L		78	30 - 150
Benzo[a]anthracene	ND		83.3	34.3		ng/L		41	30 - 150
Benzo[a]pyrene	ND		83.3	10.6	F	ng/L		13	30 - 150
Benzo[e]pyrene	ND		83.3	12.5	F	ng/L		15	37 - 105
Benzo[b]fluoranthene	ND		83.3	12.1	F	ng/L		15	30 - 150
Benzo(b)thiophene	9.9		83.3	87.5		ng/L		93	30 - 150
Benzo[k]fluoranthene	ND		83.3	14.3	F	ng/L		17	30 - 150
Benzo[g,h,i]perylene	ND		83.3	2.59	J F	ng/L		3	30 - 150
Carbazole	2.2	J	83.3	68.5		ng/L		80	30 - 150
Chrysene	ND		83.3	49.3		ng/L		59	20 - 136
Dibenz(a,h)anthracene	ND		83.3	1.21	J F	ng/L		1	30 - 150
Dibenzofuran	ND		83.3	71.7		ng/L		86	30 - 150
Dibenzothiophene	ND		83.3	73.4		ng/L		88	30 - 150
Fluoranthene	ND		83.3	70.3		ng/L		84	30 - 150
Fluorene	1.1	J	83.3	77.3		ng/L		91	34 - 96
Indene	19		83.3	91.2	F	ng/L		87	22 - 86
Indole	ND		83.3	62.6		ng/L		75	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-20302-10 MS — **Client Sample ID: SLP11-091311**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89868 — **Prep Batch: 86676**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits
Indeno[1,2,3-cd]pyrene	ND		83.3	1.58	J F	ng/L		2	30 - 150
Naphthalene	22	*	83.3	103	F	ng/L		97	27 - 95
Perylene	ND		83.3	14.2	F	ng/L		17	30 - 150
Phenanthrene	ND		83.3	74.3		ng/L		89	30 - 150
Pyrene	ND		83.3	67.5		ng/L		81	30 - 150
Quinoline	ND		83.3	62.8		ng/L		75	20 - 112
7,12-Dimethylbenz(a)anthracene	ND		83.3	54.4		ng/L		65	30 - 150
Biphenyl	ND		83.3	70.8		ng/L		85	30 - 150

Surrogate	*MS % Recovery*	*MS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*84*		*23 - 84*
Chrysene-d12 (Surr)	*55*		*28 - 101*
Naphthalene-d8 (Surr)	*88*		*22 - 97*

Lab Sample ID: 280-20302-10 MSD — **Client Sample ID: SLP11-091311**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89868 — **Prep Batch: 86676**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	3.9	J	81.6	78.0		ng/L		91	30 - 150	1	50
2,3-Dihydroindene	20		81.6	84.6		ng/L		80	30 - 150	9	50
1-Methylnaphthalene	3.3	J	81.6	83.1		ng/L		98	30 - 150	0	50
2-Methylnaphthalene	1.4	J	81.6	71.7		ng/L		86	25 - 95	4	50
3-Methylcholanthrene	ND		81.6	10.6	F	ng/L		13	30 - 150	27	50
Acenaphthene	9.6	B	81.6	83.7		ng/L		91	30 - 150	3	50
Acenaphthylene	ND		81.6	72.4		ng/L		89	30 - 150	6	50
Acridine	ND	*	81.6	ND	F	ng/L		0	30 - 150	NC	50
Anthracene	ND		81.6	78.4		ng/L		96	30 - 150	19	50
Benzo[a]anthracene	ND		81.6	40.3		ng/L		49	30 - 150	16	50
Benzo[a]pyrene	ND		81.6	15.0	F	ng/L		18	30 - 150	35	50
Benzo[e]pyrene	ND		81.6	14.8	F	ng/L		18	37 - 105	17	50
Benzo[b]fluoranthene	ND		81.6	15.1	F	ng/L		18	30 - 150	22	50
Benzo(b)thiophene	9.9		81.6	86.2		ng/L		94	30 - 150	2	50
Benzo[k]fluoranthene	ND		81.6	17.5	F	ng/L		21	30 - 150	20	50
Benzo[g,h,i]perylene	ND		81.6	5.90	J F	ng/L		7	30 - 150	78	50
Carbazole	2.2	J	81.6	68.9		ng/L		82	30 - 150	0	50
Chrysene	ND		81.6	51.0		ng/L		63	20 - 136	3	50
Dibenz(a,h)anthracene	ND		81.6	4.18	J F	ng/L		5	30 - 150	110	50
Dibenzofuran	ND		81.6	73.2		ng/L		90	30 - 150	2	50
Dibenzothiophene	ND		81.6	75.5		ng/L		93	30 - 150	3	50
Fluoranthene	ND		81.6	77.1		ng/L		94	30 - 150	9	50
Fluorene	1.1	J	81.6	78.5		ng/L		95	34 - 96	2	50
Indene	19		81.6	85.0		ng/L		81	22 - 86	7	50
Indole	ND		81.6	65.3		ng/L		80	30 - 150	4	50
Indeno[1,2,3-cd]pyrene	ND		81.6	5.05	J F	ng/L		6	30 - 150	105	50
Naphthalene	22	*	81.6	96.2		ng/L		91	27 - 95	7	50
Perylene	ND		81.6	15.4	F	ng/L		19	30 - 150	8	50
Phenanthrene	ND		81.6	76.1		ng/L		93	30 - 150	2	50
Pyrene	ND		81.6	74.1		ng/L		91	30 - 150	9	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-20302-10 MSD — **Client Sample ID: SLP11-091311**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89868 — **Prep Batch: 86676**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Quinoline	ND		81.6	52.8		ng/L		65	20 - 112	17	50
7,12-Dimethylbenz(a)anthracene	ND		81.6	59.9		ng/L		73	30 - 150	10	50
Biphenyl	ND		81.6	71.8		ng/L		88	30 - 150	1	50

Surrogate	*MSD % Recovery*	*MSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*90*	*X*	*23 - 84*
Chrysene-d12 (Surr)	*55*		*28 - 101*
Naphthalene-d8 (Surr)	*93*		*22 - 97*

Lab Sample ID: MB 280-87039/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89849 — **Prep Batch: 87039**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		09/20/11 18:38	10/05/11 19:59	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		09/20/11 18:38	10/05/11 19:59	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		09/20/11 18:38	10/05/11 19:59	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		09/20/11 18:38	10/05/11 19:59	1
3-Methylcholanthrene	ND		5.0	5.0	ng/L		09/20/11 18:38	10/05/11 19:59	1
Acenaphthene	1.07	J	5.7	0.50	ng/L		09/20/11 18:38	10/05/11 19:59	1
Acenaphthylene	ND		4.8	0.77	ng/L		09/20/11 18:38	10/05/11 19:59	1
Acridine	ND		6.5	6.5	ng/L		09/20/11 18:38	10/05/11 19:59	1
Anthracene	ND		4.2	0.80	ng/L		09/20/11 18:38	10/05/11 19:59	1
Benzo[a]anthracene	2.94	J	4.3	0.92	ng/L		09/20/11 18:38	10/05/11 19:59	1
Benzo[a]pyrene	1.82	J	2.5	1.2	ng/L		09/20/11 18:38	10/05/11 19:59	1
Benzo[e]pyrene	1.70	J	4.3	1.1	ng/L		09/20/11 18:38	10/05/11 19:59	1
Benzo[b]fluoranthene	2.51	J	4.7	1.4	ng/L		09/20/11 18:38	10/05/11 19:59	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		09/20/11 18:38	10/05/11 19:59	1
Benzo[k]fluoranthene	4.91		4.1	1.2	ng/L		09/20/11 18:38	10/05/11 19:59	1
Benzo[g,h,i]perylene	1.78	J	6.2	1.2	ng/L		09/20/11 18:38	10/05/11 19:59	1
Carbazole	ND		3.8	0.72	ng/L		09/20/11 18:38	10/05/11 19:59	1
Chrysene	ND		5.6	1.2	ng/L		09/20/11 18:38	10/05/11 19:59	1
Dibenz(a,h)anthracene	1.26	J	5.9	1.0	ng/L		09/20/11 18:38	10/05/11 19:59	1
Dibenzofuran	ND		5.7	0.99	ng/L		09/20/11 18:38	10/05/11 19:59	1
Dibenzothiophene	19.5		4.1	0.98	ng/L		09/20/11 18:38	10/05/11 19:59	1
Fluoranthene	ND		4.6	1.7	ng/L		09/20/11 18:38	10/05/11 19:59	1
Fluorene	ND		4.1	0.85	ng/L		09/20/11 18:38	10/05/11 19:59	1
Indene	ND		4.7	3.3	ng/L		09/20/11 18:38	10/05/11 19:59	1
Indole	ND		4.7	1.7	ng/L		09/20/11 18:38	10/05/11 19:59	1
Indeno[1,2,3-cd]pyrene	1.30	J	5.4	1.3	ng/L		09/20/11 18:38	10/05/11 19:59	1
Naphthalene	ND		8.6	1.1	ng/L		09/20/11 18:38	10/05/11 19:59	1
Perylene	ND		3.8	3.8	ng/L		09/20/11 18:38	10/05/11 19:59	1
Phenanthrene	ND		6.3	3.2	ng/L		09/20/11 18:38	10/05/11 19:59	1
Pyrene	ND		4.2	0.99	ng/L		09/20/11 18:38	10/05/11 19:59	1
Quinoline	ND		9.0	5.7	ng/L		09/20/11 18:38	10/05/11 19:59	1
7,12-Dimethylbenz(a)anthracene	ND		2.8	2.3	ng/L		09/20/11 18:38	10/05/11 19:59	1
Biphenyl	ND		5.6	1.1	ng/L		09/20/11 18:38	10/05/11 19:59	1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: MB 280-87039/1-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87039

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorene-d10 (Surr)	74		23 - 84	09/20/11 18:38	10/05/11 19:59	1
Chrysene-d12 (Surr)	82		28 - 101	09/20/11 18:38	10/05/11 19:59	1
Naphthalene-d8 (Surr)	67		22 - 97	09/20/11 18:38	10/05/11 19:59	1

Lab Sample ID: LCS 280-87039/2-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
2,3-Benzofuran	75.0	64.0		ng/L		85	30 - 150
2,3-Dihydroindene	75.0	65.3		ng/L		87	30 - 150
1-Methylnaphthalene	75.0	75.1		ng/L		100	30 - 150
2-Methylnaphthalene	75.0	65.7		ng/L		88	25 - 95
3-Methylcholanthrene	75.0	35.3		ng/L		47	30 - 150
Acenaphthene	75.0	69.4		ng/L		93	30 - 150
Acenaphthylene	75.0	63.7		ng/L		85	30 - 150
Acridine	75.0	32.5		ng/L		43	30 - 150
Anthracene	75.0	73.2		ng/L		98	30 - 150
Benzo[a]anthracene	75.0	68.5		ng/L		91	30 - 150
Benzo[a]pyrene	75.0	66.1		ng/L		88	30 - 150
Benzo[e]pyrene	75.0	67.3		ng/L		90	37 - 105
Benzo[b]fluoranthene	75.0	64.7		ng/L		86	30 - 150
Benzo(b)thiophene	75.0	70.0		ng/L		93	30 - 150
Benzo[k]fluoranthene	75.0	76.6		ng/L		102	30 - 150
Benzo[g,h,i]perylene	75.0	61.3		ng/L		82	30 - 150
Carbazole	75.0	61.8		ng/L		82	30 - 150
Chrysene	75.0	83.0		ng/L		111	20 - 136
Dibenz(a,h)anthracene	75.0	58.2		ng/L		78	30 - 150
Dibenzofuran	75.0	63.3		ng/L		84	30 - 150
Dibenzothiophene	75.0	68.3		ng/L		91	30 - 150
Fluoranthene	75.0	71.1		ng/L		95	30 - 150
Fluorene	75.0	70.3		ng/L		94	34 - 96
Indene	75.0	63.1		ng/L		84	22 - 86
Indole	75.0	52.1		ng/L		69	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	58.3		ng/L		78	30 - 150
Naphthalene	75.0	72.7	*	ng/L		97	27 - 95
Perylene	75.0	67.4		ng/L		90	30 - 150
Phenanthrene	75.0	68.4		ng/L		91	30 - 150
Pyrene	75.0	68.2		ng/L		91	30 - 150
Quinoline	75.0	43.1		ng/L		57	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	20.5	*	ng/L		27	30 - 150
Biphenyl	75.0	66.7		ng/L		89	30 - 150

Surrogate	LCS % Recovery	LCS Qualifier	Limits
Fluorene-d10 (Surr)	87	X	23 - 84
Chrysene-d12 (Surr)	98		28 - 101
Naphthalene-d8 (Surr)	90		22 - 97

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCSD 280-87039/3-A
Matrix: Water
Analysis Batch: 89849

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87039

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
2,3-Benzofuran			75.0	58.6		ng/L		78	30 - 150	9	50
2,3-Dihydroindene			75.0	59.3		ng/L		79	30 - 150	10	50
1-Methylnaphthalene			75.0	62.7		ng/L		84	30 - 150	18	50
2-Methylnaphthalene			75.0	57.9		ng/L		77	25 - 95	13	50
3-Methylcholanthrene			75.0	39.9		ng/L		53	30 - 150	12	50
Acenaphthene			75.0	62.0		ng/L		83	30 - 150	11	50
Acenaphthylene			75.0	56.0		ng/L		75	30 - 150	13	50
Acridine			75.0	20.5	*	ng/L		27	30 - 150	45	50
Anthracene			75.0	62.6		ng/L		84	30 - 150	16	50
Benzo[a]anthracene			75.0	54.4		ng/L		73	30 - 150	23	50
Benzo[a]pyrene			75.0	61.4		ng/L		82	30 - 150	7	50
Benzo[e]pyrene			75.0	61.8		ng/L		82	37 - 105	9	50
Benzo[b]fluoranthene			75.0	57.9		ng/L		77	30 - 150	11	50
Benzo(b)thiophene			75.0	63.3		ng/L		84	30 - 150	10	50
Benzo[k]fluoranthene			75.0	70.7		ng/L		94	30 - 150	8	50
Benzo[g,h,i]perylene			75.0	59.8		ng/L		80	30 - 150	2	50
Carbazole			75.0	47.3		ng/L		63	30 - 150	27	50
Chrysene			75.0	77.5		ng/L		103	20 - 136	7	50
Dibenz(a,h)anthracene			75.0	56.7		ng/L		76	30 - 150	3	50
Dibenzofuran			75.0	55.1		ng/L		73	30 - 150	14	50
Dibenzothiophene			75.0	59.6		ng/L		79	30 - 150	14	50
Fluoranthene			75.0	61.2		ng/L		82	30 - 150	15	50
Fluorene			75.0	61.0		ng/L		81	34 - 96	14	50
Indene			75.0	57.4		ng/L		77	22 - 86	9	50
Indole			75.0	48.5		ng/L		65	30 - 150	7	50
Indeno[1,2,3-cd]pyrene			75.0	55.9		ng/L		75	30 - 150	4	50
Naphthalene			75.0	66.3		ng/L		88	27 - 95	9	50
Perylene			75.0	65.5		ng/L		87	30 - 150	3	50
Phenanthrene			75.0	58.4		ng/L		78	30 - 150	16	50
Pyrene			75.0	58.4		ng/L		78	30 - 150	16	50
Quinoline			75.0	39.8		ng/L		53	20 - 112	8	50
7,12-Dimethylbenz(a)anthracene			75.0	25.0		ng/L		33	30 - 150	20	50
Biphenyl			75.0	57.9		ng/L		77	30 - 150	14	50

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*76*		*23 - 84*
Chrysene-d12 (Surr)	*88*		*28 - 101*
Naphthalene-d8 (Surr)	*81*		*22 - 97*

GC/MS Semi VOA

Prep Batch: 86361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-20302-1	SLP10TEXTENDED-091311	Total/NA	Water	3520C	
280-20302-2	SLP12-091311	Total/NA	Water	3520C	
280-20302-3	SLP4-091311	Total/NA	Water	3520C	
280-20302-4	W48-091311	Total/NA	Water	3520C	
280-20302-5	SLP6-091311	Total/NA	Water	3520C	
280-20302-6	W119-091311	Total/NA	Water	3520C	
280-20302-8	SLP10T-091311	Total/NA	Water	3520C	
280-20302-9	SLP10-091311	Total/NA	Water	3520C	
LCS 280-86361/2-B	Lab Control Sample	Total/NA	Water	3520C	
LCSD 280-86361/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 280-86361/1-B	Method Blank	Total/NA	Water	3520C	

Prep Batch: 86613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-20302-7	SLP10TACIDFRACTION-091311	Total/NA	Water	3520C	
LCS 280-86613/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-86613/1-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 86676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-20302-10	SLP11-091311	Total/NA	Water	3520C	
280-20302-10 MS	SLP11-091311	Total/NA	Water	3520C	
280-20302-10 MSD	SLP11-091311	Total/NA	Water	3520C	
280-20302-11	SLP11DUP-091311	Total/NA	Water	3520C	
280-20302-12	SLP11FB-091311	Total/NA	Water	3520C	
280-20302-13	SLP11FBD-091311	Total/NA	Water	3520C	
280-20302-14	W401-091411	Total/NA	Water	3520C	
280-20302-15	W402-091411	Total/NA	Water	3520C	
LCS 280-86676/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-86676/1-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 87039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-20302-16	W403-091411	Total/NA	Water	3520C	
LCS 280-87039/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 280-87039/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 280-87039/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 88621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-20302-7	SLP10TACIDFRACTION-091311	Total/NA	Water	8270C	86613
LCS 280-86613/2-A	Lab Control Sample	Total/NA	Water	8270C	86613
MB 280-86613/1-A	Method Blank	Total/NA	Water	8270C	86613

Analysis Batch: 89849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-86361/2-B	Lab Control Sample	Total/NA	Water	8270C	86361
LCS 280-86676/2-A	Lab Control Sample	Total/NA	Water	8270C	86676
LCS 280-87039/2-A	Lab Control Sample	Total/NA	Water	8270C	87039
LCSD 280-86361/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	86361
LCSD 280-87039/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	87039
MB 280-86361/1-B	Method Blank	Total/NA	Water	8270C	86361

GC/MS Semi VOA (Continued)

Analysis Batch: 89849 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-86676/1-A	Method Blank	Total/NA	Water	8270C	86676
MB 280-87039/1-A	Method Blank	Total/NA	Water	8270C	87039

Analysis Batch: 89868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-20302-1	SLP10TEXTENDED-091311	Total/NA	Water	8270C	86361
280-20302-2	SLP12-091311	Total/NA	Water	8270C	86361
280-20302-3	SLP4-091311	Total/NA	Water	8270C	86361
280-20302-4	W48-091311	Total/NA	Water	8270C	86361
280-20302-5	SLP6-091311	Total/NA	Water	8270C	86361
280-20302-6	W119-091311	Total/NA	Water	8270C	86361
280-20302-8	SLP10T-091311	Total/NA	Water	8270C	86361
280-20302-9	SLP10-091311	Total/NA	Water	8270C	86361
280-20302-10	SLP11-091311	Total/NA	Water	8270C	86676
280-20302-10 MS	SLP11-091311	Total/NA	Water	8270C	86676
280-20302-10 MSD	SLP11-091311	Total/NA	Water	8270C	86676
280-20302-11	SLP11DUP-091311	Total/NA	Water	8270C	86676
280-20302-12	SLP11FB-091311	Total/NA	Water	8270C	86676
280-20302-13	SLP11FBD-091311	Total/NA	Water	8270C	86676
280-20302-14	W401-091411	Total/NA	Water	8270C	86676
280-20302-15	W402-091411	Total/NA	Water	8270C	86676
280-20302-16	W403-091411	Total/NA	Water	8270C	87039

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP10TEXTENDED-091311
Lab Sample ID: 280-20302-1
Date Collected: 09/13/11 15:25
Matrix: Water
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3946.8 mL	1000 uL	86361	09/16/11 14:15	JCV	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 15:49	DPI	TAL DEN

Client Sample ID: SLP12-091311
Lab Sample ID: 280-20302-2
Date Collected: 09/13/11 14:15
Matrix: Water
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3904.9 mL	1000 uL	86361	09/16/11 14:15	JCV	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 16:25	DPI	TAL DEN

Client Sample ID: SLP4-091311
Lab Sample ID: 280-20302-3
Date Collected: 09/13/11 14:45
Matrix: Water
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3904.9 mL	1000 uL	86361	09/16/11 14:15	JCV	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 17:01	DPI	TAL DEN

Client Sample ID: W48-091311
Lab Sample ID: 280-20302-4
Date Collected: 09/13/11 11:00
Matrix: Water
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3922.8 mL	1000 uL	86361	09/16/11 14:15	JCV	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 17:37	DPI	TAL DEN

Client Sample ID: SLP6-091311
Lab Sample ID: 280-20302-5
Date Collected: 09/13/11 11:45
Matrix: Water
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3899.6 mL	1000 uL	86361	09/16/11 14:15	JCV	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 18:13	DPI	TAL DEN

Client Sample ID: W119-091311
Lab Sample ID: 280-20302-6
Date Collected: 09/13/11 12:00
Matrix: Water
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3915.8 mL	1000 uL	86361	09/16/11 14:15	JCV	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 18:49	DPI	TAL DEN

Client Sample ID: SLP10TACIDFRACTION-091311 — **Lab Sample ID: 280-20302-7**
Date Collected: 09/13/11 15:20 — **Matrix: Water**
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			982.5 mL	1000 uL	86613	09/17/11 11:25	JCV	TAL DEN
Total/NA	Analysis	8270C		1			88621	09/29/11 22:51	DCK	TAL DEN

Client Sample ID: SLP10T-091311 — **Lab Sample ID: 280-20302-8**
Date Collected: 09/13/11 15:15 — **Matrix: Water**
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3921.7 mL	1000 uL	86361	09/16/11 14:15	JCV	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 19:24	DPI	TAL DEN

Client Sample ID: SLP10-091311 — **Lab Sample ID: 280-20302-9**
Date Collected: 09/13/11 13:45 — **Matrix: Water**
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3912.6 mL	1000 uL	86361	09/16/11 14:15	JCV	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 20:00	DPI	TAL DEN

Client Sample ID: SLP11-091311 — **Lab Sample ID: 280-20302-10**
Date Collected: 09/13/11 16:30 — **Matrix: Water**
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3557.1 mL	1000 uL	86676	09/18/11 15:45	DFB	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 20:36	DPI	TAL DEN

Client Sample ID: SLP11DUP-091311 — **Lab Sample ID: 280-20302-11**
Date Collected: 09/13/11 16:35 — **Matrix: Water**
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3618 mL	1000 uL	86676	09/18/11 15:45	DFB	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 22:24	DPI	TAL DEN

Client Sample ID: SLP11FB-091311 — **Lab Sample ID: 280-20302-12**
Date Collected: 09/13/11 16:20 — **Matrix: Water**
Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3881.4 mL	1000 uL	86676	09/18/11 15:45	DFB	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 23:00	DPI	TAL DEN

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Client Sample ID: SLP11FBD-091311

Lab Sample ID: 280-20302-13

Date Collected: 09/13/11 16:25

Matrix: Water

Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3785.8 mL	1000 uL	86676	09/18/11 15:45	DFB	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 23:37	DPI	TAL DEN

Client Sample ID: W401-091411

Lab Sample ID: 280-20302-14

Date Collected: 09/14/11 09:00

Matrix: Water

Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3574.3 mL	1000 uL	86676	09/18/11 15:45	DFB	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/07/11 00:14	DPI	TAL DEN

Client Sample ID: W402-091411

Lab Sample ID: 280-20302-15

Date Collected: 09/14/11 08:55

Matrix: Water

Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3817 mL	1000 uL	86676	09/18/11 15:45	DFB	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/07/11 00:51	DPI	TAL DEN

Client Sample ID: W403-091411

Lab Sample ID: 280-20302-16

Date Collected: 09/14/11 12:00

Matrix: Water

Date Received: 09/15/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3809.2 mL	1000 uL	87039	09/20/11 18:38	EJP	TAL DEN
Total/NA	Analysis	8270C		1			89868	10/06/11 14:36	DPI	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	40730
TestAmerica Denver	Alaska	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAC	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAC	7	E-10166
TestAmerica Denver	Louisiana	NELAC	6	30785
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAC	1	205310
TestAmerica Denver	New Jersey	NELAC	2	CO004
TestAmerica Denver	New Mexico	State Program	6	N/A
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina	North Carolina DENR	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Tennessee	State Program	4	TN02944
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Sampler ID: IM 9/13/11

Temperature on Receipt: 3.2, 4.2, 5.1 / 3.1, 3.3, 3.9, 3.7, 4.1, 4.4, 2.3, 3.2, 2.8, 4.5, 4.6

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (1007)

Client: City of St. Louis Park (AECOM)	Project Manager: Drew Tarara	Date: 9/13/11	Chain of Custody Number: 103634
Address: 7305 Oxford St.	Telephone Number (Area Code)/Fax Number: 651 367-2335	Lab Number:	Page 1 of 2
City: St. Louis Park / State: MN / Zip Code: 55416	Site Contact: Scott Anderson	Lab Contact: Lisa M.	
Project Name and Location (State): Reilly	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 6014 5681			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAcl/NaOH	PAH PPT	Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt
SLP10TExtended-091311	9/13/11	1525		X			6						X	Extended List PAH	Low Level PAH (PPT)
SLP12-091311		1415													
SLP4-091311		1445													
W48-091311		1100													
SLP6-091311		1145													
W119-091311		1200													
SLP10TAcid Fraction-091311		1520												Acid Fraction Extraction Only	
SLP10T-091311		1515													
SLP10-091311		1345													
SLP11-091311		1630													
SLP11Dup-091311		1635													
SLP11MS-091311		1640													

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: AJ	9/		1. Received By:	9/15/11	930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

10/13/2011

Chain of Custody Record

Sampler ID _____

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (1007)

Client: City of St. Louis Park (AECOM)	Project Manager: Drew Tarara	Date: 9/13/11	Chain of Custody Number: 103635
Address: 7305 Oxford St.	Telephone Number (Area Code)/Fax Number: 651 367-2335	Lab Number	Page 2 of 2
City: St. Louis Park / State: MN / Zip Code: 55416	Site Contact: Scott Anderson	Lab Contact: Lisa U.	
Project Name and Location (State): Reilly	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 6014588			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: PAH PPT
SLP11 MSD-091311	9/13/11	1645		X			6						X
SLP11 FB-091311	↓	1620		↓			↓						↓
SLP11 FBD-091311	↓	1625		↓			↓						↓
W401-091411	9/14/11	900		↓			↓						↓
W402-091411	↓	855		↓			↓						↓
W403-091411	↓	1200		↓			↓						↓

Special Instructions/ Conditions of Receipt

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	9/		1. Received By	9/15/11	930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-20302-1

Login Number: 20302

List Source: TestAmerica Denver

List Number: 1

Creator: Cofoid, Stephen T

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	No relinquished date or time listed on the COC's.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Detection Limit Exceptions Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20302-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8270C	Water	2,3-Benzofuran	ng/L	5.4	20
8270C	Water	2,3-Dihydroindene	ng/L	5.0	20
8270C	Water	1-Methylnaphthalene	ng/L	5.6	20
8270C	Water	2-Methylnaphthalene	ng/L	5.9	20
8270C	Water	3-Methylcholanthrene	ng/L	5.0	20
8270C	Water	Acenaphthene	ng/L	5.7	20
8270C	Water	Acenaphthylene	ng/L	4.8	20
8270C	Water	Acridine	ng/L	6.5	20
8270C	Water	Anthracene	ng/L	4.2	20
8270C	Water	Benzo[a]anthracene	ng/L	4.3	20
8270C	Water	Benzo[a]pyrene	ng/L	2.5	20
8270C	Water	Benzo[e]pyrene	ng/L	4.3	20
8270C	Water	Benzo[b]fluoranthene	ng/L	4.7	20
8270C	Water	Benzo(b)thiophene	ng/L	5.2	20
8270C	Water	Benzo[k]fluoranthene	ng/L	4.1	20
8270C	Water	Benzo[g,h,i]perylene	ng/L	6.2	20
8270C	Water	Carbazole	ng/L	3.8	20
8270C	Water	Chrysene	ng/L	5.6	20
8270C	Water	Dibenz(a,h)anthracene	ng/L	5.9	20
8270C	Water	Dibenzofuran	ng/L	5.7	20
8270C	Water	Dibenzothiophene	ng/L	4.1	20
8270C	Water	Fluoranthene	ng/L	4.6	20
8270C	Water	Fluorene	ng/L	4.1	20
8270C	Water	Indene	ng/L	4.7	20
8270C	Water	Indole	ng/L	4.7	20
8270C	Water	Indeno[1,2,3-cd]pyrene	ng/L	5.4	20
8270C	Water	Naphthalene	ng/L	8.6	20
8270C	Water	Perylene	ng/L	3.8	20
8270C	Water	Phenanthrene	ng/L	6.3	20
8270C	Water	Pyrene	ng/L	4.2	20
8270C	Water	Quinoline	ng/L	9.0	20
8270C	Water	7,12-Dimethylbenz(a)anthracene	ng/L	2.8	20
8270C	Water	Biphenyl	ng/L	5.6	20

AECOM
2 Technology Park Drive
Westford, MA 01886-3140

978.589.3000 tel
978.589.3100 fax

Data Quality Assessment Memorandum

Date: December 21, 2011

To: Bill Gregg

From: Drew Tarara

Subject: Data Quality Assessment
Ultra Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 280-20302-1
Appendix I

Distribution: File 60145681 File

SUMMARY

A Data Quality Assessment (DQA) was performed on the data for the analysis of fourteen aqueous samples and two field blanks for Ultra Low Level aromatic hydrocarbons (PAHs) by SW-846 method 8270C, selected ion monitoring (SIM) method. The samples were collected from September 13-14, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to TestAmerica in Arvada, CO for analysis. TestAmerica processed and reported the results under lot number 280-20302-1

.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes. The result for SLP10EXTENDED-091311 prompted the resampling of SLP10T on October 20 and 25, 2011. Those samples are discussed in subsequent reports.

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
SLP10EXTENDED-091311	SLP11DUP-091311
SLP12-091311	SLP11FB-091311
SLP4-091311	SLP11FBD-091311
W48-091311	W401-091411
SLP6-091311	W402-091411
SLP10ACIDFRACTION-091311	W403-091411
SLP10T-091311	
SLP10-091311	

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

Sample IDs	Sample IDs
SLP11-091311	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. The relinquished by date and time were not on the chain of custody. The client was notified. No other discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

All fourteen cooler temperatures as measured upon sample receipt were within the acceptance criteria of 4± 2°C.

Laboratory Blanks/Field Blanks

Target compounds were detected in each of the laboratory method blanks analyzed with this data set.

The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. The following table summarizes the blank contamination detected, the action level (AL), and the associated samples.

Date Analyzed	Compound	Concentration (ng/L)	Action Level (ng/L)
10/5/11	2-Methylnaphthalene	1.19	5.95
10/5/11	Benzo(a)anthracene	1.10	5.50
10/5/11	Benzo(k)fluoranthene	2.02	10.1
10/5/11	Benzo(ghi)perylene	1.45	7.25
10/5/11	Chrysene	1.93	9.65
10/5/11	Dibenz(ah)anthracene	1.28	6.40
10/5/11	Napththalene	1.22	6.10
10/5/11	Pyrene	2.50	12.5
Associated samples: All samples in prep batch 86361.			

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

Date Analyzed	Compound	Concentration (ng/L)	Action Level (ng/L)
10/5/11	Acenapthene	2.65	13.25
Associated samples: All samples in prep batch 86676.			

Date Analyzed	Compound	Concentration (ng/L)	Action Level (ng/L)
10/5/11	Acenapthene	1.07	5.35
10/5/11	Benzo(a)anthracene	2.94	14.7
10/5/11	Benzo(a)pyrene	1.82	9.1
10/5/11	Benzo(e)pyrene	1.70	8.5
10/5/11	Benzo(b)fluoranthene	2.51	12.55
10/5/11	Benzo(k)fluoranthene	4.91	24.55
10/5/11	Benzo(ghi)perylene	1.78	8.9
10/5/11	Dibenz(ah)anthracene	1.26	6.3
10/5/11	Dibenzothiopene	19.5	97.5
10/5/11	Indeno(123-cd)pyrene	1.30	6.5
Associated samples: All samples in prep batch 87039.			

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

The following compounds were detected in the aqueous field blanks. No validation actions were necessary since these results were for informational purposes only.

SLP11FB-091311	
Compound	**Concentration (ng/L)**
2,3-Benzofuran	1.1
2,3-Dihydroindene	1.5
1-Methylnapthalene	2.8
2-Methylnapthalene	3.8
Acenapthene	0.59
Acenapthylene	3.5
Benzo(b)thiophene	5.8
Dibenzothiophene	20
Naphthalene	4.6

SLP11FBD-091311	
Compound	**Concentration (ng/L)**
2,3-Benzofuran	1.1
2,3-Dihydroindene	2.2
1-Methylnapthalene	1.5
2-Methylnapthalene	2.7
Acenapthene	0.61
Acenapthylene	3.0

AECOM
AECOM 978.589.3000 tel
2 Technology Park Drive 978.589.3100 fax
Westford, MA 01886-3140

Anthracene	0.85
Benzo(b)thiophene	5.9
Dibenzothiophene	21
Naphthalene	4.5

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses with the following exceptions. Qualification of the data for all samples was not required since only one of three surrogate recoveries fell below the QAPP QC acceptance in these sample analyses.

Sample ID	Surrogate Percent Recoveries (%Rs)			Actions	
	Chrysene-d12	Fluorene-d10	Naphthalene-d8	Detects	Nondetects
SLP10TEXTENDED-091311	16	Ok	Ok	Accept	Accept
SLP4-091311	25	Ok	Ok	Accept	Accept
W48-091311	24	Ok	Ok	Accept	Accept
SLP6-091311	26	Ok	Ok	Accept	Accept
SLP11FB-091311	Ok	91	Ok	Accept	Accept
W401-091411	16	Ok	Ok	Accept	Accept
W403-091411	24	Ok	Ok	Accept	Accept
QAPP QC Limits	**28-101**	**23-84**	**22-97**		

MS/MSD Results

MS/MSD analyses were performed on sample SLP11-091311 from this data set. All target analytes were spiked. The percent recoveries (%Rs) of 11 of the 33 spiked target analytes in the MS and the %Rs of 10 of the 33 spiked target analytes in the MSD fell outside the QC acceptance criteria in the MS/MSD analyses. The following table summarizes the %Rs which fell below 10%. These results were qualified as indicated below.

Compound	MS %R	MSD %R	RPD	Laboratory QC limits %R (RPD)	Action (Detects/Nondetects)
Acridine	53	0	NC	30-150 (50)	J/UJ
Benzo(ghi)perylene	3	7	78	30-150 (50)	J/UJ
Dibenzo(ah)anthracene	1	5	110	30-132 (50)	J/UJ
Indeno(123,cd)pyrene	2	6	105	30-150 (50)	J/UJ
Associated sample: SLP11-091311					

LCS Results

All target analytes were spiked. The %Rs and/or RPDs were within the QC acceptance criteria for the LCS and/or LCSD analyses with the following exceptions. No actions were taken.

Compound	LCS %R	LCSD %R	RPD	Laboratory QC limits %R (RPD)	Action (Detects/Nondetects)
Acridine	4	16	115	30-150 (50)	J/R
Benzo(k)fluoranthene	155	157	1	30-150 (50)	
Chrysene	170	169	0	30-150 (50)	J/UJ
Quinoline	30	56	59	30-150 (50)	J/UJ

Field Duplicate Results

AECOM
2 Technology Park Drive
Westford, MA 01886-3140
978.589.3000 tel
978.589.3100 fax

Samples SLP11-091311 and SLP11DUP-091311 was the field duplicate pair analyzed with this data set.

The results for all of the detected compounds in samples SLP11-091311 and SLP11DUP-091311 and their RPDs are not tabulated below since 9 of 31 compounds were detected. There were 3 RPDs that could not be calculated since one of the two samples was non-detect for that compound. The compounds were anthracene, Dibenzothiopene, and 2-methylnapthalene. No action was taken.

Sample Quantitation/Detection Limit Results

Sample calculations were spot checked. No discrepancies were noted.

All samples were analyzed undiluted for this data.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

October 07, 2011

Andrew Tarara
AECOM
First National Bank Building
332 Minnesota St, Suite E1000
Saint Paul, MN 55101

RE: Project: St Louis Park Reilly site
Pace Project No.: 10169588

Dear Andrew Tarara:
Enclosed are the analytical results for sample(s) received by the laboratory on September 15, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Carol Davy

carol.davy@pacelabs.com
Project Manager

Enclosures

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Idaho Certification #: MN00064
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New Mexico Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: D9921
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Washington Certification #: C754
Wisconsin Certification #: 999407970

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10169588001	**W420-091411**	Water	09/14/11 12:15	09/15/11 17:15
10169588002	**W434-091411**	Water	09/14/11 12:00	09/15/11 17:15
10169588003	**W421-091411**	Water	09/14/11 12:20	09/15/11 17:15
10169588004	**W421DUP-091411**	Water	09/14/11 12:25	09/15/11 17:15
10169588007	**W421FB-091411**	Water	09/14/11 12:40	09/15/11 17:15
10169588008	**W421FBD-091411**	Water	09/14/11 12:45	09/15/11 17:15
10169588009	**W101-091411**	Water	09/14/11 15:00	09/15/11 17:15
10169588010	**W131-091411**	Water	09/14/11 14:00	09/15/11 17:15
10169588011	**SLP10T-091511 (Extended List)**	Water	09/15/11 09:45	09/15/11 17:15
10169588012	**W439-091511**	Water	09/15/11 10:20	09/15/11 17:15
10169588013	**W15-091512**	Water	09/15/11 11:30	09/15/11 17:15
10169588014	**W2-091511**	Water	09/15/11 15:00	09/15/11 17:15
10169588015	**P309-091511**	Water	09/15/11 14:30	09/15/11 17:15
10169588016	**W428-091511**	Water	09/15/11 13:30	09/15/11 17:15
10169588017	**W121-091511**	Water	09/15/11 12:30	09/15/11 17:15
10169588018	**W143-091511**	Water	09/15/11 11:00	09/15/11 17:15
10169588019	**W18-091511**	Water	09/15/11 10:00	09/15/11 17:15
10169588020	**W9-091511**	Water	09/15/11 09:00	09/15/11 17:15

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10169588001	**W420-091411**	EPA 8270 by SIM	DRE	18
10169588002	**W434-091411**	EPA 8270 by SIM	DRE	18
10169588003	**W421-091411**	EPA 8270 by SIM	DRE	18
10169588004	**W421DUP-091411**	EPA 8270 by SIM	DRE	18
10169588007	**W421FB-091411**	EPA 8270 by SIM	DRE	18
10169588008	**W421FBD-091411**	EPA 8270 by SIM	DRE	18
10169588009	**W101-091411**	EPA 8270 by SIM	DRE	18
10169588010	**W131-091411**	EPA 8270 by SIM	DRE	18
10169588011	**SLP10T-091511 (Extended List)**	EPA 8270 by SIM	JMW	41
10169588012	**W439-091511**	EPA 8270 by SIM	DRE	18
10169588013	**W15-091512**	EPA 8270 by SIM	DRE	18
10169588014	**W2-091511**	EPA 8270 by SIM	DRE	18
10169588015	**P309-091511**	EPA 8270 by SIM	DRE	18
10169588016	**W428-091511**	EPA 8270 by SIM	DRE	18
10169588017	**W121-091511**	EPA 8270 by SIM	DRE	18
10169588018	**W143-091511**	EPA 8270 by SIM	DRE	18
10169588019	**W18-091511**	EPA 8270 by SIM	DRE	18
10169588020	**W9-091511**	EPA 8270 by SIM	DRE	18

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Method: **EPA 8270 by SIM**
Description: 8270 MSSV CPAH by SIM
Client: AECOM
Date: October 07, 2011

General Information:
1 sample was analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

B+: Analyte was detected in the associated method blank as well as in the sample.
- SLP10T-091511 (Extended List) (Lab ID: 10169588011)

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- SLP10T-091511 (Extended List) (Lab ID: 10169588011)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

QC Batch: OEXT/16721

IC: The initial calibration for this compound was outside of method control limits. The result is estimated.
- BLANK (Lab ID: 1059644)
  - 1,6-Dinitropyrene
  - 1,8-Dinitropyrene
- LCS (Lab ID: 1059645)
  - 1,6-Dinitropyrene
  - 1,8-Dinitropyrene
- MS (Lab ID: 1059646)
  - 1,6-Dinitropyrene
  - 1,8-Dinitropyrene
- MSD (Lab ID: 1059647)
  - 1,6-Dinitropyrene
  - 1,8-Dinitropyrene
- SLP10T-091511 (Extended List) (Lab ID: 10169588011)
  - 1,6-Dinitropyrene
  - 1,8-Dinitropyrene

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.
- LCS (Lab ID: 1059645)
  - 7,12-Dimethylbenz(a)anthracene
- MS (Lab ID: 1059646)
  - 7,12-Dimethylbenz(a)anthracene
- MSD (Lab ID: 1059647)
  - 7,12-Dimethylbenz(a)anthracene

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Method: **EPA 8270 by SIM**
Description: 8270 MSSV CPAH by SIM
Client: AECOM
Date: October 07, 2011

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: OEXT/16721

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1059645)
  - 1,6-Dinitropyrene
  - 1,8-Dinitropyrene

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/16721

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10169907003

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1059646)
  - 1,6-Dinitropyrene
  - 1,8-Dinitropyrene
- MSD (Lab ID: 1059647)
  - 1,6-Dinitropyrene
  - 1,8-Dinitropyrene

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1059646)
  - 1-Methylnaphthalene
  - 2-Chloronaphthalene
  - 2-Methylnaphthalene
  - Naphthalene
- MSD (Lab ID: 1059647)
  - 1-Methylnaphthalene

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: October 07, 2011

General Information:
17 samples were analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

B: Analyte was detected in the associated method blank.
- W101-091411 (Lab ID: 10169588009)
- W131-091411 (Lab ID: 10169588010)
- W420-091411 (Lab ID: 10169588001)
- W421-091411 (Lab ID: 10169588003)
- W421DUP-091411 (Lab ID: 10169588004)
- W421FBD-091411 (Lab ID: 10169588008)
- W434-091411 (Lab ID: 10169588002)

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- P309-091511 (Lab ID: 10169588015)
- W121-091511 (Lab ID: 10169588017)
- W143-091511 (Lab ID: 10169588018)
- W15-091512 (Lab ID: 10169588013)
- W18-091511 (Lab ID: 10169588019)
- W2-091511 (Lab ID: 10169588014)
- W428-091511 (Lab ID: 10169588016)
- W439-091511 (Lab ID: 10169588012)
- W9-091511 (Lab ID: 10169588020)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: October 07, 2011

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: OEXT/16719

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1059629)
  - Anthracene
  - Benzo(a)pyrene
  - Chrysene
  - Pyrene

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/16705

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10169588003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1058623)
  - Acenaphthene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(k)fluoranthene
  - Chrysene
  - Fluoranthene
  - Fluorene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- MSD (Lab ID: 1058624)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluoranthene
  - Fluorene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: October 07, 2011

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/16705

B: Analyte was detected in the associated method blank.
- W101-091411 (Lab ID: 10169588009)
  - Benzo(a)anthracene
- W131-091411 (Lab ID: 10169588010)
  - Benzo(a)anthracene
- W420-091411 (Lab ID: 10169588001)
  - Benzo(a)anthracene
- W421-091411 (Lab ID: 10169588003)
  - Benzo(a)anthracene
- W421DUP-091411 (Lab ID: 10169588004)
  - Benzo(a)anthracene
- W421FBD-091411 (Lab ID: 10169588008)
  - Benzo(a)anthracene
- W434-091411 (Lab ID: 10169588002)
  - Benzo(a)anthracene

C0: Result confirmed by second analysis.
- BLANK (Lab ID: 1058620)
  - Benzo(a)anthracene

E: Analyte concentration exceeded the calibration range. The reported result is estimated.
- MS (Lab ID: 1058623)
  - Acenaphthene
  - Anthracene
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Fluorene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- MSD (Lab ID: 1058624)
  - Acenaphthene
  - Anthracene

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: October 07, 2011

Analyte Comments:

QC Batch: OEXT/16705

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MSD (Lab ID: 1058624)
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Fluorene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene

QC Batch: OEXT/16719

1M: Results confirmed by analysis of out-of-hold re-extraction.

- P309-091511 (Lab ID: 10169588015)
  - 2-Fluorobiphenyl (S)
- W121-091511 (Lab ID: 10169588017)
  - 2-Fluorobiphenyl (S)
- W143-091511 (Lab ID: 10169588018)
  - 2-Fluorobiphenyl (S)
- W15-091512 (Lab ID: 10169588013)
  - 2-Fluorobiphenyl (S)
- W2-091511 (Lab ID: 10169588014)
  - 2-Fluorobiphenyl (S)
- W428-091511 (Lab ID: 10169588016)
  - 2-Fluorobiphenyl (S)

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- W18-091511 (Lab ID: 10169588019)
  - 2-Fluorobiphenyl (S)
- W439-091511 (Lab ID: 10169588012)
  - 2-Fluorobiphenyl (S)
- W9-091511 (Lab ID: 10169588020)
  - 2-Fluorobiphenyl (S)

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W420-091411 **Lab ID: 10169588001** Collected: 09/14/11 12:15 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**136**	ug/L	8.3	0.83	200	09/21/11 07:56	09/30/11 17:42	83-32-9	
Acenaphthylene	**0.43**	ug/L	0.042	0.0042	1	09/21/11 07:56	09/29/11 13:10	208-96-8	
Anthracene	**1.8**	ug/L	0.042	0.018	1	09/21/11 07:56	09/29/11 13:10	120-12-7	
Benzo(a)anthracene	**0.014J**	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 13:10	56-55-3	B
Benzo(a)pyrene	ND	ug/L	0.042	0.0052	1	09/21/11 07:56	09/29/11 13:10	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 13:10	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 13:10	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0073	1	09/21/11 07:56	09/29/11 13:10	207-08-9	
Chrysene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 13:10	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.021	1	09/21/11 07:56	09/29/11 13:10	53-70-3	
Fluoranthene	**1.1**	ug/L	0.042	0.0052	1	09/21/11 07:56	09/29/11 13:10	206-44-0	
Fluorene	**46.2**	ug/L	8.3	1.0	200	09/21/11 07:56	09/30/11 17:42	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0052	1	09/21/11 07:56	09/29/11 13:10	193-39-5	
Naphthalene	**1540**	ug/L	8.3	2.7	200	09/21/11 07:56	09/30/11 17:42	91-20-3	
Phenanthrene	**35.7**	ug/L	8.3	4.0	200	09/21/11 07:56	09/30/11 17:42	85-01-8	
Pyrene	**0.54**	ug/L	0.042	0.0052	1	09/21/11 07:56	09/29/11 13:10	129-00-0	
2-Fluorobiphenyl (S)	82	%	56-125		1	09/21/11 07:56	09/29/11 13:10	321-60-8	
Terphenyl-d14 (S)	87	%	58-125		1	09/21/11 07:56	09/29/11 13:10	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W434-091411 **Lab ID: 10169588002** Collected: 09/14/11 12:00 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**1.1**	ug/L	0.041	0.0041	1	09/21/11 07:56	09/29/11 13:28	83-32-9	
Acenaphthylene	**0.0097J**	ug/L	0.041	0.0041	1	09/21/11 07:56	09/29/11 13:28	208-96-8	
Anthracene	ND	ug/L	0.041	0.018	1	09/21/11 07:56	09/29/11 13:28	120-12-7	
Benzo(a)anthracene	**0.0068J**	ug/L	0.041	0.0062	1	09/21/11 07:56	09/29/11 13:28	56-55-3	B
Benzo(a)pyrene	ND	ug/L	0.041	0.0052	1	09/21/11 07:56	09/29/11 13:28	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0062	1	09/21/11 07:56	09/29/11 13:28	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0062	1	09/21/11 07:56	09/29/11 13:28	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0072	1	09/21/11 07:56	09/29/11 13:28	207-08-9	
Chrysene	ND	ug/L	0.041	0.0062	1	09/21/11 07:56	09/29/11 13:28	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.021	1	09/21/11 07:56	09/29/11 13:28	53-70-3	
Fluoranthene	**0.021J**	ug/L	0.041	0.0052	1	09/21/11 07:56	09/29/11 13:28	206-44-0	
Fluorene	ND	ug/L	0.041	0.0052	1	09/21/11 07:56	09/29/11 13:28	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0052	1	09/21/11 07:56	09/29/11 13:28	193-39-5	
Naphthalene	**0.037J**	ug/L	0.041	0.013	1	09/21/11 07:56	09/29/11 13:28	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.020	1	09/21/11 07:56	09/29/11 13:28	85-01-8	
Pyrene	**0.011J**	ug/L	0.041	0.0052	1	09/21/11 07:56	09/29/11 13:28	129-00-0	
2-Fluorobiphenyl (S)	80	%	56-125		1	09/21/11 07:56	09/29/11 13:28	321-60-8	
Terphenyl-d14 (S)	88	%	58-125		1	09/21/11 07:56	09/29/11 13:28	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W421-091411 **Lab ID: 10169588003** Collected: 09/14/11 12:20 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**303**	ug/L	4.1	0.41	100	09/21/11 07:56	09/29/11 10:55	83-32-9	M1
Acenaphthylene	**5.1**	ug/L	0.041	0.0041	1	09/21/11 07:56	09/28/11 23:55	208-96-8	M1
Anthracene	**56.2**	ug/L	0.41	0.17	10	09/21/11 07:56	09/29/11 10:37	120-12-7	M1
Benzo(a)anthracene	**40.1**	ug/L	0.41	0.061	10	09/21/11 07:56	09/29/11 10:37	56-55-3	B,M1
Benzo(a)pyrene	**26.0**	ug/L	0.41	0.051	10	09/21/11 07:56	09/29/11 10:37	50-32-8	M1
Benzo(b)fluoranthene	**39.9**	ug/L	0.41	0.061	10	09/21/11 07:56	09/29/11 10:37	205-99-2	M1
Benzo(g,h,i)perylene	**14.9**	ug/L	0.41	0.061	10	09/21/11 07:56	09/29/11 10:37	191-24-2	M1
Benzo(k)fluoranthene	**11.5**	ug/L	0.41	0.071	10	09/21/11 07:56	09/29/11 10:37	207-08-9	M1
Chrysene	**32.0**	ug/L	0.41	0.061	10	09/21/11 07:56	09/29/11 10:37	218-01-9	M1
Dibenz(a,h)anthracene	**4.2**	ug/L	0.041	0.020	1	09/21/11 07:56	09/28/11 23:55	53-70-3	M1
Fluoranthene	**171**	ug/L	4.1	0.51	100	09/21/11 07:56	09/29/11 10:55	206-44-0	M1
Fluorene	**188**	ug/L	4.1	0.51	100	09/21/11 07:56	09/29/11 10:55	86-73-7	M1
Indeno(1,2,3-cd)pyrene	**12.1**	ug/L	0.41	0.051	10	09/21/11 07:56	09/29/11 10:37	193-39-5	M1
Naphthalene	**880**	ug/L	4.1	1.3	100	09/21/11 07:56	09/29/11 10:55	91-20-3	M1
Phenanthrene	**396**	ug/L	4.1	1.9	100	09/21/11 07:56	09/29/11 10:55	85-01-8	M1
Pyrene	**120**	ug/L	4.1	0.51	100	09/21/11 07:56	09/29/11 10:55	129-00-0	M1
2-Fluorobiphenyl (S)	92	%	56-125		1	09/21/11 07:56	09/28/11 23:55	321-60-8	
Terphenyl-d14 (S)	91	%	58-125		1	09/21/11 07:56	09/28/11 23:55	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W421DUP-091411 **Lab ID: 10169588004** Collected: 09/14/11 12:25 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**288**	ug/L	8.1	0.81	200	09/21/11 07:56	09/30/11 16:46	83-32-9	
Acenaphthylene	**4.9**	ug/L	0.81	0.081	20	09/21/11 07:56	09/29/11 15:54	208-96-8	
Anthracene	**47.6**	ug/L	0.81	0.35	20	09/21/11 07:56	09/29/11 15:54	120-12-7	
Benzo(a)anthracene	**32.1**	ug/L	0.81	0.12	20	09/21/11 07:56	09/29/11 15:54	56-55-3	B
Benzo(a)pyrene	**20.7**	ug/L	0.81	0.10	20	09/21/11 07:56	09/29/11 15:54	50-32-8	
Benzo(b)fluoranthene	**31.6**	ug/L	0.81	0.12	20	09/21/11 07:56	09/29/11 15:54	205-99-2	
Benzo(g,h,i)perylene	**11.8**	ug/L	0.81	0.12	20	09/21/11 07:56	09/29/11 15:54	191-24-2	
Benzo(k)fluoranthene	**9.2**	ug/L	0.81	0.14	20	09/21/11 07:56	09/29/11 15:54	207-08-9	
Chrysene	**25.7**	ug/L	0.81	0.12	20	09/21/11 07:56	09/29/11 15:54	218-01-9	
Dibenz(a,h)anthracene	**3.2**	ug/L	0.81	0.41	20	09/21/11 07:56	09/29/11 15:54	53-70-3	
Fluoranthene	**141**	ug/L	0.81	0.10	20	09/21/11 07:56	09/29/11 15:54	206-44-0	
Fluorene	**170**	ug/L	0.81	0.10	20	09/21/11 07:56	09/29/11 15:54	86-73-7	
Indeno(1,2,3-cd)pyrene	**9.7**	ug/L	0.81	0.10	20	09/21/11 07:56	09/29/11 15:54	193-39-5	
Naphthalene	**956**	ug/L	8.1	2.6	200	09/21/11 07:56	09/30/11 16:46	91-20-3	
Phenanthrene	**346**	ug/L	8.1	3.9	200	09/21/11 07:56	09/30/11 16:46	85-01-8	
Pyrene	**101**	ug/L	0.81	0.10	20	09/21/11 07:56	09/29/11 15:54	129-00-0	
2-Fluorobiphenyl (S)	86	%	56-125		20	09/21/11 07:56	09/29/11 15:54	321-60-8	
Terphenyl-d14 (S)	88	%	58-125		20	09/21/11 07:56	09/29/11 15:54	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W421FB-091411 **Lab ID: 10169588007** Collected: 09/14/11 12:40 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.0040	1	09/21/11 07:56	09/29/11 13:47	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.0040	1	09/21/11 07:56	09/29/11 13:47	208-96-8	
Anthracene	ND	ug/L	0.040	0.017	1	09/21/11 07:56	09/29/11 13:47	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.0060	1	09/21/11 07:56	09/29/11 13:47	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 13:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.0060	1	09/21/11 07:56	09/29/11 13:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.0060	1	09/21/11 07:56	09/29/11 13:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.0070	1	09/21/11 07:56	09/29/11 13:47	207-08-9	
Chrysene	ND	ug/L	0.040	0.0060	1	09/21/11 07:56	09/29/11 13:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	09/21/11 07:56	09/29/11 13:47	53-70-3	
Fluoranthene	**0.0052J**	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 13:47	206-44-0	
Fluorene	ND	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 13:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 13:47	193-39-5	
Naphthalene	**0.018J**	ug/L	0.040	0.013	1	09/21/11 07:56	09/29/11 13:47	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.019	1	09/21/11 07:56	09/29/11 13:47	85-01-8	
Pyrene	ND	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 13:47	129-00-0	
2-Fluorobiphenyl (S)	85	%	56-125		1	09/21/11 07:56	09/29/11 13:47	321-60-8	
Terphenyl-d14 (S)	87	%	58-125		1	09/21/11 07:56	09/29/11 13:47	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W421FBD-091411 **Lab ID: 10169588008** Collected: 09/14/11 12:45 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.040	0.0040	1	09/21/11 07:56	09/29/11 14:05	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.0040	1	09/21/11 07:56	09/29/11 14:05	208-96-8	
Anthracene	ND	ug/L	0.040	0.017	1	09/21/11 07:56	09/29/11 14:05	120-12-7	
Benzo(a)anthracene	**0.0062J**	ug/L	0.040	0.0060	1	09/21/11 07:56	09/29/11 14:05	56-55-3	B
Benzo(a)pyrene	ND	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 14:05	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.040	0.0060	1	09/21/11 07:56	09/29/11 14:05	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.0060	1	09/21/11 07:56	09/29/11 14:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.040	0.0070	1	09/21/11 07:56	09/29/11 14:05	207-08-9	
Chrysene	ND	ug/L	0.040	0.0060	1	09/21/11 07:56	09/29/11 14:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	09/21/11 07:56	09/29/11 14:05	53-70-3	
Fluoranthene	**0.0051J**	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 14:05	206-44-0	
Fluorene	ND	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 14:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 14:05	193-39-5	
Naphthalene	**0.014J**	ug/L	0.040	0.013	1	09/21/11 07:56	09/29/11 14:05	91-20-3	
Phenanthrene	ND	ug/L	0.040	0.019	1	09/21/11 07:56	09/29/11 14:05	85-01-8	
Pyrene	ND	ug/L	0.040	0.0050	1	09/21/11 07:56	09/29/11 14:05	129-00-0	
2-Fluorobiphenyl (S)	80	%	56-125		1	09/21/11 07:56	09/29/11 14:05	321-60-8	
Terphenyl-d14 (S)	89	%	58-125		1	09/21/11 07:56	09/29/11 14:05	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W101-091411 **Lab ID: 10169588009** Collected: 09/14/11 15:00 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.24**	ug/L	0.042	0.0042	1	09/21/11 07:56	09/29/11 14:23	83-32-9	
Acenaphthylene	**0.022J**	ug/L	0.042	0.0042	1	09/21/11 07:56	09/29/11 14:23	208-96-8	
Anthracene	**0.019J**	ug/L	0.042	0.018	1	09/21/11 07:56	09/29/11 14:23	120-12-7	
Benzo(a)anthracene	**0.0066J**	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 14:23	56-55-3	B
Benzo(a)pyrene	ND	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 14:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 14:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0074	1	09/21/11 07:56	09/29/11 14:23	207-08-9	
Chrysene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 14:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.021	1	09/21/11 07:56	09/29/11 14:23	53-70-3	
Fluoranthene	**0.0064J**	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:23	206-44-0	
Fluorene	ND	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:23	193-39-5	
Naphthalene	**0.025J**	ug/L	0.042	0.014	1	09/21/11 07:56	09/29/11 14:23	91-20-3	
Phenanthrene	ND	ug/L	0.042	0.020	1	09/21/11 07:56	09/29/11 14:23	85-01-8	
Pyrene	ND	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:23	129-00-0	
2-Fluorobiphenyl (S)	75	%	56-125		1	09/21/11 07:56	09/29/11 14:23	321-60-8	
Terphenyl-d14 (S)	87	%	58-125		1	09/21/11 07:56	09/29/11 14:23	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W131-091411 **Lab ID: 10169588010** Collected: 09/14/11 14:00 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.042	0.0042	1	09/21/11 07:56	09/29/11 14:41	83-32-9	
Acenaphthylene	ND	ug/L	0.042	0.0042	1	09/21/11 07:56	09/29/11 14:41	208-96-8	
Anthracene	ND	ug/L	0.042	0.018	1	09/21/11 07:56	09/29/11 14:41	120-12-7	
Benzo(a)anthracene	**0.0069J**	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 14:41	56-55-3	B
Benzo(a)pyrene	ND	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:41	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 14:41	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 14:41	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0074	1	09/21/11 07:56	09/29/11 14:41	207-08-9	
Chrysene	ND	ug/L	0.042	0.0063	1	09/21/11 07:56	09/29/11 14:41	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.021	1	09/21/11 07:56	09/29/11 14:41	53-70-3	
Fluoranthene	**0.0077J**	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:41	206-44-0	
Fluorene	ND	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:41	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:41	193-39-5	
Naphthalene	**0.016J**	ug/L	0.042	0.014	1	09/21/11 07:56	09/29/11 14:41	91-20-3	
Phenanthrene	ND	ug/L	0.042	0.020	1	09/21/11 07:56	09/29/11 14:41	85-01-8	
Pyrene	**0.0063J**	ug/L	0.042	0.0053	1	09/21/11 07:56	09/29/11 14:41	129-00-0	
2-Fluorobiphenyl (S)	74	%	56-125		1	09/21/11 07:56	09/29/11 14:41	321-60-8	
Terphenyl-d14 (S)	84	%	58-125		1	09/21/11 07:56	09/29/11 14:41	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: SLP10T-091511 (Extended List) **Lab ID: 10169588011** Collected: 09/15/11 09:45 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV CPAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.026J**	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	83-32-9	
Acenaphthylene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	208-96-8	
Anthracene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	50-32-8	
Benzo(e)pyrene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	192-97-2	
Benzo(g,h,i)perylene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	191-24-2	
Benzofluoranthenes (Total)	ND	ug/L	0.20	0.10	1	09/22/11 08:13	09/27/11 14:39		
Carbazole	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	86-74-8	
2-Chloronaphthalene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	91-58-7	
Chrysene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	218-01-9	
Dibenz(a,h)acridine	ND	ug/L	0.10	0.020	1	09/22/11 08:13	09/27/11 14:39	226-36-8	
Dibenz(a,h)anthracene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	53-70-3	
Dibenz(a,j)acridine	ND	ug/L	0.10	0.020	1	09/22/11 08:13	09/27/11 14:39	224-42-0	
Dibenzo(a,e)pyrene	ND	ug/L	0.10	0.020	1	09/22/11 08:13	09/27/11 14:39	192-65-4	
Dibenzo(a,h)pyrene	ND	ug/L	0.10	0.020	1	09/22/11 08:13	09/27/11 14:39	189-64-0	
Dibenzo(a,i)pyrene	ND	ug/L	0.10	0.020	1	09/22/11 08:13	09/27/11 14:39	189-55-9	
Dibenzo(a,l)pyrene	ND	ug/L	0.30	0.020	1	09/22/11 08:13	09/27/11 14:39	191-30-0	
7H-Dibenzo(c,g)carbazole	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	194-59-2	
Dibenzofuran	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	132-64-9	
7,12-Dimethylbenz(a)anthracene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	57-97-6	
1,6-Dinitropyrene	ND	ug/L	1.0	0.50	1	09/22/11 08:13	09/27/11 14:39	42397-64-8	IC,L2
1,8-Dinitropyrene	ND	ug/L	1.0	0.50	1	09/22/11 08:13	09/27/11 14:39	42397-65-9	IC,L2
Fluoranthene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	206-44-0	
Fluorene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	193-39-5	
3-Methylcholanthrene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	56-49-5	
5-Methylchrysene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	3697-24-3	
1-Methylnaphthalene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	90-12-0	
2-Methylnaphthalene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	91-57-6	
Naphthalene	**0.053**	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	91-20-3	B+
5-Nitroacenaphthene	ND	ug/L	0.30	0.020	1	09/22/11 08:13	09/27/11 14:39	602-57-8	
6-Nitrochrysene	ND	ug/L	0.30	0.020	1	09/22/11 08:13	09/27/11 14:39	7496-02-8	
2-Nitrofluorene	ND	ug/L	0.30	0.020	1	09/22/11 08:13	09/27/11 14:39	607-57-8	
1-Nitropyrene	ND	ug/L	0.30	0.020	1	09/22/11 08:13	09/27/11 14:39	5522-43-0	
4-Nitropyrene	ND	ug/L	0.30	0.020	1	09/22/11 08:13	09/27/11 14:39	57835-92-4	
Perylene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	198-55-0	
Phenanthrene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	85-01-8	
Pyrene	ND	ug/L	0.040	0.020	1	09/22/11 08:13	09/27/11 14:39	129-00-0	
2-Fluorobiphenyl (S)	94	%	32-150		1	09/22/11 08:13	09/27/11 14:39	321-60-8	
Terphenyl-d14 (S)	108	%	46-141		1	09/22/11 08:13	09/27/11 14:39	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W439-091511 **Lab ID: 10169588012** Collected: 09/15/11 10:20 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**42.4**	ug/L	2.1	0.21	50	09/22/11 08:06	10/05/11 01:16	83-32-9	
Acenaphthylene	**0.39**	ug/L	0.041	0.0041	1	09/22/11 08:06	09/27/11 13:47	208-96-8	
Anthracene	**0.29**	ug/L	0.041	0.018	1	09/22/11 08:06	09/27/11 13:47	120-12-7	L2
Benzo(a)anthracene	**0.0063J**	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 13:47	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 13:47	50-32-8	L2
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 13:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 13:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0073	1	09/22/11 08:06	09/27/11 13:47	207-08-9	
Chrysene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 13:47	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.021	1	09/22/11 08:06	09/27/11 13:47	53-70-3	
Fluoranthene	**0.10**	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 13:47	206-44-0	
Fluorene	**7.0**	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 13:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 13:47	193-39-5	
Naphthalene	**378**	ug/L	2.1	0.67	50	09/22/11 08:06	10/05/11 01:16	91-20-3	
Phenanthrene	**4.8**	ug/L	0.041	0.020	1	09/22/11 08:06	09/27/11 13:47	85-01-8	
Pyrene	**0.048**	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 13:47	129-00-0	L2
2-Fluorobiphenyl (S)	64	%	56-125		1	09/22/11 08:06	09/27/11 13:47	321-60-8	P2
Terphenyl-d14 (S)	68	%	58-125		1	09/22/11 08:06	09/27/11 13:47	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W15-091512 **Lab ID: 10169588013** Collected: 09/15/11 11:30 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.021J**	ug/L	0.042	0.0042	1	09/22/11 08:06	09/27/11 14:05	83-32-9	
Acenaphthylene	**0.0047J**	ug/L	0.042	0.0042	1	09/22/11 08:06	09/27/11 14:05	208-96-8	
Anthracene	**0.064**	ug/L	0.042	0.018	1	09/22/11 08:06	09/27/11 14:05	120-12-7	L2
Benzo(a)anthracene	**0.011J**	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 14:05	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 14:05	50-32-8	L2
Benzo(b)fluoranthene	**0.0064J**	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 14:05	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 14:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0073	1	09/22/11 08:06	09/27/11 14:05	207-08-9	
Chrysene	ND	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 14:05	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.021	1	09/22/11 08:06	09/27/11 14:05	53-70-3	
Fluoranthene	**0.069**	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 14:05	206-44-0	
Fluorene	**0.021J**	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 14:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 14:05	193-39-5	
Naphthalene	**0.051**	ug/L	0.042	0.014	1	09/22/11 08:06	09/27/11 14:05	91-20-3	
Phenanthrene	**0.046**	ug/L	0.042	0.020	1	09/22/11 08:06	09/27/11 14:05	85-01-8	
Pyrene	**0.047**	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 14:05	129-00-0	L2
2-Fluorobiphenyl (S)	67	%	56-125		1	09/22/11 08:06	09/27/11 14:05	321-60-8	1M
Terphenyl-d14 (S)	72	%	58-125		1	09/22/11 08:06	09/27/11 14:05	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W2-091511 **Lab ID: 10169588014** Collected: 09/15/11 15:00 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.041	0.0041	1	09/22/11 08:06	09/27/11 14:24	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.0041	1	09/22/11 08:06	09/27/11 14:24	208-96-8	
Anthracene	ND	ug/L	0.041	0.017	1	09/22/11 08:06	09/27/11 14:24	120-12-7	L2
Benzo(a)anthracene	**0.0064J**	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 14:24	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 14:24	50-32-8	L2
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 14:24	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 14:24	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0072	1	09/22/11 08:06	09/27/11 14:24	207-08-9	
Chrysene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 14:24	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.021	1	09/22/11 08:06	09/27/11 14:24	53-70-3	
Fluoranthene	**0.0097J**	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 14:24	206-44-0	
Fluorene	ND	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 14:24	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 14:24	193-39-5	
Naphthalene	**0.026J**	ug/L	0.041	0.013	1	09/22/11 08:06	09/27/11 14:24	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.019	1	09/22/11 08:06	09/27/11 14:24	85-01-8	
Pyrene	**0.0078J**	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 14:24	129-00-0	L2
2-Fluorobiphenyl (S)	73	%	56-125		1	09/22/11 08:06	09/27/11 14:24	321-60-8	1M
Terphenyl-d14 (S)	79	%	58-125		1	09/22/11 08:06	09/27/11 14:24	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: P309-091511 **Lab ID: 10169588015** Collected: 09/15/11 14:30 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**12.3**	ug/L	0.082	0.0082	2	09/22/11 08:06	09/29/11 17:07	83-32-9	
Acenaphthylene	**0.098**	ug/L	0.041	0.0041	1	09/22/11 08:06	09/27/11 14:42	208-96-8	
Anthracene	**0.033J**	ug/L	0.041	0.018	1	09/22/11 08:06	09/27/11 14:42	120-12-7	L2
Benzo(a)anthracene	**0.0085J**	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 14:42	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 14:42	50-32-8	L2
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 14:42	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 14:42	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0072	1	09/22/11 08:06	09/27/11 14:42	207-08-9	
Chrysene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 14:42	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.021	1	09/22/11 08:06	09/27/11 14:42	53-70-3	
Fluoranthene	**0.040J**	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 14:42	206-44-0	
Fluorene	**0.49**	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 14:42	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 14:42	193-39-5	
Naphthalene	**0.058**	ug/L	0.041	0.013	1	09/22/11 08:06	09/27/11 14:42	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.020	1	09/22/11 08:06	09/27/11 14:42	85-01-8	
Pyrene	**0.037J**	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 14:42	129-00-0	L2
2-Fluorobiphenyl (S)	71	%	56-125		1	09/22/11 08:06	09/27/11 14:42	321-60-8	1M
Terphenyl-d14 (S)	73	%	58-125		1	09/22/11 08:06	09/27/11 14:42	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W428-091511 **Lab ID: 10169588016** Collected: 09/15/11 13:30 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.0085J**	ug/L	0.042	0.0042	1	09/22/11 08:06	09/27/11 15:00	83-32-9	
Acenaphthylene	ND	ug/L	0.042	0.0042	1	09/22/11 08:06	09/27/11 15:00	208-96-8	
Anthracene	ND	ug/L	0.042	0.018	1	09/22/11 08:06	09/27/11 15:00	120-12-7	L2
Benzo(a)anthracene	**0.0064J**	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 15:00	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.0053	1	09/22/11 08:06	09/27/11 15:00	50-32-8	L2
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 15:00	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 15:00	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0074	1	09/22/11 08:06	09/27/11 15:00	207-08-9	
Chrysene	ND	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 15:00	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.021	1	09/22/11 08:06	09/27/11 15:00	53-70-3	
Fluoranthene	**0.018J**	ug/L	0.042	0.0053	1	09/22/11 08:06	09/27/11 15:00	206-44-0	
Fluorene	**0.0061J**	ug/L	0.042	0.0053	1	09/22/11 08:06	09/27/11 15:00	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0053	1	09/22/11 08:06	09/27/11 15:00	193-39-5	
Naphthalene	**0.093**	ug/L	0.042	0.014	1	09/22/11 08:06	09/27/11 15:00	91-20-3	
Phenanthrene	ND	ug/L	0.042	0.020	1	09/22/11 08:06	09/27/11 15:00	85-01-8	
Pyrene	**0.0099J**	ug/L	0.042	0.0053	1	09/22/11 08:06	09/27/11 15:00	129-00-0	L2
2-Fluorobiphenyl (S)	70	%	56-125		1	09/22/11 08:06	09/27/11 15:00	321-60-8	1M
Terphenyl-d14 (S)	71	%	58-125		1	09/22/11 08:06	09/27/11 15:00	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W121-091511 **Lab ID: 10169588017** Collected: 09/15/11 12:30 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.0096J**	ug/L	0.041	0.0041	1	09/22/11 08:06	09/27/11 15:18	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.0041	1	09/22/11 08:06	09/27/11 15:18	208-96-8	
Anthracene	ND	ug/L	0.041	0.018	1	09/22/11 08:06	09/27/11 15:18	120-12-7	L2
Benzo(a)anthracene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 15:18	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 15:18	50-32-8	L2
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 15:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 15:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0072	1	09/22/11 08:06	09/27/11 15:18	207-08-9	
Chrysene	ND	ug/L	0.041	0.0062	1	09/22/11 08:06	09/27/11 15:18	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.021	1	09/22/11 08:06	09/27/11 15:18	53-70-3	
Fluoranthene	**0.0060J**	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 15:18	206-44-0	
Fluorene	**0.0062J**	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 15:18	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 15:18	193-39-5	
Naphthalene	**0.053**	ug/L	0.041	0.013	1	09/22/11 08:06	09/27/11 15:18	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.020	1	09/22/11 08:06	09/27/11 15:18	85-01-8	
Pyrene	ND	ug/L	0.041	0.0052	1	09/22/11 08:06	09/27/11 15:18	129-00-0	L2
2-Fluorobiphenyl (S)	76	%	56-125		1	09/22/11 08:06	09/27/11 15:18	321-60-8	1M
Terphenyl-d14 (S)	75	%	58-125		1	09/22/11 08:06	09/27/11 15:18	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W143-091511 **Lab ID: 10169588018** Collected: 09/15/11 11:00 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**0.22**	ug/L	0.043	0.0043	1	09/22/11 08:06	09/27/11 15:37	83-32-9	
Acenaphthylene	**0.0052J**	ug/L	0.043	0.0043	1	09/22/11 08:06	09/27/11 15:37	208-96-8	
Anthracene	ND	ug/L	0.043	0.018	1	09/22/11 08:06	09/27/11 15:37	120-12-7	L2
Benzo(a)anthracene	**0.0066J**	ug/L	0.043	0.0065	1	09/22/11 08:06	09/27/11 15:37	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.043	0.0054	1	09/22/11 08:06	09/27/11 15:37	50-32-8	L2
Benzo(b)fluoranthene	ND	ug/L	0.043	0.0065	1	09/22/11 08:06	09/27/11 15:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.043	0.0065	1	09/22/11 08:06	09/27/11 15:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.043	0.0075	1	09/22/11 08:06	09/27/11 15:37	207-08-9	
Chrysene	ND	ug/L	0.043	0.0065	1	09/22/11 08:06	09/27/11 15:37	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.043	0.022	1	09/22/11 08:06	09/27/11 15:37	53-70-3	
Fluoranthene	ND	ug/L	0.043	0.0054	1	09/22/11 08:06	09/27/11 15:37	206-44-0	
Fluorene	**0.0055J**	ug/L	0.043	0.0054	1	09/22/11 08:06	09/27/11 15:37	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.043	0.0054	1	09/22/11 08:06	09/27/11 15:37	193-39-5	
Naphthalene	**0.060**	ug/L	0.043	0.014	1	09/22/11 08:06	09/27/11 15:37	91-20-3	
Phenanthrene	ND	ug/L	0.043	0.020	1	09/22/11 08:06	09/27/11 15:37	85-01-8	
Pyrene	ND	ug/L	0.043	0.0054	1	09/22/11 08:06	09/27/11 15:37	129-00-0	L2
2-Fluorobiphenyl (S)	76	%	56-125		1	09/22/11 08:06	09/27/11 15:37	321-60-8	1M
Terphenyl-d14 (S)	75	%	58-125		1	09/22/11 08:06	09/27/11 15:37	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W18-091511 **Lab ID: 10169588019** Collected: 09/15/11 10:00 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**2.5**	ug/L	0.041	0.0041	1	09/22/11 08:06	09/27/11 15:55	83-32-9	
Acenaphthylene	**0.088**	ug/L	0.041	0.0041	1	09/22/11 08:06	09/27/11 15:55	208-96-8	
Anthracene	ND	ug/L	0.041	0.017	1	09/22/11 08:06	09/27/11 15:55	120-12-7	L2
Benzo(a)anthracene	ND	ug/L	0.041	0.0061	1	09/22/11 08:06	09/27/11 15:55	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 15:55	50-32-8	L2
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0061	1	09/22/11 08:06	09/27/11 15:55	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0061	1	09/22/11 08:06	09/27/11 15:55	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0071	1	09/22/11 08:06	09/27/11 15:55	207-08-9	
Chrysene	ND	ug/L	0.041	0.0061	1	09/22/11 08:06	09/27/11 15:55	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.020	1	09/22/11 08:06	09/27/11 15:55	53-70-3	
Fluoranthene	**0.0072J**	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 15:55	206-44-0	
Fluorene	**0.14**	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 15:55	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 15:55	193-39-5	
Naphthalene	**5.2**	ug/L	0.041	0.013	1	09/22/11 08:06	09/27/11 15:55	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.019	1	09/22/11 08:06	09/27/11 15:55	85-01-8	
Pyrene	ND	ug/L	0.041	0.0051	1	09/22/11 08:06	09/27/11 15:55	129-00-0	L2
2-Fluorobiphenyl (S)	71	%	56-125		1	09/22/11 08:06	09/27/11 15:55	321-60-8	P2
Terphenyl-d14 (S)	77	%	58-125		1	09/22/11 08:06	09/27/11 15:55	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Sample: W9-091511 **Lab ID: 10169588020** Collected: 09/15/11 09:00 Received: 09/15/11 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**6.6**	ug/L	0.042	0.0042	1	09/22/11 08:06	09/27/11 16:13	83-32-9	
Acenaphthylene	**0.027J**	ug/L	0.042	0.0042	1	09/22/11 08:06	09/27/11 16:13	208-96-8	
Anthracene	**0.045**	ug/L	0.042	0.018	1	09/22/11 08:06	09/27/11 16:13	120-12-7	L2
Benzo(a)anthracene	**0.0077J**	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 16:13	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 16:13	50-32-8	L2
Benzo(b)fluoranthene	ND	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 16:13	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 16:13	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.042	0.0073	1	09/22/11 08:06	09/27/11 16:13	207-08-9	
Chrysene	ND	ug/L	0.042	0.0063	1	09/22/11 08:06	09/27/11 16:13	218-01-9	L2
Dibenz(a,h)anthracene	ND	ug/L	0.042	0.021	1	09/22/11 08:06	09/27/11 16:13	53-70-3	
Fluoranthene	**0.016J**	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 16:13	206-44-0	
Fluorene	**1.4**	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 16:13	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 16:13	193-39-5	
Naphthalene	**2.8**	ug/L	0.042	0.014	1	09/22/11 08:06	09/27/11 16:13	91-20-3	
Phenanthrene	**0.20**	ug/L	0.042	0.020	1	09/22/11 08:06	09/27/11 16:13	85-01-8	
Pyrene	**0.011J**	ug/L	0.042	0.0052	1	09/22/11 08:06	09/27/11 16:13	129-00-0	L2
2-Fluorobiphenyl (S)	76	%	56-125		1	09/22/11 08:06	09/27/11 16:13	321-60-8	P2
Terphenyl-d14 (S)	80	%	58-125		1	09/22/11 08:06	09/27/11 16:13	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: St Louis Park Reilly site
Pace Project No.: 10169588

QC Batch: OEXT/16721
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270 Water CPAH by SIM MSSV
Associated Lab Samples: 10169588011

METHOD BLANK: 1059644
Matrix: Water
Associated Lab Samples: 10169588011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,6-Dinitropyrene	ug/L	ND	1.0	09/27/11 13:48	IC
1,8-Dinitropyrene	ug/L	ND	1.0	09/27/11 13:48	IC
1-Methylnaphthalene	ug/L	ND	0.040	09/27/11 13:48	
1-Nitropyrene	ug/L	ND	0.30	09/27/11 13:48	
2-Chloronaphthalene	ug/L	ND	0.040	09/27/11 13:48	
2-Methylnaphthalene	ug/L	ND	0.040	09/27/11 13:48	
2-Nitrofluorene	ug/L	ND	0.30	09/27/11 13:48	
3-Methylcholanthrene	ug/L	ND	0.040	09/27/11 13:48	
4-Nitropyrene	ug/L	ND	0.30	09/27/11 13:48	
5-Methylchrysene	ug/L	ND	0.040	09/27/11 13:48	
5-Nitroacenaphthene	ug/L	ND	0.30	09/27/11 13:48	
6-Nitrochrysene	ug/L	ND	0.30	09/27/11 13:48	
7,12-Dimethylbenz(a)anthracene	ug/L	ND	0.040	09/27/11 13:48	
7H-Dibenzo(c,g)carbazole	ug/L	ND	0.040	09/27/11 13:48	
Acenaphthene	ug/L	ND	0.040	09/27/11 13:48	
Acenaphthylene	ug/L	ND	0.040	09/27/11 13:48	
Anthracene	ug/L	ND	0.040	09/27/11 13:48	
Benzo(a)anthracene	ug/L	ND	0.040	09/27/11 13:48	
Benzo(a)pyrene	ug/L	ND	0.040	09/27/11 13:48	
Benzo(e)pyrene	ug/L	ND	0.040	09/27/11 13:48	
Benzo(g,h,i)perylene	ug/L	ND	0.040	09/27/11 13:48	
Benzofluoranthenes (Total)	ug/L	ND	0.20	09/27/11 13:48	
Carbazole	ug/L	ND	0.040	09/27/11 13:48	
Chrysene	ug/L	ND	0.040	09/27/11 13:48	
Dibenz(a,h)acridine	ug/L	ND	0.10	09/27/11 13:48	
Dibenz(a,h)anthracene	ug/L	ND	0.040	09/27/11 13:48	
Dibenz(a,j)acridine	ug/L	ND	0.10	09/27/11 13:48	
Dibenzo(a,e)pyrene	ug/L	ND	0.10	09/27/11 13:48	
Dibenzo(a,h)pyrene	ug/L	ND	0.10	09/27/11 13:48	
Dibenzo(a,i)pyrene	ug/L	ND	0.10	09/27/11 13:48	
Dibenzo(a,l)pyrene	ug/L	ND	0.30	09/27/11 13:48	
Dibenzofuran	ug/L	ND	0.040	09/27/11 13:48	
Fluoranthene	ug/L	ND	0.040	09/27/11 13:48	
Fluorene	ug/L	ND	0.040	09/27/11 13:48	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	09/27/11 13:48	
Naphthalene	ug/L	0.037J	0.040	09/27/11 13:48	
Perylene	ug/L	ND	0.040	09/27/11 13:48	
Phenanthrene	ug/L	ND	0.040	09/27/11 13:48	
Pyrene	ug/L	ND	0.040	09/27/11 13:48	
2-Fluorobiphenyl (S)	%	106	32-150	09/27/11 13:48	
Terphenyl-d14 (S)	%	119	46-141	09/27/11 13:48	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: St Louis Park Reilly site
Pace Project No.: 10169588

LABORATORY CONTROL SAMPLE: 1059645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,6-Dinitropyrene	ug/L	3	ND	0	30-150	IC,L0
1,8-Dinitropyrene	ug/L	3	ND	0	30-150	IC,L0
1-Methylnaphthalene	ug/L	3	2.0	68	51-125	
1-Nitropyrene	ug/L	3	3.2	108	38-131	
2-Chloronaphthalene	ug/L	3	2.4	82	51-125	
2-Methylnaphthalene	ug/L	3	2.0	68	51-125	
2-Nitrofluorene	ug/L	3	3.4	112	50-128	
3-Methylcholanthrene	ug/L	3	3.0	100	30-128	
4-Nitropyrene	ug/L	3	3.4	114	40-139	
5-Methylchrysene	ug/L	3	3.4	113	60-125	
5-Nitroacenaphthene	ug/L	3	3.6	119	50-125	
6-Nitrochrysene	ug/L	3	3.6	121	37-142	
7,12-Dimethylbenz(a)anthracene	ug/L	3	1.3	45	30-129	SS
7H-Dibenzo(c,g)carbazole	ug/L	3	3.6	122	55-125	
Acenaphthene	ug/L	3	2.4	79	59-125	
Acenaphthylene	ug/L	3	2.6	86	52-125	
Anthracene	ug/L	3	3.3	111	56-125	
Benzo(a)anthracene	ug/L	3	3.1	105	62-125	
Benzo(a)pyrene	ug/L	3	3.3	108	58-125	
Benzo(e)pyrene	ug/L	3	3.1	102	58-125	
Benzo(g,h,i)perylene	ug/L	3	3.3	109	66-125	
Benzofluoranthenes (Total)	ug/L	9	9.2	102	55-125	
Carbazole	ug/L	3	3.4	113	56-125	
Chrysene	ug/L	3	3.1	102	59-125	
Dibenz(a,h)acridine	ug/L	3	3.0	102	61-125	
Dibenz(a,h)anthracene	ug/L	3	3.4	114	59-125	
Dibenz(a,j)acridine	ug/L	3	3.1	102	63-125	
Dibenzo(a,e)pyrene	ug/L	3	3.1	103	53-125	
Dibenzo(a,h)pyrene	ug/L	3	3.4	112	56-125	
Dibenzo(a,i)pyrene	ug/L	3	3.2	108	51-125	
Dibenzo(a,l)pyrene	ug/L	3	3.1	102	44-125	
Dibenzofuran	ug/L	3	2.6	85	54-125	
Fluoranthene	ug/L	3	3.4	114	65-125	
Fluorene	ug/L	3	2.7	91	61-125	
Indeno(1,2,3-cd)pyrene	ug/L	3	3.4	113	59-125	
Naphthalene	ug/L	3	2.1	71	56-125	
Perylene	ug/L	3	2.9	96	61-125	
Phenanthrene	ug/L	3	3.0	101	60-125	
Pyrene	ug/L	3	3.0	100	63-125	
2-Fluorobiphenyl (S)	%			83	32-150	
Terphenyl-d14 (S)	%			109	46-141	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1059646 1059647

Parameter	Units	10169907003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,6-Dinitropyrene	ug/L	ND	3.3	3.4	ND	ND	0	0	30-150		30	IC,M0

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: St Louis Park Reilly site
Pace Project No.: 10169588

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1059646 1059647

Parameter	Units	10169907003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,8-Dinitropyrene	ug/L	ND	3.3	3.4	ND	ND	0	0	30-150		30	IC,M0
1-Methylnaphthalene	ug/L	0.049	3.3	3.4	1.4	2.4	40	67	70-130	54	30	D6,M1
1-Nitropyrene	ug/L	ND	3.3	3.4	3.1	3.5	95	103	30-150	13	30	
2-Chloronaphthalene	ug/L	ND	3.3	3.4	2.0	2.9	59	85	70-130	40	30	D6,M1
2-Methylnaphthalene	ug/L	0.10	3.3	3.4	1.3	2.4	38	67	42-126	56	30	D6,M1
2-Nitrofluorene	ug/L	ND	3.3	3.4	3.3	3.8	101	111	30-150	14	30	
3-Methylcholanthrene	ug/L	ND	3.3	3.4	2.9	3.2	87	92	30-128	10	30	
4-Nitropyrene	ug/L	ND	3.3	3.4	3.3	3.7	100	109	30-150	12	30	
5-Methylchrysene	ug/L	ND	3.3	3.4	3.2	3.6	97	103	72-125	11	30	
5-Nitroacenaphthene	ug/L	ND	3.3	3.4	3.5	4.0	107	117	30-150	14	30	
6-Nitrochrysene	ug/L	ND	3.3	3.4	3.5	4.0	106	117	30-150	14	30	
7,12-Dimethylbenz(a)anthracene	ug/L	ND	3.3	3.4	1.0	1.3	31	38	30-150	25	30	SS
7H-Dibenzo(c,g)carbazole	ug/L	ND	3.3	3.4	3.5	4.0	105	115	69-125	14	30	
Acenaphthene	ug/L	0.058	3.3	3.4	2.3	2.9	68	82	59-125	23	30	
Acenaphthylene	ug/L	ND	3.3	3.4	2.4	3.1	73	91	55-125	27	30	
Anthracene	ug/L	ND	3.3	3.4	3.2	3.7	98	108	48-133	14	30	
Benzo(a)anthracene	ug/L	ND	3.3	3.4	2.9	3.3	89	97	62-131	13	30	
Benzo(a)pyrene	ug/L	ND	3.3	3.4	3.1	3.5	93	101	58-127	12	30	
Benzo(e)pyrene	ug/L	ND	3.3	3.4	2.9	3.3	87	94	58-129	12	30	
Benzo(g,h,i)perylene	ug/L	ND	3.3	3.4	3.1	3.5	93	100	66-125	12	30	
Benzofluoranthenes (Total)	ug/L	ND	9.9	10.3	8.6	9.8	87	94	49-133	12	30	
Carbazole	ug/L	ND	3.3	3.4	3.3	3.9	102	113	55-134	15	30	
Chrysene	ug/L	ND	3.3	3.4	2.9	3.2	88	93	59-125	10	30	
Dibenz(a,h)acridine	ug/L	ND	3.3	3.4	2.9	3.3	88	95	61-125	12	30	
Dibenz(a,h)anthracene	ug/L	ND	3.3	3.4	3.2	3.6	97	105	59-125	13	30	
Dibenz(a,j)acridine	ug/L	ND	3.3	3.4	2.9	3.3	88	95	63-125	12	30	
Dibenzo(a,e)pyrene	ug/L	ND	3.3	3.4	2.8	3.2	84	93	53-125	15	30	
Dibenzo(a,h)pyrene	ug/L	ND	3.3	3.4	3.1	3.5	95	102	56-125	12	30	
Dibenzo(a,i)pyrene	ug/L	ND	3.3	3.4	3.0	3.4	92	98	51-125	11	30	
Dibenzo(a,l)pyrene	ug/L	ND	3.3	3.4	3.0	3.2	90	93	44-125	8	30	
Dibenzofuran	ug/L	ND	3.3	3.4	2.6	3.1	78	89	70-130	18	30	
Fluoranthene	ug/L	ND	3.3	3.4	3.3	3.7	98	107	65-127	13	30	
Fluorene	ug/L	ND	3.3	3.4	2.8	3.2	84	93	61-125	15	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	3.3	3.4	3.2	3.6	97	105	59-125	12	30	
Naphthalene	ug/L	0.40	3.3	3.4	1.5	2.8	32	69	56-125	62	30	D6,M1
Perylene	ug/L	ND	3.3	3.4	2.7	3.1	83	89	61-125	12	30	
Phenanthrene	ug/L	0.057	3.3	3.4	3.0	3.4	90	98	59-127	13	30	
Pyrene	ug/L	ND	3.3	3.4	2.9	3.2	87	94	57-131	12	30	
2-Fluorobiphenyl (S)	%						60	86	32-150			
Terphenyl-d14 (S)	%						93	101	46-141			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: St Louis Park Reilly site
Pace Project No.: 10169588

QC Batch: OEXT/16705 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10169588001, 10169588002, 10169588003, 10169588004, 10169588007, 10169588008, 10169588009, 10169588010

METHOD BLANK: 1058620 Matrix: Water
Associated Lab Samples: 10169588001, 10169588002, 10169588003, 10169588004, 10169588007, 10169588008, 10169588009, 10169588010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	09/28/11 22:06	
Acenaphthylene	ug/L	ND	0.040	09/28/11 22:06	
Anthracene	ug/L	ND	0.040	09/28/11 22:06	
Benzo(a)anthracene	ug/L	0.0068J	0.040	09/28/11 22:06	C0
Benzo(a)pyrene	ug/L	ND	0.040	09/28/11 22:06	
Benzo(b)fluoranthene	ug/L	ND	0.040	09/28/11 22:06	
Benzo(g,h,i)perylene	ug/L	ND	0.040	09/28/11 22:06	
Benzo(k)fluoranthene	ug/L	ND	0.040	09/28/11 22:06	
Chrysene	ug/L	ND	0.040	09/28/11 22:06	
Dibenz(a,h)anthracene	ug/L	ND	0.040	09/28/11 22:06	
Fluoranthene	ug/L	ND	0.040	09/28/11 22:06	
Fluorene	ug/L	ND	0.040	09/28/11 22:06	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	09/28/11 22:06	
Naphthalene	ug/L	ND	0.040	09/28/11 22:06	
Phenanthrene	ug/L	ND	0.040	09/28/11 22:06	
Pyrene	ug/L	ND	0.040	09/28/11 22:06	
2-Fluorobiphenyl (S)	%	90	56-125	09/28/11 22:06	
Terphenyl-d14 (S)	%	94	58-125	09/28/11 22:06	

LABORATORY CONTROL SAMPLE: 1058621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.76	76	56-125	
Acenaphthylene	ug/L	1	0.74	74	55-125	
Anthracene	ug/L	1	0.75	75	62-125	
Benzo(a)anthracene	ug/L	1	0.74	74	56-125	
Benzo(a)pyrene	ug/L	1	0.81	81	64-125	
Benzo(b)fluoranthene	ug/L	1	0.80	80	53-125	
Benzo(g,h,i)perylene	ug/L	1	0.94	94	38-125	
Benzo(k)fluoranthene	ug/L	1	0.81	81	59-125	
Chrysene	ug/L	1	0.81	81	64-125	
Dibenz(a,h)anthracene	ug/L	1	0.91	91	40-125	
Fluoranthene	ug/L	1	0.80	80	60-125	
Fluorene	ug/L	1	0.78	78	59-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.90	90	42-125	
Naphthalene	ug/L	1	0.73	73	52-125	
Phenanthrene	ug/L	1	0.76	76	54-125	
Pyrene	ug/L	1	0.83	83	66-125	
2-Fluorobiphenyl (S)	%			86	56-125	
Terphenyl-d14 (S)	%			92	58-125	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: St Louis Park Reilly site
Pace Project No.: 10169588

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1058623 1058624

Parameter	Units	10169588003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	303	1	1	268	262	-3380	-3980	46-125	2	30	E,M1
Acenaphthylene	ug/L	5.1	1	1	5.6	5.5	49	35	46-125	2	30	M1
Anthracene	ug/L	56.2	1	1	49.7	44.6	-632	-1140	48-125	11	30	E,M1
Benzo(a)anthracene	ug/L	40.1	1	1	41.7	33.6	159	-643	47-125	22	30	E,M1
Benzo(a)pyrene	ug/L	26.0	1	1	27.6	22.1	153	-386	59-125	22	30	E,M1
Benzo(b)fluoranthene	ug/L	39.9	1	1	38.1	30.8	-176	-887	40-125	21	30	E,M1
Benzo(g,h,i)perylene	ug/L	14.9	1	1	16.0	13.1	110	-180	38-125	20	30	E,M1
Benzo(k)fluoranthene	ug/L	11.5	1	1	15.2	12.1	361	59	46-125	23	30	E,M1
Chrysene	ug/L	32.0	1	1	33.6	27.5	155	-445	56-125	20	30	E,M1
Dibenz(a,h)anthracene	ug/L	4.2	1	1	5.4	4.5	121	28	30-125	19	30	M1
Fluoranthene	ug/L	171	1	1	153	128	-1810	-4320	46-125	18	30	E,M1
Fluorene	ug/L	188	1	1	183	172	-538	-1590	48-125	6	30	E,M1
Indeno(1,2,3-cd)pyrene	ug/L	12.1	1	1	13.0	10.7	91	-137	32-125	20	30	E,M1
Naphthalene	ug/L	880	1	1	406	450	-46500	-42300	44-125	10	30	E,M1
Phenanthrene	ug/L	396	1	1	251	239	-14200	-15500	47-125	5	30	E,M1
Pyrene	ug/L	120	1	1	125	105	400	-1500	55-125	17	30	E,M1
2-Fluorobiphenyl (S)	%						83	87	56-125			
Terphenyl-d14 (S)	%						84	93	58-125			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: St Louis Park Reilly site
Pace Project No.: 10169588

QC Batch: OEXT/16719 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10169588012, 10169588013, 10169588014, 10169588015, 10169588016, 10169588017, 10169588018, 10169588019, 10169588020

METHOD BLANK: 1059628 Matrix: Water
Associated Lab Samples: 10169588012, 10169588013, 10169588014, 10169588015, 10169588016, 10169588017, 10169588018, 10169588019, 10169588020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	09/27/11 11:21	
Acenaphthylene	ug/L	ND	0.040	09/27/11 11:21	
Anthracene	ug/L	ND	0.040	09/27/11 11:21	
Benzo(a)anthracene	ug/L	ND	0.040	09/27/11 11:21	
Benzo(a)pyrene	ug/L	ND	0.040	09/27/11 11:21	
Benzo(b)fluoranthene	ug/L	ND	0.040	09/27/11 11:21	
Benzo(g,h,i)perylene	ug/L	ND	0.040	09/27/11 11:21	
Benzo(k)fluoranthene	ug/L	ND	0.040	09/27/11 11:21	
Chrysene	ug/L	ND	0.040	09/27/11 11:21	
Dibenz(a,h)anthracene	ug/L	ND	0.040	09/27/11 11:21	
Fluoranthene	ug/L	ND	0.040	09/27/11 11:21	
Fluorene	ug/L	ND	0.040	09/27/11 11:21	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	09/27/11 11:21	
Naphthalene	ug/L	ND	0.040	09/27/11 11:21	
Phenanthrene	ug/L	ND	0.040	09/27/11 11:21	
Pyrene	ug/L	ND	0.040	09/27/11 11:21	
2-Fluorobiphenyl (S)	%	63	56-125	09/27/11 11:21	
Terphenyl-d14 (S)	%	80	58-125	09/27/11 11:21	

LABORATORY CONTROL SAMPLE & LCSD: 1059629 1059630

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	1	0.59	0.65	59	65	56-125	9	20	
Acenaphthylene	ug/L	1	0.55	0.60	55	60	55-125	9	20	
Anthracene	ug/L	1	0.58	0.65	58	65	62-125	11	20	L0
Benzo(a)anthracene	ug/L	1	0.59	0.64	59	64	56-125	8	20	
Benzo(a)pyrene	ug/L	1	0.62	0.69	62	69	64-125	11	20	L0
Benzo(b)fluoranthene	ug/L	1	0.62	0.67	62	67	53-125	6	20	
Benzo(g,h,i)perylene	ug/L	1	0.70	0.77	70	77	38-125	9	20	
Benzo(k)fluoranthene	ug/L	1	0.69	0.72	69	72	59-125	6	20	
Chrysene	ug/L	1	0.61	0.68	61	68	64-125	12	20	L0
Dibenz(a,h)anthracene	ug/L	1	0.67	0.74	67	74	40-125	10	20	
Fluoranthene	ug/L	1	0.62	0.69	62	69	60-125	10	20	
Fluorene	ug/L	1	0.61	0.67	61	67	59-125	9	20	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.68	0.74	68	74	42-125	9	20	
Naphthalene	ug/L	1	0.56	0.65	56	65	52-125	14	20	
Phenanthrene	ug/L	1	0.60	0.67	60	67	54-125	10	20	
Pyrene	ug/L	1	0.65	0.71	65	71	66-125	9	20	L0
2-Fluorobiphenyl (S)	%				67	72	56-125			
Terphenyl-d14 (S)	%				71	77	58-125			

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: St Louis Park Reilly site
Pace Project No.: 10169588

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

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.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

WORKORDER QUALIFIERS

WO: 10169588

[1]	The samples were received outside of required temperature range. Analysis was completed upon client approval.

ANALYTE QUALIFIERS

1M	Results confirmed by analysis of out-of-hold re-extraction.
B	Analyte was detected in the associated method blank.
B+	Analyte was detected in the associated method blank as well as in the sample.
C0	Result confirmed by second analysis.
D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
IC	The initial calibration for this compound was outside of method control limits. The result is estimated.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: St Louis Park Reilly site
Pace Project No.: 10169588

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10169588011	**SLP10T-091511 (Extended List)**	EPA 3510	OEXT/16721	EPA 8270 by SIM	MSSV/7209
10169588001	**W420-091411**	EPA 3510	OEXT/16705	EPA 8270 by SIM	MSSV/7219
10169588002	**W434-091411**	EPA 3510	OEXT/16705	EPA 8270 by SIM	MSSV/7219
10169588003	**W421-091411**	EPA 3510	OEXT/16705	EPA 8270 by SIM	MSSV/7219
10169588004	**W421DUP-091411**	EPA 3510	OEXT/16705	EPA 8270 by SIM	MSSV/7219
10169588007	**W421FB-091411**	EPA 3510	OEXT/16705	EPA 8270 by SIM	MSSV/7219
10169588008	**W421FBD-091411**	EPA 3510	OEXT/16705	EPA 8270 by SIM	MSSV/7219
10169588009	**W101-091411**	EPA 3510	OEXT/16705	EPA 8270 by SIM	MSSV/7219
10169588010	**W131-091411**	EPA 3510	OEXT/16705	EPA 8270 by SIM	MSSV/7219
10169588012	**W439-091511**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211
10169588013	**W15-091512**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211
10169588014	**W2-091511**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211
10169588015	**P309-091511**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211
10169588016	**W428-091511**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211
10169588017	**W121-091511**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211
10169588018	**W143-091511**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211
10169588019	**W18-091511**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211
10169588020	**W9-091511**	EPA 3510	OEXT/16719	EPA 8270 by SIM	MSSV/7211

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 2

10169588

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	AECOM	Report To:	~~Bill Gregg~~ Drew Tarara	Attention:	~~Bill Gregg~~ Drew Tarara
Address:	First National Bank Building	Copy To:	Andrew Tarara	Company Name:	AECOM
	Saint Paul, MN 55101		First National Bank Building, Saint Paul, MN 55101	Address:	First National Bank Building, Saint Paul,
Email To:	~~bill.gregg@aecom.com~~ Drew Tarara	Purchase Order No.		Pace Quote Reference:	
Phone:	651-367-2328 Fax:	Client Project ID:	SLP Reilly	Pace Project Manager:	Davy, Carol
Requested Due Date/TAT:	10 Day (Default)	Container Order Number:		Pace Profile #:	22562

Regulatory Agency: | State/Location: Minnesota

Requested Analysis Filtered (Y/N)

ITEM#	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	PAH SIM*	Residual Chlorine (Y/N)	
1	W420-091411	WT		9/14/11			1215		2	X									X		001
2	W434-091411						1200														002
3	W421-091411						1220														003
4	W421 Dup-091411						1225														004
5	W421 MS-091411						1230														005
6	W421 MSD-091411						1235														006
7	W421 FB-091411						1240														007
8	W421 FBD-091411						1245														008
9	W101-091411						1500														009
10	W131-091411						1400														010
11	SLP10T-091511 (Extended List)			9/15/11			945													* Extended List	011
12	W439-091511						1020														012

DR 9/1

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
*16 compound list (priority pollutant)	AJ Tarara/AECOM	9/15/11				
AECOM-Equis edd needed. Email to: amy.sulborski@aecom.com						
* Extended List of PAH (25 compounds)						

SAMPLE CONDITIONS			
TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
7.6	Y	N	Y
~~8.5~~ 8.2	Y	N	Y
5.9	Y	N	Y
9.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew Tarara

SIGNATURE of SAMPLER: AJ Tarara DATE Signed: 9/15/11

10169588

Chain of Custody Record

Sampler ID _____

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PACE

TAL-4124-280 (0508)

Page 38 of 1227

Client	Project Manager	Date	Chain of Custody Number
			141422
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 2 of 2
City / State / Zip Code	Site Contact / Lab Contact	Analysis (Attach list if more space is needed)	
Project Name and Location (State)	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	PAH PBB (SIM)	Special Instructions/ Conditions of Receipt
W15-091511	9/15/11	1130		X			2						X	013
W2-091511		1500												014
P309-091511		1430												015
W428-091511		1330												016
W121-091511		1230												017
W143-091511		1100												018
W18-091511		1000												019
W9-091511		900												020

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By			1. Received By	9/15/11	1715
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

10169588

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

T = 7.6, 8.2, 5.9, 9.0°C

Pace Analytical®	Document Name: Sample Condition Upon Receipt Form	Revised Date: 02Jun2011 Page 1 of 1
	Document Number: F-L-213 Rev.01	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Aecom Project # 10169588

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____ Temp Blank: Yes ☑ No ☐

Thermometer Used: 80344042 or 80512447 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 7.6, 8.2, 5.9, 9.0 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 9/15/11 SL

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: -Includes date/time/ID/Analysis Matrix: WT	☑Yes ☐No ☐N/A	12.
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl Samp #
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	Initial when completed / Lot # of added preservative
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐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: Andrew Tarrara Date/Time: 9/16/11 9:45

Comments/ Resolution: VM + e-mail Re: Temps for samples collected 9/14

Project Manager Review: Deana Gunderson **Date:** 9/16/11

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)

DATA VALIDATION

FOR

GROUNDWATER and GAC TREATMENT SYSTEM MONITORING
REILLY N.P.L. SITE
SAINT LOUIS PARK, MINNESOTTA

ORGANIC ANALYSIS DATA
PAHs in Water
Laboratory Job No. 10169588

Analyses Performed

By:

Pace Analytical Services, Inc.
Minneapolis, Minnesota

For:

Summit Envirosolutions, Inc.
1217 Bandana Boulevard North
St. Paul, Minnesota 55108

Data Validation By:

ddms, inc.
St. Paul, Minnesota

March 14, 2012

Reilly\10169588SV

ddms

EXECUTIVE SUMMARY

Validation of the semivolatile organics analysis data prepared by Pace Analytical Services, Inc. for 16 aqueous samples and two field blanks from the Reilly N.P.L. Site has been completed by ddms, inc. (ddms). The data were reported by the laboratory under Job No. 10169588 in a single data package. The following samples were reported:

W420-091411	W434-091411	W421-091411
W421DUP-091411	W421FB-091411	W421FBD-091411
W101-091411	W131-091411	SLP10T-091511
W439-091511	W15-091511	W2-091511
P309-091511	W428-091511	W121-091511
W143-091511	W18-091511	W9-091511

Based on the validation effort, all results were determined to be valid as reported, with the following exceptions:

- Results for 1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit.
- Results for chrysene and 7,12,-dimethylbenz[a]anthracene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit.
- Results for1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit.
- Results for naphthalene in samples SLP10T-091511, W15-091511, P309-091511, and W143-091511, fluoranthene in samples W18-091511 and W9-091511, benzo[a]anthracene in samples W420-091411, W434-091411, W421FBD-091411, W101-091411, and W131-091411, fluoranthene and naphthalene in samples W434-091411, W101-091411, W131-091411, W2-091511, W428-091511, and W121-091511 were

qualified as not detected (U) at the reporting limit or reported concentration, whichever is greater.

- Results for 1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as rejected (R) and results for anthracene, benzo[a]pyrene, chrysene, and pyrene in samples W439-091511, W15-091511, W2-091511, P309-091511, W428-091511, W121-091511, W143-091511, W18-091511, and W9-091511 were qualified as estimated (L, UJ).

- Results for dibenz[a,h]anthracene in samples W421-091411 and W421DUP-091411 were qualified as estimated (J).

Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report. Brief explanations of the reasons for the actions taken above can be found in Section XIII.

Documentation issues are discussed in Section XII.

This report should be considered part of the data package for all future distributions of the semivolatiles data.

INTRODUCTION

Analyses were performed in accordance with USEPA Method 8270C SIM. This methodology does not stipulate a reporting format, however, upon request the laboratory provided a "CLP-type" data package. ddms' review was performed in accordance with the EPA's Region 5 Document "Standard Operating Procedure For Data Review Of Semivolatile Organic Compound Analysis By Gas Chromatography/Mass Spectrometry (GC/MS); CRL Method GEN010 / Version 9.0" and the Quality Assurance Project Plan (QAPP) for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly N.P.L. Site, St. Louis Park, Minnesota" June 2010. Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the referenced methods. An initial assumption is that the data package is presented in accordance with the CLP requirements (or "CLP-like," as in this case). It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the EPA Region 5 document as follows:

U = The compound was analyzed for, but was not detected above the reported sample quantitation limit.

J = The compound was positively identified; the associated numerical value is the approximate concentration of the compound in the sample.

K = The identification of the compound is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value.

L = The identification of the compound is acceptable; the reported value may be biased low. The actual value is expected to be greater than the reported value.

MI = This flag applies when a compound has matrix interferences.

N = The analysis indicates the presence of a compound for which there is presumptive evidence to make a “tentative identification”.

NJ= The analysis indicates the presence of a compound that has been “tentatively identified” and the associated numerical value represent its approximate concentration.

UJ= The compound was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the compound in the sample.

R= The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence of absence of the compound cannot be verified.

Two facts should be noted by all data users. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the compound is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, **no concentration is guaranteed to be accurate even if all associated quality control is acceptable.** Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation and Sample Integrity

A copy of the applicable chain of custody (COC) record was included in the data package, documenting sample collection dates of September 14 and 15, 2011. The samples were hand carried and received by the laboratory on September 15, 2011. Although the temperature of the coolers on receipt at the laboratory was noted on the COC and was unacceptable (5.9 to 9.0^{o} C; criteria 4^{o} C $\pm$ 2^{o} C), the samples were delivered approximately two hours after the last sample was collected, on ice, indicating the cooling process had begun. No data were qualified on this basis. All samples were extracted on September 21 and 22, 2011, which is within the 7 day holding time for aqueous samples. All sample extracts were analyzed on September 27, 28, 29, 30 and October 5, 2011, which is within the 40-day holding time for sample extracts.

II. GC/MS Instrument Performance Check

The samples were analyzed on two GC/MS systems, identified as "10MSS8 and 10MSSA". Eight decafluorotriphenylphosphine (DFTPP) instrument performance checks were run in association with these samples, representing each 12-hour period during which the samples or associated standards were analyzed. All of the performance checks were documented and were acceptable.

III. Calibration

For the standard list low level PAH analysis there were more compounds in the standards than target compounds. Only the data supporting those compounds reported in the Form Is were reviewed by the validator. Documentation was provided for all of the compounds on which manual integration was performed. All manual integration appeared to have been appropriately performed.

A. Initial Calibration (IC)

One 6 to 8-point IC was performed on August 14, 2011 (Instrument ID: 10mss8) and two 8-point ICs were performed on September 9 and October 4, 2011(Instrument ID: 10mssA) for all of the target compounds with the exception of a five point calibration for 1,6-dinitropyrene and a four point calibration for 1,8-dinitropyrene on 10mss8. Documentation of all individual IC standards was provided by the laboratory and relative response factors (RRFs) as well as percent relative standard deviation (%RSD) values were correctly calculated and accurately reported. All quadratic curve r^2 values were > 0.990 and %RSD values were below the maximum acceptance limit of 30 percent as defined in the QAPP with the exception of 1,6-dinitropyrene (50% RSD). An initial calibration verification (ICV) standard was analyzed immediately after each of the ICs. All percent difference (%D) values were acceptable with the exception of chrysene and

7,12,-dimethylbenz[a]anthracene (32.7 and 253%D). Results for 1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit, due to unacceptable IC results. Results for chrysene and 7,12,-dimethylbenz[a]anthracene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit, due to unacceptable ICV results.

B. Continuing Calibration (CC)

Five CC standards were run in support of all the target compounds, two on September 27 and one each on September 28, 29 and October 4, 2011. All %D results were within the acceptance limits (35%), as defined in the QAPP, with the exception of 1,6-dinitropyrene and 1,8-dinitropyrene with %D values of 720 and 1,620%. Results for 1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit, due to unacceptable CC results.

IV. Blanks

Three laboratory method blanks and two field blanks were analyzed in support of these samples. Naphthalene in laboratory blank 1059644 and benzo[a]anthracene in laboratory blank 1058620 were detected at 0.037 and 0.0068ug/L respectively. Fluoranthene was detected at 0.0051 and 0.0064ug/L and naphthalene was detected at 0.014 and 0.025ug/L in the field blanks. Results for naphthalene in samples SLP10T-091511, W15-091511, P309-091511, and W143-091511, fluoranthene in samples W18-091511 and W9-091511, benzo[a]anthracene in samples W420-091411, W434-091411, W421FBD-091411, W101-091411, and W131-091411, fluoranthene and naphthalene in samples W434-091411, W101-091411, W131-091411, W2-091511, W428-091511, and W121-091511 were qualified as not detected (U) at the reporting limit or reported concentration, whichever is greater, due to sample concentrations detected within five-times the concentration found in the blank. No other target compounds were detected in the blanks.

V. Surrogate Compound Recovery

Recoveries of all surrogate compounds were correctly calculated, accurately reported, and within acceptance limits.

VI. Spike Analysis

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed on sample W421-091511. All sample concentrations were greater than four-times the spike amount. No data were qualified based on MS/MSD percent recoveries (%R). All RPD values, based on concentration, were acceptable. Results for an additional MS/MSD pair were performed on a sample from a site other than Reilly N.P.L. Site. No meaningful information can be obtained from these MS/MSD results.

B. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

Results for two LCS and one LCS/LCSD pair were provided in the data package. All recoveries were acceptable with the exception of 1,6-dinitropyrene and 1,8-dinitropyrene (0/0%; 30-150% QC limits) associated with sample SLP10T-091511 and results for anthracene (58/65% R; 62-125% QC limits), benzo[a]pyrene (62/69% R; 64-125% QC limits), chrysene (61/68% R; 64-125% QC limits), and pyrene (65/71% R; 66-125% QC limits) associated with samples W439-091511, W15-091511, W2-091511, P309-091511, W428-091511, W121-091511, W143-091511, W18-091511, W9-091511, and P309-091511. Results for 1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as rejected (R) and results for anthracene, benzo[a]pyrene, chrysene, and pyrene in samples W439-091511, W15-091511, W2-091511, P309-091511, W428-091511, W121-091511, W143-091511, W18-091511, and W9-091511 were qualified as estimated (K, UJ) due to unacceptable LCS recovery.

VII. Field Duplicate

Sample W421DUP-091411 was collected as a field duplicate of sample W421-091411 and sample W421FBD-091411was collected as a field duplicate of sample W421FB-091411. All RPDs were within quality control limits (≤ 25% if both samples are >5X RL) for both field duplicate pairs with the exception of dibenz[a,h]anthracene in samples W421-091411 and W421DUP-091411 with a %D of 27%. Results for dibenz[a,h]anthracene in samples W421-091411 and W421DUP-091411 were qualified as estimated (J) due to failure to confirm in paired field samples.

VIII. Internal Standard Performance

All internal standard areas and retention times were within quality control limits for the applicable analyses.

IX. Target Compound Identification

Acceptable ion chromatograms were provided for each of the compounds detected in these samples.

X. Compound Quantitation and Reporting Limits (RL)

Target compound concentrations and reporting limits were correctly calculated and accurately reported for all samples with the exception of 1,8-dinitrpyrene which would have a reporting limit three times the reported value. The reporting limit was equivalent to the concentration of the lowest calibration standard from the IC. The laboratory eliminated the three low level standards from the IC for 1,8-dinitropyrene but did not adjust the reporting limit on the organic analysis report sheets. The actual reporting limit was calculated by the validator and replaced on the report sheets. The laboratory appropriately applied "J" qualifiers to concentrations that were less than the reporting limit but greater than the method detection limit (MDL). All laboratory-reported MDLs were less than the project RL goals with the exception of benzofluoranthenes (total) in sample SLP10T-091511 with the project RL goal at 0.040ug/L and the MDL at 0.10ug/L.

XI. System Performance

The analytical system appears to have been working satisfactorily at the time of these analyses, based on evaluation of the available raw data.

XII. Documentation

The chain-of-custody record was present and accurately completed for the samples reported in this data package. The following documentation issues were observed:

- The RL for 1,8-dinitropyrene was reported incorrectly.
- The sample ID for field sample W15-091511 (Lab ID: 10169588013) was mislabeled as "W15-091512" in the laboratory report.

The laboratory was contacted regarding the incorrect sample identification on March 11, 2012.

XIII. Overall Assessment

Based on the validation effort, all results were determined to be valid as reported, with the following exceptions:

- Results for 1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit, due to unacceptable IC results.

- Results for chrysene and 7,12,-dimethylbenz[a]anthracene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit, due to unacceptable ICV results.

- Results for 1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as estimated (UJ), at the reporting limit, due to unacceptable CC results.

- Results for naphthalene in samples SLP10T-091511, W15-091511, P309-091511, and W143-091511, fluoranthene in samples W18-091511 and W9-091511, benzo[a]anthracene in samples W420-091411, W434-091411, W421FBD-091411, W101-091411, and W131-091411, fluoranthene and naphthalene in samples W434-091411, W101-091411, W131-091411, W2-091511, W428-091511, and W121-091511 were qualified as not detected (U) at the reporting limit or reported concentration, whichever is greater, due to sample concentrations detected within five-times the concentration found in the blank.

- Results for 1,6-dinitropyrene and 1,8-dinitropyrene in sample SLP10T-091511 were qualified as rejected (R) and results for anthracene, benzo[a]pyrene, chrysene, and pyrene in samples W439-091511, W15-091511, W2-091511, P309-091511, W428-091511, W121-091511, W143-091511, W18-091511, and W9-09151 were qualified as estimated (L, UJ) due to unacceptable LCS recovery

- Results for dibenz[a,h]anthracene in samples W421-091411 and W421DUP-091411 were qualified as estimated (J) due to failure to confirm in paired field samples.

Documentation issues observed in the data package are described in Section XII.

This validation report should be considered part of the data package for all future distributions of the semivolatiles data.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-20371-1

Job Description: CSLP - Reilly Tar & Chemical

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, MN 55426

Attention: Scott Anderson

Approved for release.
Corinne H Krier
Project Mgmt. Assistant
10/14/2011 10:15 AM

Designee for
Lisa B Uriell
Project Manager I
lisa.uriell@testamericainc.com
10/14/2011

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is E87667.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.
TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

Table of Contents

Table of Contents

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-20371-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
One sample was received under chain of custody on September 16, 2011. The sample was received at a temperature of 3.5°C.

No anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to limited sample volume, sample E13-081511 (280-20371-1) had an initial aliquot volume of 3887.7 mL, which is below the nominal aliquot volume of 4000 mL. Therefore, the analysis of this sample had to be performed with elevated detection limits. The reporting limits have been adjusted relative to the dilutions required.

Surrogate Chrysene-d12 was recovered below the QC control limits (28-101% in sample E13-081511 (280-20371-1) at 24%. Matrix interference was not obvious. Upon re-aliquoting and reanalyzing, the surrogate recovery outlier was still present. Re-extraction was not possible due to insufficient remaining sample volume; therefore, the data is reported as is.

Low levels of Acenaphtene, Benzo[a]anthracene, Benzo[a]pyrene, Benzo[e]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene are present in the method blank associated with prep batch 280-87039. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”.

Additionally, levels of Dibenzothiopene and Benzo[k]fluoranthene are present in the method blank associated with prep batch 280-87039 at levels above the RL. The associated positive results in the analytical report have been flagged with “B”. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is.

The LCS/LCSD associated with prep batch 280-87039 exhibited percent recoveries outside the QC control limits for Acridine and Naphthalene. Additionally, the surrogate Fluorene-d10 was recovered above QC control limits in the LCS. The LCS/LCSD were re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

Additionally, the LCS/LCSD associated with prep batch 280-87039 exhibited the LCS percent recovery below the QC control limits for 7,12-Dimethylbenz(a)anthracene. This analyte is not a compound of interest for this project; therefore, corrective action was deemed unnecessary. The LCS/LCSD was reanalyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume.

The method required MS/MSD could not be performed for prep batch 280-87039, due to insufficient sample volume.

No other anomalies were noted.

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION
JOB: 280-20371-1
ANALYSIS: SW846-8270C SIM

QC Parameter	Data Planned	Valid Data Obtained
Method Blank	31	29
MB Surrogates	3	3
LCS/LCSD	14	13
LCS/LCSD Surrogates	6	5
FB/FBD	0	0
MS	0	0
MS Surrogates	0	0
MSD	0	0
MSD Surrogates	0	0
MS/MSD RPD	0	0
Sample/Dup. RPD	0	0
Sample Surrogates	3	1
Samples and QC Internal Standard Area	12	12
TOTAL	**69**	**63**
% Completeness	**91.3%**	

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Instrument ID: MSS_F Analysis Batch Number: 89821

Lab Sample ID: ICIS 280-89821/1 Client Sample ID:

Date Analyzed: 09/30/11 08:31 Lab File ID: F1463.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene-d10 (Surr)	10.69	Analyte Misidentified by the Data System	ilczyszyn d	09/30/11 12:59

Lab Sample ID: STD150 280-89821/4 IC Client Sample ID:

Date Analyzed: 09/30/11 10:23 Lab File ID: F1466.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene	10.74	Analyte not Identified by the Data System	ilczyszyn d	09/30/11 13:03

Lab Sample ID: STD600 280-89821/5 IC Client Sample ID:

Date Analyzed: 09/30/11 11:00 Lab File ID: F1467.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene-d10 (Surr)	10.69	Analyte Misidentified by the Data System	ilczyszyn d	09/30/11 13:04
Fluorene	10.74	Analyte Misidentified by the Data System	ilczyszyn d	09/30/11 13:04

Lab Sample ID: STD800 280-89821/6 IC Client Sample ID:

Date Analyzed: 09/30/11 11:37 Lab File ID: F1468.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene-d10 (Surr)	10.69	Analyte not Identified by the Data System	ilczyszyn d	09/30/11 13:05
Fluorene	10.74	Analyte Misidentified by the Data System	ilczyszyn d	09/30/11 13:05

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Instrument ID: MSS_F Analysis Batch Number: 89821

Lab Sample ID: STD1200 280-89821/7 IC Client Sample ID:

Date Analyzed: 09/30/11 12:14 Lab File ID: F1469.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene-d10 (Surr)	10.69	Analyte not Identified by the Data System	ilczyszyn d	09/30/11 13:06
Fluorene	10.74	Analyte Misidentified by the Data System	ilczyszyn d	09/30/11 13:06

Lab Sample ID: ICV 280-89821/8 Client Sample ID:

Date Analyzed: 09/30/11 12:50 Lab File ID: F1470.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene	10.74	Analyte Misidentified by the Data System	ilczyszyn d	09/30/11 13:21

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Instrument ID: MSS_F Analysis Batch Number: 89849

Lab Sample ID: CCV 280-89849/1 Client Sample ID:

Date Analyzed: 10/05/11 12:59 Lab File ID: F1585.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene-d10 (Surr)	10.73	Analyte not Identified by the Data System	ilczyszyn d	10/07/11 07:17
Fluorene	10.78	Analyte Misidentified by the Data System	ilczyszyn d	10/07/11 07:17

Lab Sample ID: MB 280-87039/1-A Client Sample ID:

Date Analyzed: 10/05/11 19:59 Lab File ID: F1595.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene-d10 (Surr)	10.73	Analyte not Identified by the Data System	ilczyszyn d	10/07/11 11:17

Lab Sample ID: LCSD 280-87039/3-A Client Sample ID:

Date Analyzed: 10/05/11 21:11 Lab File ID: F1597.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene-d10 (Surr)	10.73	Analyte not Identified by the Data System	ilczyszyn d	10/07/11 07:48
Fluorene	10.78	Analyte Misidentified by the Data System	ilczyszyn d	10/07/11 07:48

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Instrument ID: MSS_F Analysis Batch Number: 89868

Lab Sample ID: CCV 280-89868/1 Client Sample ID:

Date Analyzed: 10/06/11 13:24 Lab File ID: F1625.D GC Column: Vf-5MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorene-d10 (Surr)	10.73	Analyte not Identified by the Data System	ilczyszyn d	10/07/11 07:27
Fluorene	10.78	Analyte Misidentified by the Data System	ilczyszyn d	10/07/11 07:28

SAMPLE SUMMARY

Client: City of Saint Louis Park

Job Number: 280-20371-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-20371-1	E13-091511	Water	09/15/2011 0900	09/16/2011 1000

EXECUTIVE SUMMARY - Detections

Client: City of Saint Louis Park Job Number: 280-20371-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-20371-1	**E13-091511**					
2,3-Dihydroindene		8.2		5.1	ng/L	8270C
Acenaphthene		120	B	5.9	ng/L	8270C
Acenaphthylene		10		4.9	ng/L	8270C
Benzo[g,h,i]perylene		2.0	J B	6.4	ng/L	8270C
Dibenzothiophene		3.1	J B	4.2	ng/L	8270C
Fluoranthene		1.7	J	4.7	ng/L	8270C
Naphthalene		2.3	J *	8.8	ng/L	8270C
Pyrene		9.7		4.3	ng/L	8270C

METHOD SUMMARY

Client: City of Saint Louis Park

Job Number: 280-20371-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Semivolatile Organic Compound (GC/MS SIM LL)	TAL DEN	SW846 8270C	
Liquid-Liquid Extraction (Continuous)			SW846 3520C

Lab References:

TAL DEN = TestAmerica Denver

Method References:

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

METHOD / ANALYST SUMMARY

Client: City of Saint Louis Park

Job Number: 280-20371-1

Method	Analyst	Analyst ID
SW846 8270C	Ilczyszyn, Dennis P	DPI

Client: City of Saint Louis Park | Job Number: 280-20371-1

Client Sample ID: **E13-091511**

Lab Sample ID: 280-20371-1 | Date Sampled: 09/15/2011 0900
Client Matrix: Water | Date Received: 09/16/2011 1000

8270C Semivolatile Organic Compound (GC/MS SIM LL)

Analysis Method:	8270C	Analysis Batch:	280-89868	Instrument ID:	MSS_F
Prep Method:	3520C	Prep Batch:	280-87039	Lab File ID:	F1628.D
Dilution:	1.0			Initial Weight/Volume:	3887.7 mL
Analysis Date:	10/06/2011 1513			Final Weight/Volume:	1000 uL
Prep Date:	09/20/2011 1838			Injection Volume:	1 uL

Analyte	Result (ng/L)	Qualifier	MDL	RL
2,3-Benzofuran	ND		0.70	5.6
2,3-Dihydroindene	8.2		0.72	5.1
1-Methylnaphthalene	ND		0.92	5.8
2-Methylnaphthalene	ND		1.0	6.1
Acenaphthene	120	B	0.51	5.9
Acenaphthylene	10		0.79	4.9
Acridine	ND	*	6.7	6.7
Anthracene	ND		0.82	4.3
Benzo[a]anthracene	ND		0.95	4.4
Benzo[a]pyrene	ND		1.3	2.6
Benzo[e]pyrene	ND		1.2	4.4
Benzo[b]fluoranthene	ND		1.4	4.8
Benzo(b)thiophene	ND		0.77	5.4
Benzo[k]fluoranthene	ND		1.3	4.2
Benzo[g,h,i]perylene	2.0	J B	1.2	6.4
Carbazole	ND		0.74	3.9
Chrysene	ND		1.3	5.8
Dibenz(a,h)anthracene	ND		1.1	6.1
Dibenzofuran	ND		1.0	5.9
Dibenzothiophene	3.1	J B	1.0	4.2
Fluoranthene	1.7	J	1.7	4.7
Fluorene	ND		0.87	4.2
Indene	ND		3.4	4.8
Indole	ND		1.8	4.8
Indeno[1,2,3-cd]pyrene	ND		1.3	5.6
Naphthalene	2.3	J *	1.2	8.8
Perylene	ND		3.9	3.9
Phenanthrene	ND		3.3	6.5
Pyrene	9.7		1.0	4.3
Quinoline	ND		5.8	9.3
Biphenyl	ND		1.1	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Fluorene-d10 (Surr)	77		23 - 84
Chrysene-d12 (Surr)	24	X	28 - 101
Naphthalene-d8 (Surr)	77		22 - 97

Client: City of Saint Louis Park

Job Number: 280-20371-1

Surrogate Recovery Report

8270C Semivolatile Organic Compound (GC/MS SIM LL)

Client Matrix: Water

Lab Sample ID	Client Sample ID	NTH %Rec	FLR %Rec	CRY %Rec
280-20371-1	E13-091511	77	77	24X
MB 280-87039/1-A		67	74	82
LCS 280-87039/2-A		90	87X	98
LCSD 280-87039/3-A		81	76	88

Surrogate	Acceptance Limits
NTH = Naphthalene-d8 (Surr)	22-97
FLR = Fluorene-d10 (Surr)	23-84
CRY = Chrysene-d12 (Surr)	28-101

Client: City of Saint Louis Park

Job Number: 280-20371-1

Method Blank - Batch: 280-87039

Method: 8270C
Preparation: 3520C

Lab Sample ID:	MB 280-87039/1-A	Analysis Batch:	280-89849	Instrument ID:	MSS_F
Client Matrix:	Water	Prep Batch:	280-87039	Lab File ID:	F1595.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4000 mL
Analysis Date:	10/05/2011 1959	Units:	ng/L	Final Weight/Volume:	1000 uL
Prep Date:	09/20/2011 1838			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2,3-Benzofuran	ND		0.68	5.4
2,3-Dihydroindene	ND		0.70	5.0
1-Methylnaphthalene	ND		0.89	5.6
2-Methylnaphthalene	ND		0.98	5.9
Acenaphthene	1.07	J	0.50	5.7
Acenaphthylene	ND		0.77	4.8
Acridine	ND		6.5	6.5
Anthracene	ND		0.80	4.2
Benzo[a]anthracene	2.94	J	0.92	4.3
Benzo[a]pyrene	1.82	J	1.2	2.5
Benzo[e]pyrene	1.70	J	1.1	4.3
Benzo[b]fluoranthene	2.51	J	1.4	4.7
Benzo(b)thiophene	ND		0.75	5.2
Benzo[k]fluoranthene	4.91		1.2	4.1
Benzo[g,h,i]perylene	1.78	J	1.2	6.2
Carbazole	ND		0.72	3.8
Chrysene	ND		1.2	5.6
Dibenz(a,h)anthracene	1.26	J	1.0	5.9
Dibenzofuran	ND		0.99	5.7
Dibenzothiophene	19.5		0.98	4.1
Fluoranthene	ND		1.7	4.6
Fluorene	ND		0.85	4.1
Indene	ND		3.3	4.7
Indole	ND		1.7	4.7
Indeno[1,2,3-cd]pyrene	1.30	J	1.3	5.4
Naphthalene	ND		1.1	8.6
Perylene	ND		3.8	3.8
Phenanthrene	ND		3.2	6.3
Pyrene	ND		0.99	4.2
Quinoline	ND		5.7	9.0
Biphenyl	ND		1.1	5.6

Surrogate	% Rec	Acceptance Limits
Fluorene-d10 (Surr)	74	23 - 84
Chrysene-d12 (Surr)	82	28 - 101
Naphthalene-d8 (Surr)	67	22 - 97

Client: City of Saint Louis Park

Job Number: 280-20371-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-87039

Method: 8270C
Preparation: 3520C

LCS Lab Sample ID:	LCS 280-87039/2-A	Analysis Batch:	280-89849	Instrument ID:	MSS_F
Client Matrix:	Water	Prep Batch:	280-87039	Lab File ID:	F1596.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4000 mL
Analysis Date:	10/05/2011 2035	Units:	ng/L	Final Weight/Volume:	1000 uL
Prep Date:	09/20/2011 1838			Injection Volume:	1 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-87039/3-A	Analysis Batch:	280-89849	Instrument ID:	MSS_F
Client Matrix:	Water	Prep Batch:	280-87039	Lab File ID:	F1597.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4000 mL
Analysis Date:	10/05/2011 2111	Units:	ng/L	Final Weight/Volume:	1000 uL
Prep Date:	09/20/2011 1838			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
2,3-Benzofuran	85	78	30 - 150	9	50		
2,3-Dihydroindene	87	79	30 - 150	10	50		
1-Methylnaphthalene	100	84	30 - 150	18	50		
2-Methylnaphthalene	88	77	25 - 95	13	50		
3-Methylcholanthrene	47	53	30 - 150	12	50		
Acenaphthene	93	83	30 - 150	11	50		
Acenaphthylene	85	75	30 - 150	13	50		
Acridine	43	27	30 - 150	45	50		*
Anthracene	98	84	30 - 150	16	50		
Benzo[a]anthracene	91	73	30 - 150	23	50		
Benzo[a]pyrene	88	82	30 - 150	7	50		
Benzo[e]pyrene	90	82	37 - 105	9	50		
Benzo[b]fluoranthene	86	77	30 - 150	11	50		
Benzo(b)thiophene	93	84	30 - 150	10	50		
Benzo[k]fluoranthene	102	94	30 - 150	8	50		
Benzo[g,h,i]perylene	82	80	30 - 150	2	50		
Carbazole	82	63	30 - 150	27	50		
Chrysene	111	103	20 - 136	7	50		
Dibenz(a,h)anthracene	78	76	30 - 150	3	50		
Dibenzofuran	84	73	30 - 150	14	50		
Dibenzothiophene	91	79	30 - 150	14	50		
Fluoranthene	95	82	30 - 150	15	50		
Fluorene	94	81	34 - 96	14	50		
Indene	84	77	22 - 86	9	50		
Indole	69	65	30 - 150	7	50		
Indeno[1,2,3-cd]pyrene	78	75	30 - 150	4	50		
Naphthalene	97	88	27 - 95	9	50	*	
Perylene	90	87	30 - 150	3	50		
Phenanthrene	91	78	30 - 150	16	50		
Pyrene	91	78	30 - 150	16	50		
Quinoline	57	53	20 - 112	8	50		
7,12-Dimethylbenz(a)anthracene	27	33	30 - 150	20	50	*	
Biphenyl	89	77	30 - 150	14	50		

Surrogate	LCS % Rec		LCSD % Rec	Acceptance Limits
Fluorene-d10 (Surr)	87	X	76	23 - 84

Client: City of Saint Louis Park

Job Number: 280-20371-1

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Chrysene-d12 (Surr)	98	88	28 - 101
Naphthalene-d8 (Surr)	90	81	22 - 97

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-87039

Method: 8270C
Preparation: 3520C

LCS Lab Sample ID:	LCS 280-87039/2-A	Units: ng/L	LCSD Lab Sample ID:	LCSD 280-87039/3-A	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	10/05/2011 2035		Analysis Date:	10/05/2011 2111	
Prep Date:	09/20/2011 1838		Prep Date:	09/20/2011 1838	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual		LCSD Result/Qual	
2,3-Benzofuran	75.0	75.0	64.0		58.6	
2,3-Dihydroindene	75.0	75.0	65.3		59.3	
1-Methylnaphthalene	75.0	75.0	75.1		62.7	
2-Methylnaphthalene	75.0	75.0	65.7		57.9	
3-Methylcholanthrene	75.0	75.0	35.3		39.9	
Acenaphthene	75.0	75.0	69.4		62.0	
Acenaphthylene	75.0	75.0	63.7		56.0	
Acridine	75.0	75.0	32.5		20.5	*
Anthracene	75.0	75.0	73.2		62.6	
Benzo[a]anthracene	75.0	75.0	68.5		54.4	
Benzo[a]pyrene	75.0	75.0	66.1		61.4	
Benzo[e]pyrene	75.0	75.0	67.3		61.8	
Benzo[b]fluoranthene	75.0	75.0	64.7		57.9	
Benzo(b)thiophene	75.0	75.0	70.0		63.3	
Benzo[k]fluoranthene	75.0	75.0	76.6		70.7	
Benzo[g,h,i]perylene	75.0	75.0	61.3		59.8	
Carbazole	75.0	75.0	61.8		47.3	
Chrysene	75.0	75.0	83.0		77.5	
Dibenz(a,h)anthracene	75.0	75.0	58.2		56.7	
Dibenzofuran	75.0	75.0	63.3		55.1	
Dibenzothiophene	75.0	75.0	68.3		59.6	
Fluoranthene	75.0	75.0	71.1		61.2	
Fluorene	75.0	75.0	70.3		61.0	
Indene	75.0	75.0	63.1		57.4	
Indole	75.0	75.0	52.1		48.5	
Indeno[1,2,3-cd]pyrene	75.0	75.0	58.3		55.9	
Naphthalene	75.0	75.0	72.7	*	66.3	
Perylene	75.0	75.0	67.4		65.5	
Phenanthrene	75.0	75.0	68.4		58.4	
Pyrene	75.0	75.0	68.2		58.4	
Quinoline	75.0	75.0	43.1		39.8	
7,12-Dimethylbenz(a)anthracene	75.0	75.0	20.5	*	25.0	
Biphenyl	75.0	75.0	66.7		57.9	

DATA REPORTING QUALIFIERS

Client: City of Saint Louis Park Job Number: 280-20371-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	B	Compound was found in the blank and sample.
	*	LCS or LCSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits

Client: City of Saint Louis Park Job Number: 280-20371-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-87039					
LCS 280-87039/2-A	Lab Control Sample	T	Water	3520C	
LCSD 280-87039/3-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 280-87039/1-A	Method Blank	T	Water	3520C	
280-20371-1	E13-091511	T	Water	3520C	
Analysis Batch:280-89849					
LCS 280-87039/2-A	Lab Control Sample	T	Water	8270C	280-87039
LCSD 280-87039/3-A	Lab Control Sample Duplicate	T	Water	8270C	280-87039
MB 280-87039/1-A	Method Blank	T	Water	8270C	280-87039
Analysis Batch:280-89868					
280-20371-1	E13-091511	T	Water	8270C	280-87039

Report Basis
T = Total

Client: City of Saint Louis Park

Job Number: 280-20371-1

Laboratory Chronicle

Lab ID: 280-20371-1 **Client ID:** E13-091511

Sample Date/Time: 09/15/2011 09:00 Received Date/Time: 09/16/2011 10:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	280-20371-E-1-A		280-89868	280-87039	09/20/2011 18:38	1	TAL DEN	EJP
A:8270C	280-20371-E-1-A		280-89868	280-87039	10/06/2011 15:13	1	TAL DEN	DPI

Lab ID: MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	MB 280-87039/1-A		280-89849	280-87039	09/20/2011 18:38	1	TAL DEN	EJP
A:8270C	MB 280-87039/1-A		280-89849	280-87039	10/05/2011 19:59	1	TAL DEN	DPI

Lab ID: LCS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCS 280-87039/2-A		280-89849	280-87039	09/20/2011 18:38	1	TAL DEN	EJP
A:8270C	LCS 280-87039/2-A		280-89849	280-87039	10/05/2011 20:35	1	TAL DEN	DPI

Lab ID: LCSD **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCSD 280-87039/3-A		280-89849	280-87039	09/20/2011 18:38	1	TAL DEN	EJP
A:8270C	LCSD 280-87039/3-A		280-89849	280-87039	10/05/2011 21:11	1	TAL DEN	DPI

Lab References:
TAL DEN = TestAmerica Denver

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
CSLP_SIM_LCS_00003	07/02/11	12/15/10	P&T Methanol, Lot DB939	100 mL	CSLP_FS_LCS_00004	0.6 mL	1-Methylnaphthalene	0.3 ug/mL
							2-Methylnaphthalene	0.3 ug/mL
							Acenaphthene	0.3 ug/mL
							Acenaphthylene	0.3 ug/mL
							Anthracene	0.3 ug/mL
							Benzo[a]anthracene	0.3 ug/mL
							Benzo[a]pyrene	0.3 ug/mL
							Benzo[b]fluoranthene	0.3 ug/mL
							Benzo[g,h,i]perylene	0.3 ug/mL
							Benzo[k]fluoranthene	0.3 ug/mL
							Chrysene	0.3 ug/mL
							Dibenz(a,h)anthracene	0.3 ug/mL
							Fluoranthene	0.3 ug/mL
							Fluorene	0.3 ug/mL
							Indeno[1,2,3-cd]pyrene	0.3 ug/mL
							Naphthalene	0.3 ug/mL
							Phenanthrene	0.3 ug/mL
							Pyrene	0.3 ug/mL
							2,3,5-Trimethylnaphthalene	0.3 ug/mL
							2,3-Benzofuran	0.3 ug/mL
							2,3-Dihydroindene	0.3 ug/mL
							2,6-Dimethylnaphthalene	0.3 ug/mL
							3-Methylcholanthrene	0.3 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.3 ug/mL
							Acridine	0.3 ug/mL
							Benzo(b)thiophene	0.3 ug/mL
							Benzo[e]pyrene	0.3 ug/mL
							Biphenyl	0.3 ug/mL
							Carbazole	0.3 ug/mL
							Di-n-octyl phthalate	0.3 ug/mL
							Dibenz[a,h]acridine	0.3 ug/mL
							Dibenz[a,j]acridine	0.3 ug/mL
							Dibenzofuran	0.3 ug/mL
							Dibenzothiophene	0.3 ug/mL
							Indene	0.3 ug/mL
							Indole	0.3 ug/mL
							Perylene	0.3 ug/mL
							Quinoline	0.3 ug/mL
							1,2:7,8-Dibenzpyrene	0.3 ug/mL
							1-Methylphenanthrene	0.3 ug/mL
							6-Methylchrysene	0.3 ug/mL
							7H-Dibenzo[c,g]carbazole	0.3 ug/mL
							Dibenzo(def,p)chrysene	0.3 ug/mL
							Dibenzo[a,e]pyrene	0.3 ug/mL
							Dibenzo[a,h]pyrene	0.3 ug/mL
.CSLP_FS_LCS_00004	07/02/11	12/15/10	P&T Methanol, Lot DB939	100 mL	CSLP-LCS-Stk1_00009	1.25 mL	1-Methylnaphthalene	50 ug/mL
							2-Methylnaphthalene	50 ug/mL
							Acenaphthene	50 ug/mL
							Acenaphthylene	50 ug/mL
							Anthracene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	50 ug/mL
							Benzo[a]pyrene	50 ug/mL
							Benzo[b]fluoranthene	50 ug/mL
							Benzo[g,h,i]perylene	50 ug/mL
							Benzo[k]fluoranthene	50 ug/mL
							Chrysene	50 ug/mL
							Dibenz(a,h)anthracene	50 ug/mL
							Fluoranthene	50 ug/mL
							Fluorene	50 ug/mL
							Indeno[1,2,3-cd]pyrene	50 ug/mL
							Naphthalene	50 ug/mL
							Phenanthrene	50 ug/mL
							Pyrene	50 ug/mL
					CSLP-LCS-Stk1_00010	1.25 mL	1-Methylnaphthalene	50 ug/mL
							2-Methylnaphthalene	50 ug/mL
							Acenaphthene	50 ug/mL
							Acenaphthylene	50 ug/mL
							Anthracene	50 ug/mL
							Benzo[a]anthracene	50 ug/mL
							Benzo[a]pyrene	50 ug/mL
							Benzo[b]fluoranthene	50 ug/mL
							Benzo[g,h,i]perylene	50 ug/mL
							Benzo[k]fluoranthene	50 ug/mL
							Chrysene	50 ug/mL
							Dibenz(a,h)anthracene	50 ug/mL
							Fluoranthene	50 ug/mL
							Fluorene	50 ug/mL
							Indeno[1,2,3-cd]pyrene	50 ug/mL
							Naphthalene	50 ug/mL
							Phenanthrene	50 ug/mL
							Pyrene	50 ug/mL
					CSLP-LCS-Stk2_00012	1.25 mL	2,3,5-Trimethylnaphthalene	50 ug/mL
							2,3-Benzofuran	50 ug/mL
							2,3-Dihydroindene	50 ug/mL
							2,6-Dimethylnaphthalene	50 ug/mL
							3-Methylcholanthrene	50 ug/mL
							7,12-Dimethylbenz(a)anthracene	50 ug/mL
							Acridine	50 ug/mL
							Benzo(b)thiophene	50 ug/mL
							Benzo[e]pyrene	50 ug/mL
							Biphenyl	50 ug/mL
							Carbazole	50 ug/mL
							Di-n-octyl phthalate	50 ug/mL
							Dibenz[a,h]acridine	50 ug/mL
							Dibenz[a,j]acridine	50 ug/mL
							Dibenzofuran	50 ug/mL
							Dibenzothiophene	50 ug/mL
							Indene	50 ug/mL
							Indole	50 ug/mL
							Perylene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Quinoline	50 ug/mL
					CSLP-LCS-Stk2_00013	1.25 mL	2,3,5-Trimethylnaphthalene	50 ug/mL
							2,3-Benzofuran	50 ug/mL
							2,3-Dihydroindene	50 ug/mL
							2,6-Dimethylnaphthalene	50 ug/mL
							3-Methylcholanthrene	50 ug/mL
							7,12-Dimethylbenz(a)anthracene	50 ug/mL
							Acridine	50 ug/mL
							Benzo(b)thiophene	50 ug/mL
							Benzo[e]pyrene	50 ug/mL
							Biphenyl	50 ug/mL
							Carbazole	50 ug/mL
							Di-n-octyl phthalate	50 ug/mL
							Dibenz[a,h]acridine	50 ug/mL
							Dibenz[a,j]acridine	50 ug/mL
							Dibenzofuran	50 ug/mL
							Dibenzothiophene	50 ug/mL
							Indene	50 ug/mL
							Indole	50 ug/mL
							Perylene	50 ug/mL
							Quinoline	50 ug/mL
					CSLP-LCS-Stk3_00017	1 mL	1,2:7,8-Dibenzpyrene	50 ug/mL
							1-Methylphenanthrene	50 ug/mL
							6-Methylchrysene	50 ug/mL
							7H-Dibenzo[c,g]carbazole	50 ug/mL
							Dibenzo(def,p)chrysene	50 ug/mL
							Dibenzo[a,e]pyrene	50 ug/mL
							Dibenzo[a,h]pyrene	50 ug/mL
					CSLP-LCS-Stk3_00018	1 mL	1,2:7,8-Dibenzpyrene	50 ug/mL
							1-Methylphenanthrene	50 ug/mL
							6-Methylchrysene	50 ug/mL
							7H-Dibenzo[c,g]carbazole	50 ug/mL
							Dibenzo(def,p)chrysene	50 ug/mL
							Dibenzo[a,e]pyrene	50 ug/mL
							Dibenzo[a,h]pyrene	50 ug/mL
					CSLP-LCS-Stk3_00019	1 mL	1,2:7,8-Dibenzpyrene	50 ug/mL
							1-Methylphenanthrene	50 ug/mL
							6-Methylchrysene	50 ug/mL
							7H-Dibenzo[c,g]carbazole	50 ug/mL
							Dibenzo(def,p)chrysene	50 ug/mL
							Dibenzo[a,e]pyrene	50 ug/mL
							Dibenzo[a,h]pyrene	50 ug/mL
					CSLP-LCS-Stk3_00020	1 mL	1,2:7,8-Dibenzpyrene	50 ug/mL
							1-Methylphenanthrene	50 ug/mL
							6-Methylchrysene	50 ug/mL
							7H-Dibenzo[c,g]carbazole	50 ug/mL
							Dibenzo(def,p)chrysene	50 ug/mL
							Dibenzo[a,e]pyrene	50 ug/mL
							Dibenzo[a,h]pyrene	50 ug/mL
					CSLP-LCS-Stk3_00021	1 mL	1,2:7,8-Dibenzpyrene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylphenanthrene	50 ug/mL
							6-Methylchrysene	50 ug/mL
							7H-Dibenzo[c,g]carbazole	50 ug/mL
							Dibenzo(def,p)chrysene	50 ug/mL
							Dibenzo[a,e]pyrene	50 ug/mL
							Dibenzo[a,h]pyrene	50 ug/mL
..CSLP-LCS-Stk1_00009	04/29/12		Accustandard, Lot 21004128		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
..CSLP-LCS-Stk1_00010	04/29/12		Accustandard, Lot 21004128		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
..CSLP-LCS-Stk2_00012	07/02/11		Accustandard, Lot 210061390		(Purchased Reagent)		2,3,5-Trimethylnaphthalene	2000 ug/mL
							2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							2,6-Dimethylnaphthalene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL
							Carbazole	2000 ug/mL
							Di-n-octyl phthalate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dibenzofuran	2000 ug/mL
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
..CSLP-LCS-Stk2_00013	07/02/11		Accustandard, Lot 210061390		(Purchased Reagent)		2,3,5-Trimethylnaphthalene	2000 ug/mL
							2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							2,6-Dimethylnaphthalene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL
							Carbazole	2000 ug/mL
							Di-n-octyl phthalate	2000 ug/mL
							Dibenz[a,h]acridine	2000 ug/mL
							Dibenz[a,j]acridine	2000 ug/mL
							Dibenzofuran	2000 ug/mL
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
..CSLP-LCS-Stk3_00017	07/07/13		Accustandard, Lot 210061394		(Purchased Reagent)		1,2:7,8-Dibenzpyrene	1000 ug/mL
							1-Methylphenanthrene	1000 ug/mL
							6-Methylchrysene	1000 ug/mL
							7H-Dibenzo[c,g]carbazole	1000 ug/mL
							Dibenzo(def,p)chrysene	1000 ug/mL
							Dibenzo[a,e]pyrene	1000 ug/mL
							Dibenzo[a,h]pyrene	1000 ug/mL
..CSLP-LCS-Stk3_00018	07/07/13		Accustandard, Lot 210061394		(Purchased Reagent)		1,2:7,8-Dibenzpyrene	1000 ug/mL
							1-Methylphenanthrene	1000 ug/mL
							6-Methylchrysene	1000 ug/mL
							7H-Dibenzo[c,g]carbazole	1000 ug/mL
							Dibenzo(def,p)chrysene	1000 ug/mL
							Dibenzo[a,e]pyrene	1000 ug/mL
							Dibenzo[a,h]pyrene	1000 ug/mL
..CSLP-LCS-Stk3_00019	07/07/13		Accustandard, Lot 210061394		(Purchased Reagent)		1,2:7,8-Dibenzpyrene	1000 ug/mL
							1-Methylphenanthrene	1000 ug/mL
							6-Methylchrysene	1000 ug/mL
							7H-Dibenzo[c,g]carbazole	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzo(def,p)chrysene	1000 ug/mL
							Dibenzo[a,e]pyrene	1000 ug/mL
							Dibenzo[a,h]pyrene	1000 ug/mL
..CSLP-LCS-Stk3_00020	07/07/13		Accustandard, Lot 210061394		(Purchased Reagent)		1,2:7,8-Dibenzpyrene	1000 ug/mL
							1-Methylphenanthrene	1000 ug/mL
							6-Methylchrysene	1000 ug/mL
							7H-Dibenzo[c,g]carbazole	1000 ug/mL
							Dibenzo(def,p)chrysene	1000 ug/mL
							Dibenzo[a,e]pyrene	1000 ug/mL
							Dibenzo[a,h]pyrene	1000 ug/mL
..CSLP-LCS-Stk3_00021	07/07/13		Accustandard, Lot 210061394		(Purchased Reagent)		1,2:7,8-Dibenzpyrene	1000 ug/mL
							1-Methylphenanthrene	1000 ug/mL
							6-Methylchrysene	1000 ug/mL
							7H-Dibenzo[c,g]carbazole	1000 ug/mL
							Dibenzo(def,p)chrysene	1000 ug/mL
							Dibenzo[a,e]pyrene	1000 ug/mL
							Dibenzo[a,h]pyrene	1000 ug/mL
CSLP_SIM_SURR_00010	11/11/11	05/24/11	P&T Methanol, Lot DB939	100 mL	CSLP_FS_Surr_00003	0.6 mL	Chrysene-d12 (Surr)	0.3 ug/mL
							Fluorene-d10 (Surr)	0.3 ug/mL
							Naphthalene-d8 (Surr)	0.3 ug/mL
.CSLP_FS_Surr_00003	11/11/11	05/24/11	P&T Methanol, Lot G50E19	200 mL	CSLPSurrStock_00002	10 mL	Chrysene-d12 (Surr)	50 ug/mL
							Fluorene-d10 (Surr)	50 ug/mL
							Naphthalene-d8 (Surr)	50 ug/mL
..CSLPSurrStock_00002	11/11/11		Supelco, Lot LB80434		(Purchased Reagent)		Chrysene-d12 (Surr)	1000 ug/mL
							Fluorene-d10 (Surr)	1000 ug/mL
							Naphthalene-d8 (Surr)	1000 ug/mL
MS-CSLPSIM.01_00024	11/11/11	09/28/11	Methylene Chloride, Lot K07S05	500 uL	MS-CSLPSIM IS_00009	50 uL	Perylene-d12	0.6 ug/mL
							Acenaphthene-d10	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-CSLPSIMstk_00009	4.2 uL	1-Methylnaphthalene	0.01008 ug/mL
							2-Methylnaphthalene	0.01008 ug/mL
							Acenaphthene	0.01008 ug/mL
							Acenaphthylene	0.01008 ug/mL
							Anthracene	0.01008 ug/mL
							Benzo[a]anthracene	0.01008 ug/mL
							Benzo[a]pyrene	0.01008 ug/mL
							Benzo[b]fluoranthene	0.01008 ug/mL
							Benzo[g,h,i]perylene	0.01008 ug/mL
							Benzo[k]fluoranthene	0.01008 ug/mL
							Chrysene	0.01008 ug/mL
							Dibenz(a,h)anthracene	0.01008 ug/mL
							Fluoranthene	0.01008 ug/mL
							Fluorene	0.01008 ug/mL
							Indeno[1,2,3-cd]pyrene	0.01008 ug/mL
							Naphthalene	0.01008 ug/mL
							Phenanthrene	0.01008 ug/mL
							Pyrene	0.01008 ug/mL
							2,3-Benzofuran	0.01008 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3-Dihydroindene	0.01008 ug/mL
							3-Methylcholanthrene	0.01008 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.01008 ug/mL
							Acridine	0.01008 ug/mL
							Benzo(b)thiophene	0.01008 ug/mL
							Benzo[e]pyrene	0.01008 ug/mL
							Biphenyl	0.01008 ug/mL
							Carbazole	0.01008 ug/mL
							Dibenzofuran	0.01008 ug/mL
							Dibenzothiophene	0.01008 ug/mL
							Indene	0.01008 ug/mL
							Indole	0.01008 ug/mL
							Perylene	0.01008 ug/mL
							Quinoline	0.01008 ug/mL
							Chrysene-d12 (Surr)	0.01008 ug/mL
							Fluorene-d10 (Surr)	0.01008 ug/mL
							Naphthalene-d8 (Surr)	0.01008 ug/mL
.MS-CSLPSIM IS_00009	09/13/12	09/14/11	Methylene Chloride, Lot K07s05	10 mL	MS-CSLP FS IS_00004	150 uL	Perylene-d12	6 ug/mL
							Acenaphthene-d10	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-CSLP FS IS_00004	09/13/12	09/14/11	Methylene Chloride, Lot K07S05	10 ug/mL	MS-48081_00005	1 mL	Perylene-d12	400 ug/mL
					MS-48081_00006	1 mL	Perylene-d12	400 ug/mL
					MS-48417_00005	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48417_00006	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48710-U_00005	1 mL	Phenanthrene-d10	400 ug/mL
					MS-48710-U_00006	1 mL	Phenanthrene-d10	400 ug/mL
...MS-48081_00005	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48081_00006	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48417_00005	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48417_00006	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48710-U_00005	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
...MS-48710-U_00006	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
.MS-CSLPSIMstk_00009	11/11/11	06/09/11	Methylene Chloride, Lot K01S10	10 mL	CSLP-FS Stock_00009	60 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
							2,3-Benzofuran	1.2 ug/mL
							2,3-Dihydroindene	1.2 ug/mL
							3-Methylcholanthrene	1.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	1.2 ug/mL
							Acridine	1.2 ug/mL
							Benzo(b)thiophene	1.2 ug/mL
							Benzo[e]pyrene	1.2 ug/mL
							Biphenyl	1.2 ug/mL
							Carbazole	1.2 ug/mL
							Dibenzofuran	1.2 ug/mL
							Dibenzothiophene	1.2 ug/mL
							Indene	1.2 ug/mL
							Indole	1.2 ug/mL
							Perylene	1.2 ug/mL
							Quinoline	1.2 ug/mL
							Chrysene-d12 (Surr)	1.2 ug/mL
							Fluorene-d10 (Surr)	1.2 ug/mL
							Naphthalene-d8 (Surr)	1.2 ug/mL
..CSLP-FS Stock_00009	09/11/11	02/28/11	Methylene Chloride, Lot J41S00	10 mL	CSLP-LCS-Stk1_00012	1 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
					CSLP-LCS-Stk2_00014	1 mL	2,3-Benzofuran	200 ug/mL
							2,3-Dihydroindene	200 ug/mL
							3-Methylcholanthrene	200 ug/mL
							7,12-Dimethylbenz(a)anthracene	200 ug/mL
							Acridine	200 ug/mL
							Benzo(b)thiophene	200 ug/mL
							Benzo[e]pyrene	200 ug/mL
							Biphenyl	200 ug/mL
							Carbazole	200 ug/mL
							Dibenzofuran	200 ug/mL
							Dibenzothiophene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indene	200 ug/mL
							Indole	200 ug/mL
							Perylene	200 ug/mL
							Quinoline	200 ug/mL
					CSLPSurrStock_00002	2 mL	Chrysene-d12 (Surr)	200 ug/mL
							Fluorene-d10 (Surr)	200 ug/mL
							Naphthalene-d8 (Surr)	200 ug/mL
...CSLP-LCS-Stk1_00012	04/29/12		Accustandard, Lot 21004128		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
...CSLP-LCS-Stk2_00014	09/11/11		Accustandard, Lot 210061390		(Purchased Reagent)		2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL
							Carbazole	2000 ug/mL
							Dibenzofuran	2000 ug/mL
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
...CSLPSurrStock_00002	11/11/11		Supelco, Lot LB80434		(Purchased Reagent)		Chrysene-d12 (Surr)	1000 ug/mL
							Fluorene-d10 (Surr)	1000 ug/mL
							Naphthalene-d8 (Surr)	1000 ug/mL
MS-CSLPSIM.02_00023	11/11/11	09/28/11	Methylene Chloride, Lot K07S05	500 uL	MS-CSLPSIM IS_00009	50 uL	Perylene-d12	0.6 ug/mL
							Acenaphthene-d10	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-CSLPSIMstk_00009	8.3 uL	1-Methylnaphthalene	0.01992 ug/mL
							2-Methylnaphthalene	0.01992 ug/mL
							Acenaphthene	0.01992 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthylene	0.01992 ug/mL
							Anthracene	0.01992 ug/mL
							Benzo[a]anthracene	0.01992 ug/mL
							Benzo[a]pyrene	0.01992 ug/mL
							Benzo[b]fluoranthene	0.01992 ug/mL
							Benzo[g,h,i]perylene	0.01992 ug/mL
							Benzo[k]fluoranthene	0.01992 ug/mL
							Chrysene	0.01992 ug/mL
							Dibenz(a,h)anthracene	0.01992 ug/mL
							Fluoranthene	0.01992 ug/mL
							Fluorene	0.01992 ug/mL
							Indeno[1,2,3-cd]pyrene	0.01992 ug/mL
							Naphthalene	0.01992 ug/mL
							Phenanthrene	0.01992 ug/mL
							Pyrene	0.01992 ug/mL
							2,3-Benzofuran	0.01992 ug/mL
							2,3-Dihydroindene	0.01992 ug/mL
							3-Methylcholanthrene	0.01992 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.01992 ug/mL
							Acridine	0.01992 ug/mL
							Benzo(b)thiophene	0.01992 ug/mL
							Benzo[e]pyrene	0.01992 ug/mL
							Biphenyl	0.01992 ug/mL
							Carbazole	0.01992 ug/mL
							Dibenzofuran	0.01992 ug/mL
							Dibenzothiophene	0.01992 ug/mL
							Indene	0.01992 ug/mL
							Indole	0.01992 ug/mL
							Perylene	0.01992 ug/mL
							Quinoline	0.01992 ug/mL
							Chrysene-d12 (Surr)	0.01992 ug/mL
							Fluorene-d10 (Surr)	0.01992 ug/mL
							Naphthalene-d8 (Surr)	0.01992 ug/mL
.MS-CSLPSIM IS_00009	09/13/12	09/14/11	Methylene Chloride, Lot K07s05	10 mL	MS-CSLP FS IS_00004	150 uL	Perylene-d12	6 ug/mL
							Acenaphthene-d10	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-CSLP FS IS_00004	09/13/12	09/14/11	Methylene Chloride, Lot K07S05	10 ug/mL	MS-48081_00005	1 mL	Perylene-d12	400 ug/mL
					MS-48081_00006	1 mL	Perylene-d12	400 ug/mL
					MS-48417_00005	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48417_00006	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48710-U_00005	1 mL	Phenanthrene-d10	400 ug/mL
					MS-48710-U_00006	1 mL	Phenanthrene-d10	400 ug/mL
...MS-48081_00005	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48081_00006	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48417_00005	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48417_00006	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48710-U_00005	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
...MS-48710-U_00006	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MS-CSLPSIMstk_00009	11/11/11	06/09/11	Methylene Chloride, Lot K01S10	10 mL	CSLP-FS Stock_00009	60 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
							2,3-Benzofuran	1.2 ug/mL
							2,3-Dihydroindene	1.2 ug/mL
							3-Methylcholanthrene	1.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	1.2 ug/mL
							Acridine	1.2 ug/mL
							Benzo(b)thiophene	1.2 ug/mL
							Benzo[e]pyrene	1.2 ug/mL
							Biphenyl	1.2 ug/mL
							Carbazole	1.2 ug/mL
							Dibenzofuran	1.2 ug/mL
							Dibenzothiophene	1.2 ug/mL
							Indene	1.2 ug/mL
							Indole	1.2 ug/mL
							Perylene	1.2 ug/mL
							Quinoline	1.2 ug/mL
							Chrysene-d12 (Surr)	1.2 ug/mL
							Fluorene-d10 (Surr)	1.2 ug/mL
							Naphthalene-d8 (Surr)	1.2 ug/mL
..CSLP-FS Stock_00009	09/11/11	02/28/11	Methylene Chloride, Lot J41S00	10 mL	CSLP-LCS-Stk1_00012	1 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
					CSLP-LCS-Stk2_00014	1 mL	2,3-Benzofuran	200 ug/mL
							2,3-Dihydroindene	200 ug/mL
							3-Methylcholanthrene	200 ug/mL
							7,12-Dimethylbenz(a)anthracene	200 ug/mL
							Acridine	200 ug/mL
							Benzo(b)thiophene	200 ug/mL
							Benzo[e]pyrene	200 ug/mL
							Biphenyl	200 ug/mL
							Carbazole	200 ug/mL
							Dibenzofuran	200 ug/mL
							Dibenzothiophene	200 ug/mL
							Indene	200 ug/mL
							Indole	200 ug/mL
							Perylene	200 ug/mL
							Quinoline	200 ug/mL
					CSLPSurrStock_00002	2 mL	Chrysene-d12 (Surr)	200 ug/mL
							Fluorene-d10 (Surr)	200 ug/mL
							Naphthalene-d8 (Surr)	200 ug/mL
...CSLP-LCS-Stk1_00012	04/29/12		Accustandard, Lot 21004128		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
...CSLP-LCS-Stk2_00014	09/11/11		Accustandard, Lot 210061390		(Purchased Reagent)		2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	2000 ug/mL
							Dibenzofuran	2000 ug/mL
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
...CSLPSurrStock_00002	11/11/11		Supelco, Lot LB80434		(Purchased Reagent)		Chrysene-d12 (Surr)	1000 ug/mL
							Fluorene-d10 (Surr)	1000 ug/mL
							Naphthalene-d8 (Surr)	1000 ug/mL
MS-CSLPSIM.15_00021	11/11/11	09/28/11	Methylene Chloride, Lot K07S05	500 uL	MS-CSLPSIM IS_00009	50 uL	Perylene-d12	0.6 ug/mL
							Acenaphthene-d10	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-CSLPSIMstk_00009	62.5 uL	1-Methylnaphthalene	0.15 ug/mL
							2-Methylnaphthalene	0.15 ug/mL
							Acenaphthene	0.15 ug/mL
							Acenaphthylene	0.15 ug/mL
							Anthracene	0.15 ug/mL
							Benzo[a]anthracene	0.15 ug/mL
							Benzo[a]pyrene	0.15 ug/mL
							Benzo[b]fluoranthene	0.15 ug/mL
							Benzo[g,h,i]perylene	0.15 ug/mL
							Benzo[k]fluoranthene	0.15 ug/mL
							Chrysene	0.15 ug/mL
							Dibenz(a,h)anthracene	0.15 ug/mL
							Fluoranthene	0.15 ug/mL
							Fluorene	0.15 ug/mL
							Indeno[1,2,3-cd]pyrene	0.15 ug/mL
							Naphthalene	0.15 ug/mL
							Phenanthrene	0.15 ug/mL
							Pyrene	0.15 ug/mL
							2,3-Benzofuran	0.15 ug/mL
							2,3-Dihydroindene	0.15 ug/mL
							3-Methylcholanthrene	0.15 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.15 ug/mL
							Acridine	0.15 ug/mL
							Benzo(b)thiophene	0.15 ug/mL
							Benzo[e]pyrene	0.15 ug/mL
							Biphenyl	0.15 ug/mL
							Carbazole	0.15 ug/mL
							Dibenzofuran	0.15 ug/mL
							Dibenzothiophene	0.15 ug/mL
							Indene	0.15 ug/mL
							Indole	0.15 ug/mL
							Perylene	0.15 ug/mL
							Quinoline	0.15 ug/mL
							Chrysene-d12 (Surr)	0.15 ug/mL
							Fluorene-d10 (Surr)	0.15 ug/mL
							Naphthalene-d8 (Surr)	0.15 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MS-CSLPSIM IS_00009	09/13/12	09/14/11	Methylene Chloride, Lot K07s05	10 mL	MS-CSLP FS IS_00004	150 uL	Perylene-d12	6 ug/mL
							Acenaphthene-d10	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-CSLP FS IS_00004	09/13/12	09/14/11	Methylene Chloride, Lot K07S05	10 ug/mL	MS-48081_00005	1 mL	Perylene-d12	400 ug/mL
					MS-48081_00006	1 mL	Perylene-d12	400 ug/mL
					MS-48417_00005	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48417_00006	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48710-U_00005	1 mL	Phenanthrene-d10	400 ug/mL
					MS-48710-U_00006	1 mL	Phenanthrene-d10	400 ug/mL
...MS-48081_00005	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48081_00006	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48417_00005	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48417_00006	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48710-U_00005	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
...MS-48710-U_00006	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
.MS-CSLPSIMstk_00009	11/11/11	06/09/11	Methylene Chloride, Lot K01S10	10 mL	CSLP-FS Stock_00009	60 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
							2,3-Benzofuran	1.2 ug/mL
							2,3-Dihydroindene	1.2 ug/mL
							3-Methylcholanthrene	1.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	1.2 ug/mL
							Acridine	1.2 ug/mL
							Benzo(b)thiophene	1.2 ug/mL
							Benzo[e]pyrene	1.2 ug/mL
							Biphenyl	1.2 ug/mL
							Carbazole	1.2 ug/mL
							Dibenzofuran	1.2 ug/mL
							Dibenzothiophene	1.2 ug/mL
							Indene	1.2 ug/mL
							Indole	1.2 ug/mL
							Perylene	1.2 ug/mL
							Quinoline	1.2 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12 (Surr)	1.2 ug/mL
							Fluorene-d10 (Surr)	1.2 ug/mL
							Naphthalene-d8 (Surr)	1.2 ug/mL
..CSLP-FS Stock_00009	09/11/11	02/28/11	Methylene Chloride, Lot J41S00	10 mL	CSLP-LCS-Stk1_00012	1 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
					CSLP-LCS-Stk2_00014	1 mL	2,3-Benzofuran	200 ug/mL
							2,3-Dihydroindene	200 ug/mL
							3-Methylcholanthrene	200 ug/mL
							7,12-Dimethylbenz(a)anthracene	200 ug/mL
							Acridine	200 ug/mL
							Benzo(b)thiophene	200 ug/mL
							Benzo[e]pyrene	200 ug/mL
							Biphenyl	200 ug/mL
							Carbazole	200 ug/mL
							Dibenzofuran	200 ug/mL
							Dibenzothiophene	200 ug/mL
							Indene	200 ug/mL
							Indole	200 ug/mL
							Perylene	200 ug/mL
							Quinoline	200 ug/mL
					CSLPSurrStock_00002	2 mL	Chrysene-d12 (Surr)	200 ug/mL
							Fluorene-d10 (Surr)	200 ug/mL
							Naphthalene-d8 (Surr)	200 ug/mL
...CSLP-LCS-Stk1_00012	04/29/12		Accustandard, Lot 21004128		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
...CSLP-LCS-Stk2_00014	09/11/11	Accustandard, Lot 210061390			(Purchased Reagent)		2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL
							Carbazole	2000 ug/mL
							Dibenzofuran	2000 ug/mL
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
...CSLPSurrStock_00002	11/11/11	Supelco, Lot LB80434			(Purchased Reagent)		Chrysene-d12 (Surr)	1000 ug/mL
							Fluorene-d10 (Surr)	1000 ug/mL
							Naphthalene-d8 (Surr)	1000 ug/mL
MS-CSLPSIM0.3_00028	11/11/11	09/28/11	Methylene Chloride, Lot K07S05	500 uL	MS-CSLPSIM IS_00009	50 uL	Perylene-d12	0.6 ug/mL
							Acenaphthene-d10	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-CSLPSIMstk_00009	125 uL	1-Methylnaphthalene	0.3 ug/mL
							2-Methylnaphthalene	0.3 ug/mL
							Acenaphthene	0.3 ug/mL
							Acenaphthylene	0.3 ug/mL
							Anthracene	0.3 ug/mL
							Benzo[a]anthracene	0.3 ug/mL
							Benzo[a]pyrene	0.3 ug/mL
							Benzo[b]fluoranthene	0.3 ug/mL
							Benzo[g,h,i]perylene	0.3 ug/mL
							Benzo[k]fluoranthene	0.3 ug/mL
							Chrysene	0.3 ug/mL
							Dibenz(a,h)anthracene	0.3 ug/mL
							Fluoranthene	0.3 ug/mL
							Fluorene	0.3 ug/mL
							Indeno[1,2,3-cd]pyrene	0.3 ug/mL
							Naphthalene	0.3 ug/mL
							Phenanthrene	0.3 ug/mL
							Pyrene	0.3 ug/mL
							2,3-Benzofuran	0.3 ug/mL
							2,3-Dihydroindene	0.3 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Methylcholanthrene	0.3 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.3 ug/mL
							Acridine	0.3 ug/mL
							Benzo(b)thiophene	0.3 ug/mL
							Benzo[e]pyrene	0.3 ug/mL
							Biphenyl	0.3 ug/mL
							Carbazole	0.3 ug/mL
							Dibenzofuran	0.3 ug/mL
							Dibenzothiophene	0.3 ug/mL
							Indene	0.3 ug/mL
							Indole	0.3 ug/mL
							Perylene	0.3 ug/mL
							Quinoline	0.3 ug/mL
							Chrysene-d12 (Surr)	0.3 ug/mL
							Fluorene-d10 (Surr)	0.3 ug/mL
							Naphthalene-d8 (Surr)	0.3 ug/mL
.MS-CSLPSIM IS_00009	09/13/12	09/14/11	Methylene Chloride, Lot K07s05	10 mL	MS-CSLP FS IS_00004	150 uL	Perylene-d12	6 ug/mL
							Acenaphthene-d10	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-CSLP FS IS_00004	09/13/12	09/14/11	Methylene Chloride, Lot K07S05	10 ug/mL	MS-48081_00005	1 mL	Perylene-d12	400 ug/mL
					MS-48081_00006	1 mL	Perylene-d12	400 ug/mL
					MS-48417_00005	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48417_00006	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48710-U_00005	1 mL	Phenanthrene-d10	400 ug/mL
					MS-48710-U_00006	1 mL	Phenanthrene-d10	400 ug/mL
...MS-48081_00005	10/31/13	SUPELCO, Lot LB79372			(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48081_00006	10/31/13	SUPELCO, Lot LB79372			(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48417_00005	02/28/14	SUPELCO, Lot LB82102			(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48417_00006	02/28/14	SUPELCO, Lot LB82102			(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48710-U_00005	04/30/14	SUPPELCO, Lot LB84263			(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
...MS-48710-U_00006	04/30/14	SUPPELCO, Lot LB84263			(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
.MS-CSLPSIMstk_00009	11/11/11	06/09/11	Methylene Chloride, Lot K01S10	10 mL	CSLP-FS Stock_00009	60 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene	1.2 ug/mL
							2,3-Benzofuran	1.2 ug/mL
							2,3-Dihydroindene	1.2 ug/mL
							3-Methylcholanthrene	1.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	1.2 ug/mL
							Acridine	1.2 ug/mL
							Benzo(b)thiophene	1.2 ug/mL
							Benzo[e]pyrene	1.2 ug/mL
							Biphenyl	1.2 ug/mL
							Carbazole	1.2 ug/mL
							Dibenzofuran	1.2 ug/mL
							Dibenzothiophene	1.2 ug/mL
							Indene	1.2 ug/mL
							Indole	1.2 ug/mL
							Perylene	1.2 ug/mL
							Quinoline	1.2 ug/mL
							Chrysene-d12 (Surr)	1.2 ug/mL
							Fluorene-d10 (Surr)	1.2 ug/mL
							Naphthalene-d8 (Surr)	1.2 ug/mL
..CSLP-FS Stock_00009	09/11/11	02/28/11	Methylene Chloride, Lot J41S00	10 mL	CSLP-LCS-Stk1_00012	1 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
					CSLP-LCS-Stk2_00014	1 mL	2,3-Benzofuran	200 ug/mL
							2,3-Dihydroindene	200 ug/mL
							3-Methylcholanthrene	200 ug/mL
							7,12-Dimethylbenz(a)anthracene	200 ug/mL
							Acridine	200 ug/mL
							Benzo(b)thiophene	200 ug/mL
							Benzo[e]pyrene	200 ug/mL
							Biphenyl	200 ug/mL
							Carbazole	200 ug/mL
							Dibenzofuran	200 ug/mL
							Dibenzothiophene	200 ug/mL
							Indene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indole	200 ug/mL
							Perylene	200 ug/mL
							Quinoline	200 ug/mL
					CSLPSurrStock_00002	2 mL	Chrysene-d12 (Surr)	200 ug/mL
							Fluorene-d10 (Surr)	200 ug/mL
							Naphthalene-d8 (Surr)	200 ug/mL
...CSLP-LCS-Stk1_00012	04/29/12	Accustandard, Lot 21004128			(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
...CSLP-LCS-Stk2_00014	09/11/11	Accustandard, Lot 210061390			(Purchased Reagent)		2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL
							Carbazole	2000 ug/mL
							Dibenzofuran	2000 ug/mL
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
...CSLPSurrStock_00002	11/11/11	Supelco, Lot LB80434			(Purchased Reagent)		Chrysene-d12 (Surr)	1000 ug/mL
							Fluorene-d10 (Surr)	1000 ug/mL
							Naphthalene-d8 (Surr)	1000 ug/mL
MS-CSLPSIM0.6_00022	11/11/11	09/28/11	Methylene Chloride, Lot K07S05	500 uL	MS-CSLPSIM IS_00009	50 uL	Perylene-d12	0.6 ug/mL
							Acenaphthene-d10	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-CSLPSIMstk_00009	250 uL	1-Methylnaphthalene	0.6 ug/mL
							2-Methylnaphthalene	0.6 ug/mL
							Acenaphthene	0.6 ug/mL
							Acenaphthylene	0.6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	0.6 ug/mL
							Benzo[a]anthracene	0.6 ug/mL
							Benzo[a]pyrene	0.6 ug/mL
							Benzo[b]fluoranthene	0.6 ug/mL
							Benzo[g,h,i]perylene	0.6 ug/mL
							Benzo[k]fluoranthene	0.6 ug/mL
							Chrysene	0.6 ug/mL
							Dibenz(a,h)anthracene	0.6 ug/mL
							Fluoranthene	0.6 ug/mL
							Fluorene	0.6 ug/mL
							Indeno[1,2,3-cd]pyrene	0.6 ug/mL
							Naphthalene	0.6 ug/mL
							Phenanthrene	0.6 ug/mL
							Pyrene	0.6 ug/mL
							2,3-Benzofuran	0.6 ug/mL
							2,3-Dihydroindene	0.6 ug/mL
							3-Methylcholanthrene	0.6 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.6 ug/mL
							Acridine	0.6 ug/mL
							Benzo(b)thiophene	0.6 ug/mL
							Benzo[e]pyrene	0.6 ug/mL
							Biphenyl	0.6 ug/mL
							Carbazole	0.6 ug/mL
							Dibenzofuran	0.6 ug/mL
							Dibenzothiophene	0.6 ug/mL
							Indene	0.6 ug/mL
							Indole	0.6 ug/mL
							Perylene	0.6 ug/mL
							Quinoline	0.6 ug/mL
							Chrysene-d12 (Surr)	0.6 ug/mL
							Fluorene-d10 (Surr)	0.6 ug/mL
							Naphthalene-d8 (Surr)	0.6 ug/mL
.MS-CSLPSIM IS_00009	09/13/12	09/14/11	Methylene Chloride, Lot K07s05	10 mL	MS-CSLP FS IS_00004	150 uL	Perylene-d12	6 ug/mL
							Acenaphthene-d10	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-CSLP FS IS_00004	09/13/12	09/14/11	Methylene Chloride, Lot K07S05	10 ug/mL	MS-48081_00005	1 mL	Perylene-d12	400 ug/mL
					MS-48081_00006	1 mL	Perylene-d12	400 ug/mL
					MS-48417_00005	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48417_00006	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48710-U_00005	1 mL	Phenanthrene-d10	400 ug/mL
					MS-48710-U_00006	1 mL	Phenanthrene-d10	400 ug/mL
...MS-48081_00005	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48081_00006	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48417_00005	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48417_00006	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48710-U_00005	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
...MS-48710-U_00006	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
.MS-CSLPSIMstk_00009	11/11/11	06/09/11	Methylene Chloride, Lot K01S10	10 mL	CSLP FS Stock_00009	60 uL	1-Methylnaphthalene	1.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
							2,3-Benzofuran	1.2 ug/mL
							2,3-Dihydroindene	1.2 ug/mL
							3-Methylcholanthrene	1.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	1.2 ug/mL
							Acridine	1.2 ug/mL
							Benzo(b)thiophene	1.2 ug/mL
							Benzo[e]pyrene	1.2 ug/mL
							Biphenyl	1.2 ug/mL
							Carbazole	1.2 ug/mL
							Dibenzofuran	1.2 ug/mL
							Dibenzothiophene	1.2 ug/mL
							Indene	1.2 ug/mL
							Indole	1.2 ug/mL
							Perylene	1.2 ug/mL
							Quinoline	1.2 ug/mL
							Chrysene-d12 (Surr)	1.2 ug/mL
							Fluorene-d10 (Surr)	1.2 ug/mL
							Naphthalene-d8 (Surr)	1.2 ug/mL
..CSLP-FS Stock_00009	09/11/11	02/28/11	Methylene Chloride, Lot J41S00	10 mL	CSLP-LCS-Stk1_00012	1 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
					CSLP-LCS-Stk2_00014	1 mL	2,3-Benzofuran	200 ug/mL
							2,3-Dihydroindene	200 ug/mL
							3-Methylcholanthrene	200 ug/mL
							7,12-Dimethylbenz(a)anthracene	200 ug/mL
							Acridine	200 ug/mL
							Benzo(b)thiophene	200 ug/mL
							Benzo[e]pyrene	200 ug/mL
							Biphenyl	200 ug/mL
							Carbazole	200 ug/mL
							Dibenzofuran	200 ug/mL
							Dibenzothiophene	200 ug/mL
							Indene	200 ug/mL
							Indole	200 ug/mL
							Perylene	200 ug/mL
							Quinoline	200 ug/mL
					CSLPSurrStock_00002	2 mL	Chrysene-d12 (Surr)	200 ug/mL
							Fluorene-d10 (Surr)	200 ug/mL
							Naphthalene-d8 (Surr)	200 ug/mL
...CSLP-LCS-Stk1_00012	04/29/12		Accustandard, Lot 21004128		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
...CSLP-LCS-Stk2_00014	09/11/11		Accustandard, Lot 210061390		(Purchased Reagent)		2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL
							Carbazole	2000 ug/mL
							Dibenzofuran	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
...CSLPSurrStock_00002	11/11/11		Supelco, Lot LB80434		(Purchased Reagent)		Chrysene-d12 (Surr)	1000 ug/mL
							Fluorene-d10 (Surr)	1000 ug/mL
							Naphthalene-d8 (Surr)	1000 ug/mL
MS-CSLPSIM0.8_00020	11/11/11	09/28/11	Methylene Chloride, Lot K07S05	500 uL	MS-CSLPSIM IS_00009	50 uL	Perylene-d12	0.6 ug/mL
							Acenaphthene-d10	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-CSLPSIMstk_00009	333.3 uL	1-Methylnaphthalene	0.79992 ug/mL
							2-Methylnaphthalene	0.79992 ug/mL
							Acenaphthene	0.79992 ug/mL
							Acenaphthylene	0.79992 ug/mL
							Anthracene	0.79992 ug/mL
							Benzo[a]anthracene	0.79992 ug/mL
							Benzo[a]pyrene	0.79992 ug/mL
							Benzo[b]fluoranthene	0.79992 ug/mL
							Benzo[g,h,i]perylene	0.79992 ug/mL
							Benzo[k]fluoranthene	0.79992 ug/mL
							Chrysene	0.79992 ug/mL
							Dibenz(a,h)anthracene	0.79992 ug/mL
							Fluoranthene	0.79992 ug/mL
							Fluorene	0.79992 ug/mL
							Indeno[1,2,3-cd]pyrene	0.79992 ug/mL
							Naphthalene	0.79992 ug/mL
							Phenanthrene	0.79992 ug/mL
							Pyrene	0.79992 ug/mL
							2,3-Benzofuran	0.79992 ug/mL
							2,3-Dihydroindene	0.79992 ug/mL
							3-Methylcholanthrene	0.79992 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.79992 ug/mL
							Acridine	0.79992 ug/mL
							Benzo(b)thiophene	0.79992 ug/mL
							Benzo[e]pyrene	0.79992 ug/mL
							Biphenyl	0.79992 ug/mL
							Carbazole	0.79992 ug/mL
							Dibenzofuran	0.79992 ug/mL
							Dibenzothiophene	0.79992 ug/mL
							Indene	0.79992 ug/mL
							Indole	0.79992 ug/mL
							Perylene	0.79992 ug/mL
							Quinoline	0.79992 ug/mL
							Chrysene-d12 (Surr)	0.79992 ug/mL
							Fluorene-d10 (Surr)	0.79992 ug/mL
							Naphthalene-d8 (Surr)	0.79992 ug/mL
.MS-CSLPSIM IS_00009	09/13/12	09/14/11	Methylene Chloride, Lot K07s05	10 mL	MS-CSLP FS IS_00004	150 uL	Perylene-d12	6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-CSLP FS IS_00004	09/13/12	09/14/11	Methylene Chloride, Lot K07S05	10 ug/mL	MS-48081_00005	1 mL	Perylene-d12	400 ug/mL
					MS-48081_00006	1 mL	Perylene-d12	400 ug/mL
					MS-48417_00005	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48417_00006	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48710-U_00005	1 mL	Phenanthrene-d10	400 ug/mL
					MS-48710-U_00006	1 mL	Phenanthrene-d10	400 ug/mL
...MS-48081_00005	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48081_00006	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48417_00005	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48417_00006	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48710-U_00005	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
...MS-48710-U_00006	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
.MS-CSLPSIMstk_00009	11/11/11	06/09/11	Methylene Chloride, Lot K01S10	10 mL	CSLP-FS Stock_00009	60 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
							2,3-Benzofuran	1.2 ug/mL
							2,3-Dihydroindene	1.2 ug/mL
							3-Methylcholanthrene	1.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	1.2 ug/mL
							Acridine	1.2 ug/mL
							Benzo(b)thiophene	1.2 ug/mL
							Benzo[e]pyrene	1.2 ug/mL
							Biphenyl	1.2 ug/mL
							Carbazole	1.2 ug/mL
							Dibenzofuran	1.2 ug/mL
							Dibenzothiophene	1.2 ug/mL
							Indene	1.2 ug/mL
							Indole	1.2 ug/mL
							Perylene	1.2 ug/mL
							Quinoline	1.2 ug/mL
							Chrysene-d12 (Surr)	1.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene-d10 (Surr)	1.2 ug/mL
							Naphthalene-d8 (Surr)	1.2 ug/mL
..CSLP-FS Stock_00009	09/11/11	02/28/11	Methylene Chloride, Lot J41S00	10 mL	CSLP-LCS-Stk1_00012	1 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
					CSLP-LCS-Stk2_00014	1 mL	2,3-Benzofuran	200 ug/mL
							2,3-Dihydroindene	200 ug/mL
							3-Methylcholanthrene	200 ug/mL
							7,12-Dimethylbenz(a)anthracene	200 ug/mL
							Acridine	200 ug/mL
							Benzo(b)thiophene	200 ug/mL
							Benzo[e]pyrene	200 ug/mL
							Biphenyl	200 ug/mL
							Carbazole	200 ug/mL
							Dibenzofuran	200 ug/mL
							Dibenzothiophene	200 ug/mL
							Indene	200 ug/mL
							Indole	200 ug/mL
							Perylene	200 ug/mL
							Quinoline	200 ug/mL
					CSLPSurrStock_00002	2 mL	Chrysene-d12 (Surr)	200 ug/mL
							Fluorene-d10 (Surr)	200 ug/mL
							Naphthalene-d8 (Surr)	200 ug/mL
...CSLP-LCS-Stk1_00012	04/29/12		Accustandard, Lot 21004128		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
...CSLP-LCS-Stk2_00014	09/11/11		Accustandard, Lot 210061390		(Purchased Reagent)		2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL
							Carbazole	2000 ug/mL
							Dibenzofuran	2000 ug/mL
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
...CSLPSurrStock_00002	11/11/11		Supelco, Lot LB80434		(Purchased Reagent)		Chrysene-d12 (Surr)	1000 ug/mL
							Fluorene-d10 (Surr)	1000 ug/mL
							Naphthalene-d8 (Surr)	1000 ug/mL
MS-CSLPSIM1.2_00020	11/11/11	09/28/11	Methylene Chloride, Lot K07s05	500 uL	MS-CSLPSIM IS_00009	50 uL	Perylene-d12	0.6 ug/mL
							Acenaphthene-d10	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-CSLPSIMstk_00009	500 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
							2,3-Benzofuran	1.2 ug/mL
							2,3-Dihydroindene	1.2 ug/mL
							3-Methylcholanthrene	1.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	1.2 ug/mL
							Acridine	1.2 ug/mL
							Benzo(b)thiophene	1.2 ug/mL
							Benzo[e]pyrene	1.2 ug/mL
							Biphenyl	1.2 ug/mL
							Carbazole	1.2 ug/mL
							Dibenzofuran	1.2 ug/mL
							Dibenzothiophene	1.2 ug/mL
							Indene	1.2 ug/mL
							Indole	1.2 ug/mL
							Perylene	1.2 ug/mL
							Quinoline	1.2 ug/mL
							Chrysene-d12 (Surr)	1.2 ug/mL
							Fluorene-d10 (Surr)	1.2 ug/mL
							Naphthalene-d8 (Surr)	1.2 ug/mL
.MS-CSLPSIM IS_00009	09/13/12	09/14/11	Methylene Chloride, Lot K07s05	10 mL	MS-CSLP FS IS_00004	150 uL	Perylene-d12	6 ug/mL
							Acenaphthene-d10	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-CSLP FS IS_00004	09/13/12	09/14/11	Methylene Chloride, Lot K07S05	10 ug/mL	MS-48081_00005	1 mL	Perylene-d12	400 ug/mL
					MS-48081_00006	1 mL	Perylene-d12	400 ug/mL
					MS-48417_00005	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48417_00006	1 mL	Acenaphthene-d10	400 ug/mL
					MS-48710-U_00005	1 mL	Phenanthrene-d10	400 ug/mL
					MS-48710-U_00006	1 mL	Phenanthrene-d10	400 ug/mL
...MS-48081_00005	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48081_00006	10/31/13		SUPELCO, Lot LB79372		(Purchased Reagent)		Perylene-d12	2000 ug/mL
...MS-48417_00005	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48417_00006	02/28/14		SUPELCO, Lot LB82102		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
...MS-48710-U_00005	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
...MS-48710-U_00006	04/30/14		SUPPELCO, Lot LB84263		(Purchased Reagent)		Phenanthrene-d10	2000 ug/mL
.MS-CSLPSIMstk_00009	11/11/11	06/09/11	Methylene Chloride, Lot K01S10	10 mL	CSLP-FS Stock_00009	60 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3-Benzofuran	1.2 ug/mL
							2,3-Dihydroindene	1.2 ug/mL
							3-Methylcholanthrene	1.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	1.2 ug/mL
							Acridine	1.2 ug/mL
							Benzo(b)thiophene	1.2 ug/mL
							Benzo[e]pyrene	1.2 ug/mL
							Biphenyl	1.2 ug/mL
							Carbazole	1.2 ug/mL
							Dibenzofuran	1.2 ug/mL
							Dibenzothiophene	1.2 ug/mL
							Indene	1.2 ug/mL
							Indole	1.2 ug/mL
							Perylene	1.2 ug/mL
							Quinoline	1.2 ug/mL
							Chrysene-d12 (Surr)	1.2 ug/mL
							Fluorene-d10 (Surr)	1.2 ug/mL
							Naphthalene-d8 (Surr)	1.2 ug/mL
..CSLP-FS Stock_00009	09/11/11	02/28/11	Methylene Chloride, Lot J41S00	10 mL	CSLP-LCS-Stk1_00012	1 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
					CSLP-LCS-Stk2_00014	1 mL	2,3-Benzofuran	200 ug/mL
							2,3-Dihydroindene	200 ug/mL
							3-Methylcholanthrene	200 ug/mL
							7,12-Dimethylbenz(a)anthracene	200 ug/mL
							Acridine	200 ug/mL
							Benzo(b)thiophene	200 ug/mL
							Benzo[e]pyrene	200 ug/mL
							Biphenyl	200 ug/mL
							Carbazole	200 ug/mL
							Dibenzofuran	200 ug/mL
							Dibenzothiophene	200 ug/mL
							Indene	200 ug/mL
							Indole	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene	200 ug/mL
							Quinoline	200 ug/mL
					CSLPSurrStock_00002	2 mL	Chrysene-d12 (Surr)	200 ug/mL
							Fluorene-d10 (Surr)	200 ug/mL
							Naphthalene-d8 (Surr)	200 ug/mL
...CSLP-LCS-Stk1_00012	04/29/12		Accustandard, Lot 21004128		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
...CSLP-LCS-Stk2_00014	09/11/11		Accustandard, Lot 210061390		(Purchased Reagent)		2,3-Benzofuran	2000 ug/mL
							2,3-Dihydroindene	2000 ug/mL
							3-Methylcholanthrene	2000 ug/mL
							7,12-Dimethylbenz(a)anthracene	2000 ug/mL
							Acridine	2000 ug/mL
							Benzo(b)thiophene	2000 ug/mL
							Benzo[e]pyrene	2000 ug/mL
							Biphenyl	2000 ug/mL
							Carbazole	2000 ug/mL
							Dibenzofuran	2000 ug/mL
							Dibenzothiophene	2000 ug/mL
							Indene	2000 ug/mL
							Indole	2000 ug/mL
							Perylene	2000 ug/mL
							Quinoline	2000 ug/mL
...CSLPSurrStock_00002	11/11/11		Supelco, Lot LB80434		(Purchased Reagent)		Chrysene-d12 (Surr)	1000 ug/mL
							Fluorene-d10 (Surr)	1000 ug/mL
							Naphthalene-d8 (Surr)	1000 ug/mL
MS-CSLPSIMSSV_00020	11/11/11	09/28/11	Methylene Chloride, Lot K07s05	500 uL	MS-SIM SSV_00049	15 uL	Indene	0.6 ug/mL
							1-Methylnaphthalene	0.6 ug/mL
							2-Methylnaphthalene	0.6 ug/mL
							Acenaphthene	0.6 ug/mL
							Acenaphthylene	0.6 ug/mL
							Anthracene	0.6 ug/mL
							Benzo[a]anthracene	0.6 ug/mL
							Benzo[a]pyrene	0.6 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	0.6 ug/mL
							Benzo[g,h,i]perylene	0.6 ug/mL
							Benzo[k]fluoranthene	0.6 ug/mL
							Carbazole	0.6 ug/mL
							Chrysene	0.6 ug/mL
							Dibenz(a,h)anthracene	0.6 ug/mL
							Dibenzofuran	0.6 ug/mL
							Fluoranthene	0.6 ug/mL
							Fluorene	0.6 ug/mL
							Indeno[1,2,3-cd]pyrene	0.6 ug/mL
							Naphthalene	0.6 ug/mL
							Phenanthrene	0.6 ug/mL
							Pyrene	0.6 ug/mL
.MS-SIM SSV_00049	02/23/12	08/25/11	Methylene Chloride, Lot K07S03	10 mL	MS-HSLSSV STK_00007	1 mL	Indene	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-HSLSSV STK_00007	02/23/12	03/08/11	Methylene Chloride, Lot J41S00	10 mL	MS-21233108_00001	1 mL	Indene	200 ug/mL
					MS-48162_00004	1 mL	1-Methylnaphthalene	200 ug/mL
					MS-506508_00006	2 mL	2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-21233108_00001	02/23/12		Supelco, Lot LB73897		(Purchased Reagent)		Indene	2000 ug/mL
...MS-48162_00004	10/31/13		Supelco, Lot LB79536		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
...MS-506508_00006	09/30/13		Supelco, Lot LB78428		(Purchased Reagent)		2-Methylnaphthalene	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-20371-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	40730
TestAmerica Denver	Alaska	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAC	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAC	7	E-10166
TestAmerica Denver	Louisiana	NELAC	6	30785
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAC	1	205310
TestAmerica Denver	New Jersey	NELAC	2	CO004
TestAmerica Denver	New Mexico	State Program	6	N/A
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina	North Carolina DENR	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Tennessee	State Program	4	TN02944
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

8270C_SIM_LL

Semivolatile Organic Compound (GC/MS SIM LL)

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Vf-5MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	NTH #	FLR #	CRY #
E13-091511	280-20371-1	77	77	24 X
	MB 280-87039/1-A	67	74	82
	LCS 280-87039/2-A	90	87 X	98
	LCSD 280-87039/3-A	81	76	88

	QC LIMITS
NTH = Naphthalene-d8 (Surr)	22-97
FLR = Fluorene-d10 (Surr)	23-84
CRY = Chrysene-d12 (Surr)	28-101

Column to be used to flag recovery values

FORM II 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F1596.D

Lab ID: LCS 280-87039/2-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
2,3-Benzofuran	75.0	64.0	85	30-150	
2,3-Dihydroindene	75.0	65.3	87	30-150	
1-Methylnaphthalene	75.0	75.1	100	30-150	
2-Methylnaphthalene	75.0	65.7	88	25-95	
3-Methylcholanthrene	75.0	35.3	47	30-150	
Acenaphthene	75.0	69.4	93	30-150	
Acenaphthylene	75.0	63.7	85	30-150	
Acridine	75.0	32.5	43	30-150	
Anthracene	75.0	73.2	98	30-150	
Benzo[a]anthracene	75.0	68.5	91	30-150	
Benzo[a]pyrene	75.0	66.1	88	30-150	
Benzo[e]pyrene	75.0	67.3	90	37-105	
Benzo[b]fluoranthene	75.0	64.7	86	30-150	
Benzo(b)thiophene	75.0	70.0	93	30-150	
Benzo[k]fluoranthene	75.0	76.6	102	30-150	
Benzo[g,h,i]perylene	75.0	61.3	82	30-150	
Carbazole	75.0	61.8	82	30-150	
Chrysene	75.0	83.0	111	20-136	
Dibenz(a,h)anthracene	75.0	58.2	78	30-150	
Dibenzofuran	75.0	63.3	84	30-150	
Dibenzothiophene	75.0	68.3	91	30-150	
Fluoranthene	75.0	71.1	95	30-150	
Fluorene	75.0	70.3	94	34-96	
Indene	75.0	63.1	84	22-86	
Indole	75.0	52.1	69	30-150	
Indeno[1,2,3-cd]pyrene	75.0	58.3	78	30-150	
Naphthalene	75.0	72.7	97	27-95	*
Perylene	75.0	67.4	90	30-150	
Phenanthrene	75.0	68.4	91	30-150	
Pyrene	75.0	68.2	91	30-150	
Quinoline	75.0	43.1	57	20-112	
7,12-Dimethylbenz(a)anthracene	75.0	20.5	27	30-150	*
Biphenyl	75.0	66.7	89	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F1597.D

Lab ID: LCSD 280-87039/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LCSD CONCENTRATION (ng/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,3-Benzofuran	75.0	58.6	78	9	50	30-150	
2,3-Dihydroindene	75.0	59.3	79	10	50	30-150	
1-Methylnaphthalene	75.0	62.7	84	18	50	30-150	
2-Methylnaphthalene	75.0	57.9	77	13	50	25-95	
3-Methylcholanthrene	75.0	39.9	53	12	50	30-150	
Acenaphthene	75.0	62.0	83	11	50	30-150	
Acenaphthylene	75.0	56.0	75	13	50	30-150	
Acridine	75.0	20.5	27	45	50	30-150	*
Anthracene	75.0	62.6	84	16	50	30-150	
Benzo[a]anthracene	75.0	54.4	73	23	50	30-150	
Benzo[a]pyrene	75.0	61.4	82	7	50	30-150	
Benzo[e]pyrene	75.0	61.8	82	9	50	37-105	
Benzo[b]fluoranthene	75.0	57.9	77	11	50	30-150	
Benzo(b)thiophene	75.0	63.3	84	10	50	30-150	
Benzo[k]fluoranthene	75.0	70.7	94	8	50	30-150	
Benzo[g,h,i]perylene	75.0	59.8	80	2	50	30-150	
Carbazole	75.0	47.3	63	27	50	30-150	
Chrysene	75.0	77.5	103	7	50	20-136	
Dibenz(a,h)anthracene	75.0	56.7	76	3	50	30-150	
Dibenzofuran	75.0	55.1	73	14	50	30-150	
Dibenzothiophene	75.0	59.6	79	14	50	30-150	
Fluoranthene	75.0	61.2	82	15	50	30-150	
Fluorene	75.0	61.0	81	14	50	34-96	
Indene	75.0	57.4	77	9	50	22-86	
Indole	75.0	48.5	65	7	50	30-150	
Indeno[1,2,3-cd]pyrene	75.0	55.9	75	4	50	30-150	
Naphthalene	75.0	66.3	88	9	50	27-95	
Perylene	75.0	65.5	87	3	50	30-150	
Phenanthrene	75.0	58.4	78	16	50	30-150	
Pyrene	75.0	58.4	78	16	50	30-150	
Quinoline	75.0	39.8	53	8	50	20-112	
7,12-Dimethylbenz(a)anthracene	75.0	25.0	33	20	50	30-150	
Biphenyl	75.0	57.9	77	14	50	30-150	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Lab File ID: F1595.D Lab Sample ID: MB 280-87039/1-A

Matrix: Water Date Extracted: 09/20/2011 18:38

Instrument ID: MSS_F Date Analyzed: 10/05/2011 19:59

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-87039/2-A	F1596.D	10/05/2011 20:35
	LCSD 280-87039/3-A	F1597.D	10/05/2011 21:11
E13-091511	280-20371-1	F1628.D	10/06/2011 15:13

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Sample No.: ICIS 280-89821/1 Date Analyzed: 09/30/2011 08:31

Instrument ID: MSS_F GC Column: Vf-5MS (30.25) ID: 0.25(mm)

Lab File ID (Standard): F1463.D Heated Purge: (Y/N) N

Calibration ID: 7437

		ANT		PHN		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		119990	9.77	196405	12.38	256508	19.06
UPPER LIMIT							
LOWER LIMIT							
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-89821/8		121792	9.76	198462	12.38	250403	19.05
CCV 280-89849/1		135342	9.80	217976	12.42	241935	19.09
MB 280-87039/1-A		142935	9.80	223752	12.42	259731	19.10
LCS 280-87039/2-A		146762	9.80	239042	12.42	272492	19.09
LCSD 280-87039/3-A		147060	9.80	235524	12.42	249786	19.09
CCV 280-89868/1		134307	9.80	207337	12.42	256534	19.10
280-20371-1	E13-091511	133802	9.80	215868	12.41	260989	19.10

ANT = Acenaphthene-d10
PHN = Phenanthrene-d10
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area

Column used to flag values outside QC limits

FORM VIII 8270C

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-20371-1

SDG No.:

Client Sample ID: E13-091511 | Lab Sample ID: 280-20371-1

Matrix: Water | Lab File ID: F1628.D

Analysis Method: 8270C | Date Collected: 09/15/2011 09:00

Extract. Method: 3520C | Date Extracted: 09/20/2011 18:38

Sample wt/vol: 3887.7(mL) | Date Analyzed: 10/06/2011 15:13

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 89868 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
271-89-6	2,3-Benzofuran	ND		5.6	0.70
496-11-7	2,3-Dihydroindene	8.2		5.1	0.72
90-12-0	1-Methylnaphthalene	ND		5.8	0.92
91-57-6	2-Methylnaphthalene	ND		6.1	1.0
83-32-9	Acenaphthene	120	B	5.9	0.51
208-96-8	Acenaphthylene	10		4.9	0.79
260-94-6	Acridine	ND	*	6.7	6.7
120-12-7	Anthracene	ND		4.3	0.82
56-55-3	Benzo[a]anthracene	ND		4.4	0.95
50-32-8	Benzo[a]pyrene	ND		2.6	1.3
192-97-2	Benzo[e]pyrene	ND		4.4	1.2
205-99-2	Benzo[b]fluoranthene	ND		4.8	1.4
95-15-8	Benzo(b)thiophene	ND		5.4	0.77
207-08-9	Benzo[k]fluoranthene	ND		4.2	1.3
191-24-2	Benzo[g,h,i]perylene	2.0	J B	6.4	1.2
86-74-8	Carbazole	ND		3.9	0.74
218-01-9	Chrysene	ND		5.8	1.3
53-70-3	Dibenz(a,h)anthracene	ND		6.1	1.1
132-64-9	Dibenzofuran	ND		5.9	1.0
132-65-0	Dibenzothiophene	3.1	J B	4.2	1.0
206-44-0	Fluoranthene	1.7	J	4.7	1.7
86-73-7	Fluorene	ND		4.2	0.87
95-13-6	Indene	ND		4.8	3.4
120-72-9	Indole	ND		4.8	1.8
193-39-5	Indeno[1,2,3-cd]pyrene	ND		5.6	1.3
91-20-3	Naphthalene	2.3	J *	8.8	1.2
198-55-0	Perylene	ND		3.9	3.9
85-01-8	Phenanthrene	ND		6.5	3.3
129-00-0	Pyrene	9.7		4.3	1.0
91-22-5	Quinoline	ND		9.3	5.8
92-52-4	Biphenyl	ND		5.8	1.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Client Sample ID: E13-091511 Lab Sample ID: 280-20371-1

Matrix: Water Lab File ID: F1628.D

Analysis Method: 8270C Date Collected: 09/15/2011 09:00

Extract. Method: 3520C Date Extracted: 09/20/2011 18:38

Sample wt/vol: 3887.7(mL) Date Analyzed: 10/06/2011 15:13

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 89868 Units: ng/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
81103-79-9	Fluorene-d10 (Surr)	77		23-84
1719-03-5	Chrysene-d12 (Surr)	24	X	28-101
1146-65-2	Naphthalene-d8 (Surr)	77		22-97

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\100611.B\F1628.D
Lab Smp Id: 280-20371-E-1-A Client Smp ID: E13-091511
Inj Date : 06-OCT-2011 15:13
Operator : ILCZYSZD Inst ID: F.i
Smp Info : 280-20371-e-1-a
Misc Info : 280-20371-E-1-A
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\100611.B\CSLPSIM.m
Meth Date : 07-Oct-2011 07:29 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 08:31 Cal File: F1463.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 3E-CSLP4L.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	3887.700	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
* 17 Acenaphthene-d10	164	9.802	9.802	(1.000)	133802	600.000	
* 24 Phenanthrene-d10	188	12.413	12.422	(1.000)	215868	600.000	
* 42 Perylene-d12	264	19.095	19.095	(1.000)	260989	600.000	
$ 5 Naphthalene-d8 (Surr)	136	6.583	6.583	(0.672)	75426	230.620	59.32
$ 21 Fluorene-d10 (Surr)	176	10.731	10.731	(0.865)	55683	231.180	59.46
$ 33 Chrysene-d12 (Surr)	240	16.868	16.868	(0.883)	26588	72.4029	18.62
1 2,3-Benzofuran	118	Compound Not Detected.					
2 2,3-Dihydroindene	117	5.027	5.033	(0.513)	7142	31.7296	8.162
3 1H-Indene	116	5.136	5.136	(0.524)	524	2.34678	0.6036(aQ)
6 Naphthalene	128	6.615	6.615	(0.675)	3278	9.08239	2.336(a)
8 Benzo(b)thiophene	134	Compound Not Detected.					
9 Quinoline	129	Compound Not Detected.					
11 1H-Indole	117	Compound Not Detected.					
12 2-Methylnaphthalene	142	Compound Not Detected.					
13 1-Methylnaphthalene	142	8.064	8.069	(0.823)	501	2.18450	0.5619(a)
14 Biphenyl	154	Compound Not Detected.					
16 Acenaphthylene	152	9.543	9.543	(0.974)	14895	40.2337	10.35
18 Acenaphthene	154	9.855	9.866	(1.005)	113447	485.215	124.8
19 Dibenzofuran	168	Compound Not Detected.					
22 Fluorene	166	Compound Not Detected.					
23 Dibenzothiophene	184	12.240	12.249	(0.986)	4533	12.0437	3.098
25 Phenanthrene	178	12.456	12.456	(1.003)	1584	4.11215	1.058(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
26 Anthracene	178	12.543	12.543	(1.010)	1027	2.72032	0.6997(a)
27 Acridine	179	Compound Not Detected.					
28 Carbazole	167	Compound Not Detected.					
30 Fluoranthene	202	14.476	14.485	(1.166)	2661	6.75493	1.738(a)
31 Pyrene	202	14.865	14.869	(1.198)	16525	37.6608	9.687(a)
34 Benzo(a)anthracene	228	16.842	16.851	(0.882)	742	2.64831	0.6812(a)
35 Chrysene	228	16.903	16.911	(0.885)	2076	4.75757	1.224(a)
32 7,12-Dimethylbenz(a)anthracen	256	Compound Not Detected.					
38 Benzo(b)fluoranthene	252	18.519	18.519	(0.970)	1140	3.18022	0.8180(a)
40 Benzo(k)fluoranthene	252	18.557	18.557	(0.972)	2296	4.71065	1.212(a)
41 Benzo(e)pyrene	252	Compound Not Detected.					
43 Benzo(a)pyrene	252	19.004	19.011	(0.995)	1105	2.87150	0.7386(aQ)
44 Perylene	252	Compound Not Detected.					
45 3-Methylcholanthrene	268	Compound Not Detected.					
48 Indeno(1,2,3-cd)pyrene	276	20.959	20.959	(1.098)	1969	3.80736	0.9793(a)
49 Dibenz(a,h)anthracene	278	20.972	20.972	(1.098)	1310	3.21223	0.8262(a)
51 Benzo(g,h,i)perylene	276	21.525	21.525	(1.127)	3490	7.61489	1.959(a)

QC Flag Legend

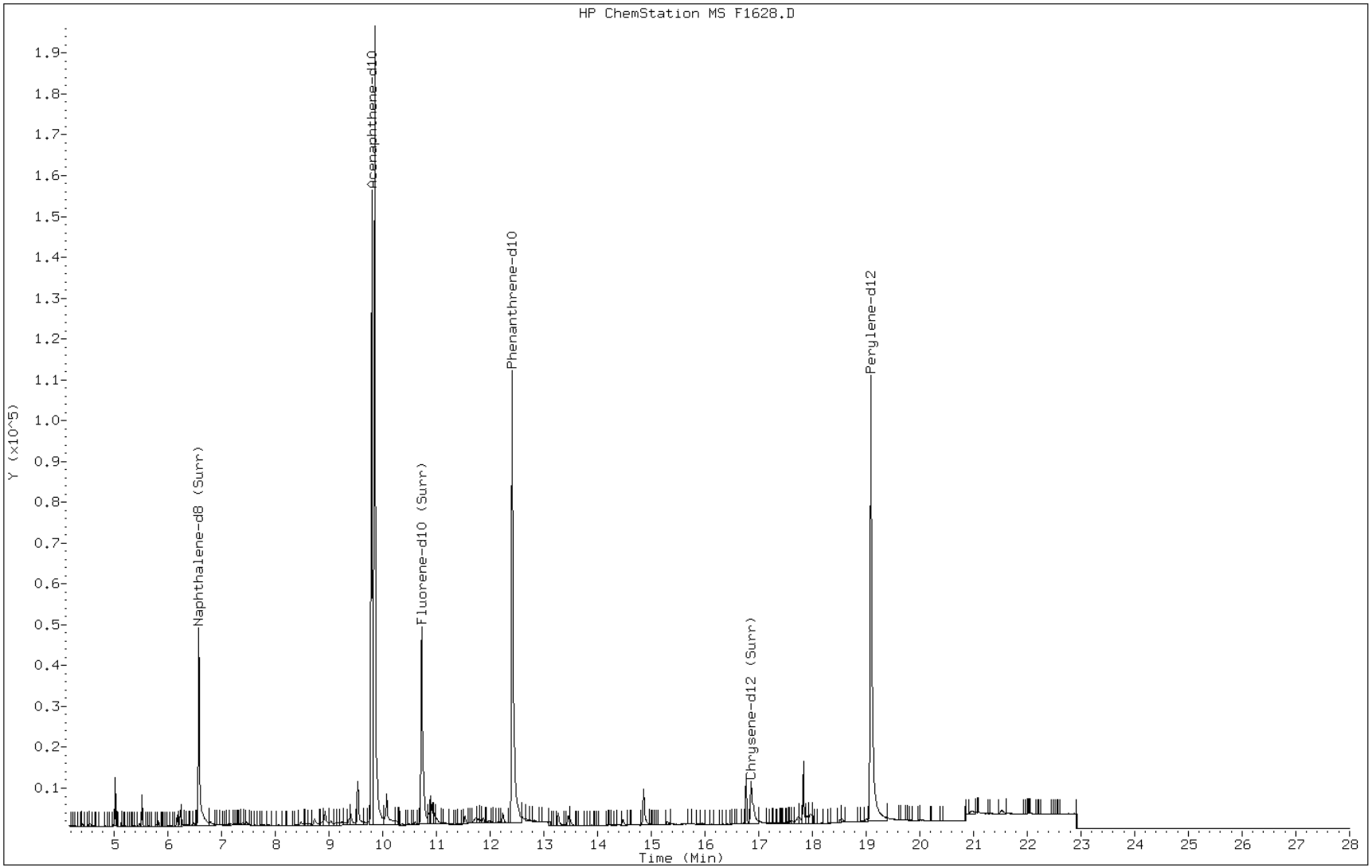
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: F1628.D

Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD



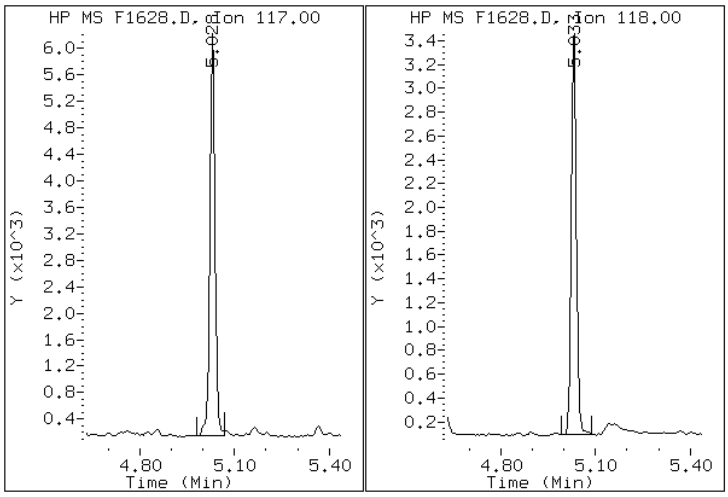
Data File: F1628.D

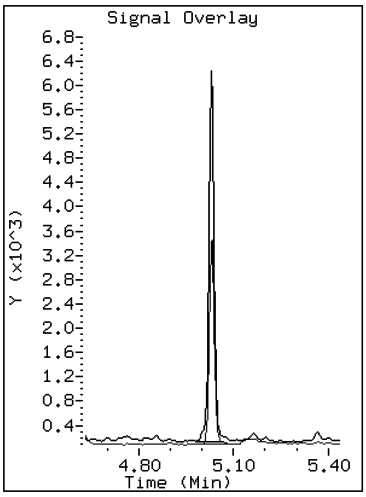
Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD

2 2,3-Dihydroindene





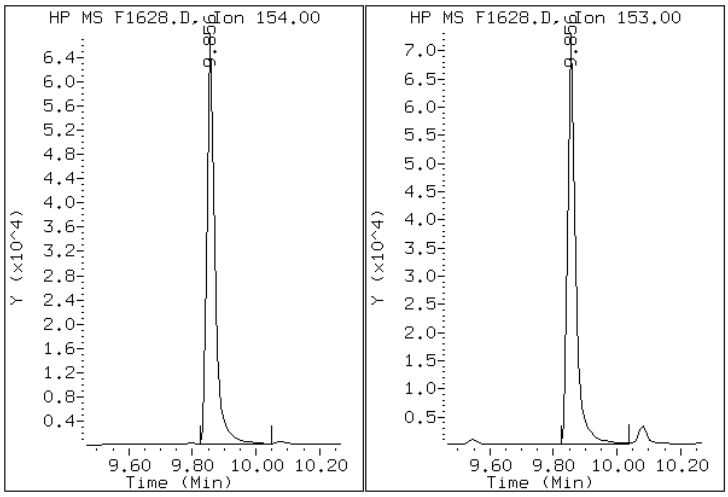
Data File: F1628.D

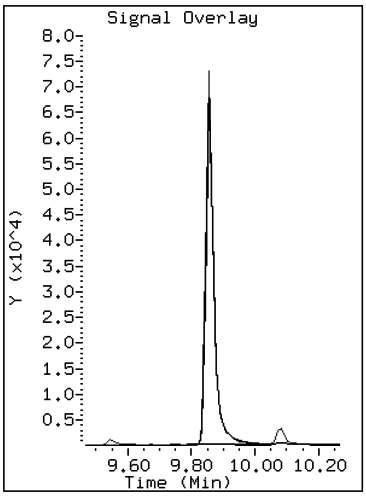
Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD

18 Acenaphthene





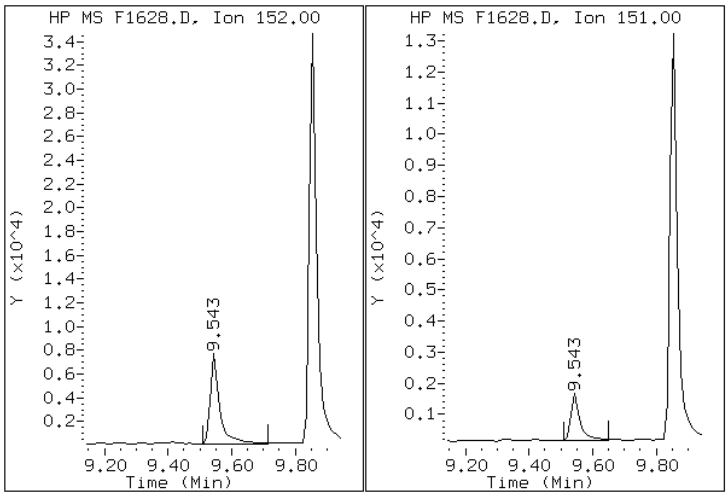
Data File: F1628.D

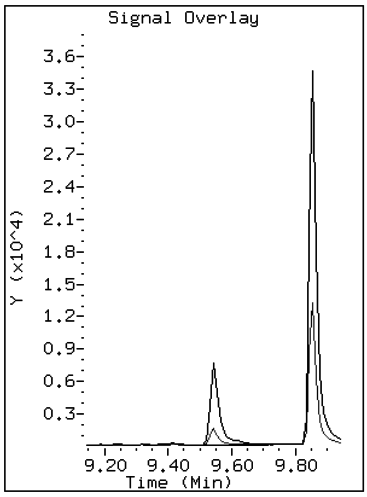
Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD

16 Acenaphthylene





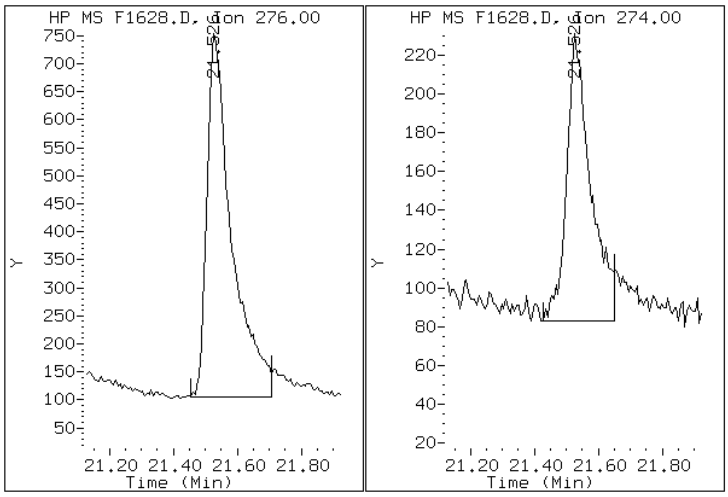
Data File: F1628.D

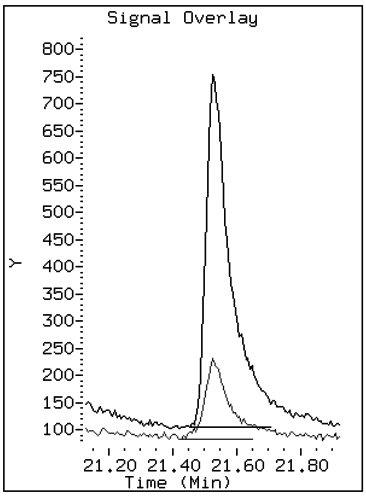
Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD

51 Benzo(g,h,i)perylene





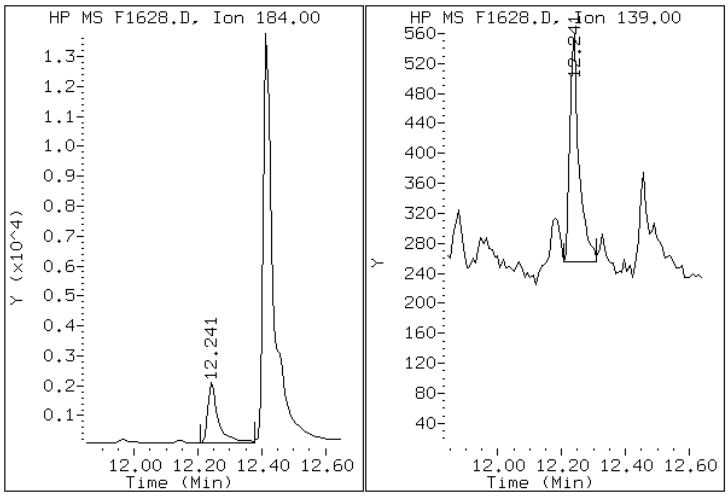
Data File: F1628.D

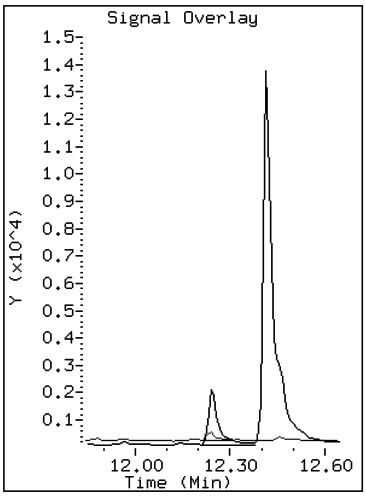
Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD

23 Dibenzothiophene





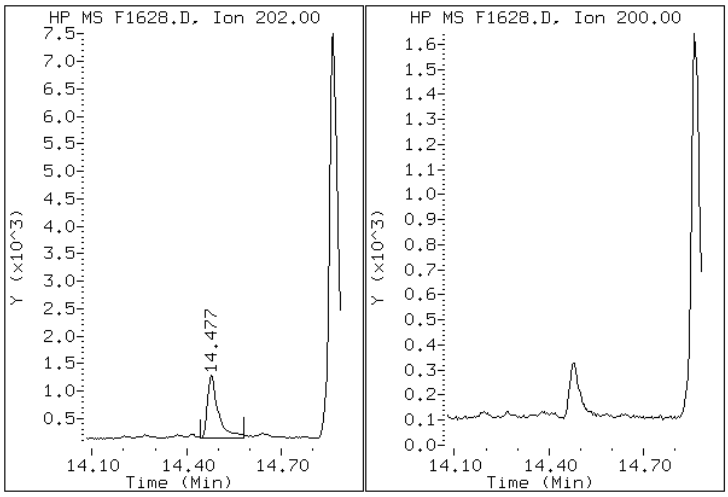
Data File: F1628.D

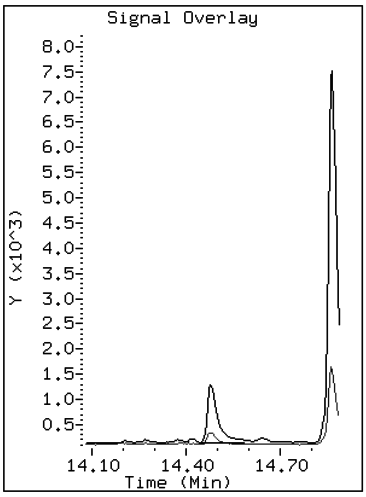
Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD

30 Fluoranthene





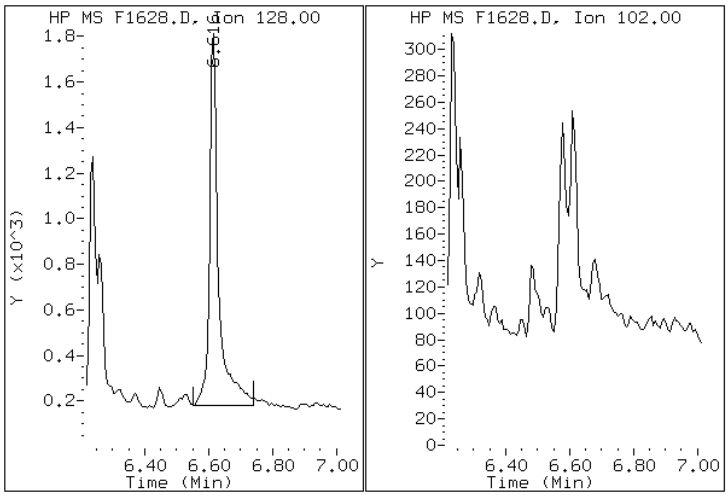
Data File: F1628.D

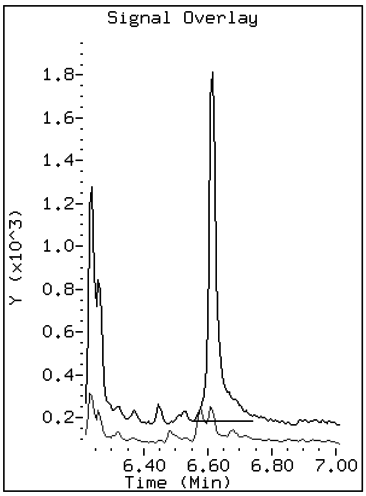
Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD

6 Naphthalene





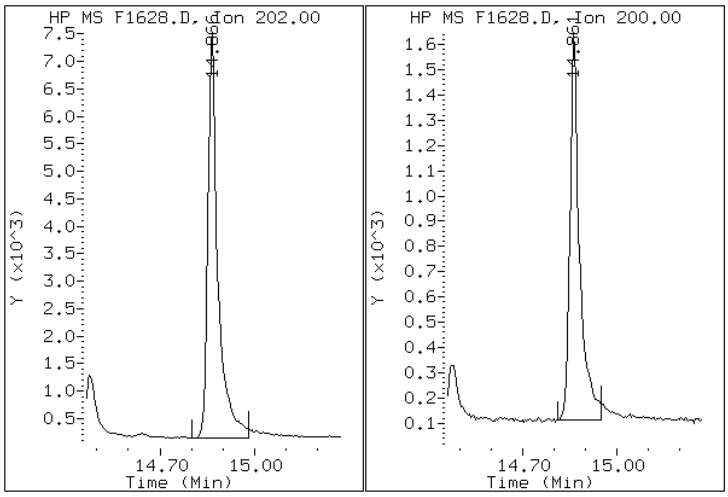
Data File: F1628.D

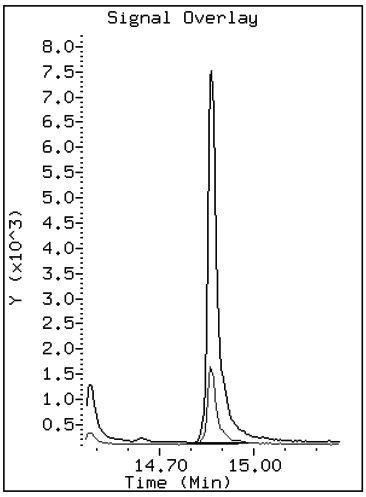
Date: 06-OCT-2011 15:13

Client ID: E13-091511 Instrument: F.i

Sample Info: 280-20371-e-1-a Operator: ILCZYSZD

31 Pyrene





FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Denver Job No.: 280-20371-1 Analy Batch No.: 89821

SDG No.:

Instrument ID: MSS_F GC Column: Vf-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/30/2011 08:31 Calibration End Date: 09/30/2011 08:31 Calibration ID: 7437

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10 280-89821/2	F1464.D
Level 2	STD20 280-89821/3	F1465.D
Level 3	STD150 280-89821/4	F1466.D
Level 4	ICIS 280-89821/1	F1463.D
Level 5	STD600 280-89821/5	F1467.D
Level 6	STD800 280-89821/6	F1468.D
Level 7	STD1200 280-89821/7	F1469.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,3-Benzofuran	0.6785 0.8604	0.8622 0.8183	0.7119	0.8739	0.8386	Ave		0.8063				9.7		30.0			
2,3-Dihydroindene	0.8491 1.0814	1.0788 1.0259	0.8950	1.0825	1.0527	Ave		1.0094				9.6		30.0			
Indene	0.8594 1.0739	1.0618 1.0231	0.8836	1.0617	1.0454	Ave		1.0013				9.0		30.0			
Naphthalene	1.1299 1.8442	1.5210 1.7664	1.4826	1.8076	1.7774	Ave		1.6184				16.0		30.0			
Benzo(b)thiophene	0.8633 1.5563	1.1286 1.5013	1.2131	1.5137	1.4978	Ave		1.3249				19.8		30.0			
Quinoline	+++++ 1.1023	0.9014 1.0766	0.8370	1.0361	1.0499	Ave		1.0005				10.6		30.0			
Indole	+++++ 1.0503	0.8804 0.9996	0.8446	1.0053	0.9976	Ave		0.9630				8.4		30.0			
2-Methylnaphthalene	+++++ 1.2431	1.1813 1.1980	0.9549	1.1895	1.1949	Ave		1.1603				8.9		30.0			
1-Methylnaphthalene	+++++ 1.1644	0.6596 1.1173	0.9614	1.1328	1.1351	Ave		1.0284				18.9		30.0			
Biphenyl	1.2966 1.5657	1.5124 1.4829	1.2566	1.5478	1.5206	Ave		1.4547				8.6		30.0			
Acenaphthylene	1.3717 1.8222	1.7224 1.7895	1.4662	1.6802	1.7688	Ave		1.6601				10.4		30.0			
Acenaphthene	0.8984 1.1203	1.1323 1.0831	0.9155	1.0954	1.0941	Ave		1.0485				9.4		30.0			
Dibenzofuran	1.2708 1.5253	1.6023 1.5097	1.3197	1.6571	1.6386	Ave		1.5034				10.2		30.0			
Fluorene	0.6272 0.7993	0.7836 0.7899	0.6315	0.7868	0.7647	Ave		0.7404				10.3		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Denver Job No.: 280-20371-1 Analy Batch No.: 89821

SDG No.:

Instrument ID: MSS_F GC Column: Vf-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/30/2011 08:31 Calibration End Date: 09/30/2011 08:31 Calibration ID: 7437

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibenzothiophene	0.8790 1.1298	1.0928 1.1005	0.9265	1.0995	1.0950	Ave		1.0461				9.5		30.0			
Phenanthrene	0.9887 1.1457	1.0787 1.1222	0.9069	1.1332	1.1191	Ave		1.0707				8.4		30.0			
Anthracene	+++++ 1.0995	1.2479 1.0993	0.8148	1.0045	1.0300	Ave		1.0493				13.6		30.0			
Acridine	0.3680 0.8420	0.6092 0.8474	0.6093	0.7348	0.7927	Ave		0.6862				25.0		30.0			
Carbazole	0.6204 0.9378	0.7725 0.9398	0.7713	0.8836	0.8941	Ave		0.8314				14.0		30.0			
Fluoranthene	1.0119 1.1126	1.1934 1.1211	1.0000	1.1667	1.0587	Ave		1.0949				6.8		30.0			
Pyrene	1.2114 1.1963	1.3295 1.2033	1.0795	1.2643	1.2529	Ave		1.2196				6.3		30.0			
Benzo[a]anthracene	+++++ 0.7752	0.4121 0.7956	0.4556	0.6986	0.7277	Ave		0.6441				25.9		30.0			
Chrysene	0.7297 1.0637	1.1918 1.0254	0.9798	0.9863	1.0453	Ave		1.0032				13.9		30.0			
7,12-Dimethylbenz(a)anthracene	0.3490 0.4367	0.4234 0.4361	0.3487	0.4161	0.4289	Ave		0.4056				9.7		30.0			
Benzo[b]fluoranthene	0.6256 0.9180	0.6705 0.9531	0.6668	0.9412	0.9935	Ave		0.8241				19.5		30.0			
Benzo[k]fluoranthene	0.9425 1.2542	1.1698 1.2173	0.9917	1.1358	1.1323	Ave		1.1205				10.2		30.0			
Benzo[e]pyrene	0.8068 1.0030	0.9122 1.0151	0.7756	0.9644	0.9874	Ave		0.9235				10.5		30.0			
Benzo[a]pyrene	0.5288 1.0064	0.8756 1.0058	0.8149	0.9665	0.9948	Ave		0.8847				19.6		30.0			
Perylene	0.8111 1.1813	1.0668 1.1696	0.9100	1.1678	1.1658	Ave		1.0675				14.0		30.0			
3-Methylcholanthrene	0.4614 0.5965	0.5161 0.6006	0.4806	0.5741	0.5920	Ave		0.5459				10.8		30.0			
Indeno[1,2,3-cd]pyrene	0.8734 1.3239	1.1286 1.3485	1.0546	1.2772	1.3161	Ave		1.1889				14.9		30.0			
Dibenz(a,h)anthracene	0.5504 1.0868	0.8916 1.0931	0.8483	1.0225	1.0701	Ave		0.9375				20.9		30.0			
Benzo[g,h,i]perylene	0.8751 1.1388	1.0499 1.1486	0.9265	1.1022	1.1344	Ave		1.0536				10.5		30.0			
Naphthalene-d8 (Surr)	1.0436 1.6982	1.3120 1.6274	1.2849	1.6602	1.6399	Ave		1.4666				17.2		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Denver Job No.: 280-20371-1 Analy Batch No.: 89821

SDG No.:

Instrument ID: MSS_F GC Column: Vf-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/30/2011 08:31 Calibration End Date: 09/30/2011 08:31 Calibration ID: 7437

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Fluorene-d10 (Surr)	0.6671 0.6904	0.7385 0.6752	0.5920	0.6449	0.6782	Ave		0.6695				6.7		30.0			
Chrysene-d12 (Surr)	+++++ 0.8912	0.8370 0.8996	0.6957	0.8616	0.8801	Ave		0.8442				9.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-20371-1 Analy Batch No.: 89821

SDG No.:

Instrument ID: MSS_F GC Column: Vf-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/30/2011 08:31 Calibration End Date: 09/30/2011 08:31 Calibration ID: 7437

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10 280-89821/2	F1464.D
Level 2	STD20 280-89821/3	F1465.D
Level 3	STD150 280-89821/4	F1466.D
Level 4	ICIS 280-89821/1	F1463.D
Level 5	STD600 280-89821/5	F1467.D
Level 6	STD800 280-89821/6	F1468.D
Level 7	STD1200 280-89821/7	F1469.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
2,3-Benzofuran	ANT	Ave	1392 135422	3498 212774	21791	52432	99893	10.0 800	20.0 1200	150	300	600
2,3-Dihydroindene	ANT	Ave	1742 170223	4377 266757	27394	64943	125398	10.0 800	20.0 1200	150	300	600
Indene	ANT	Ave	1763 169030	4308 266008	27045	63697	124535	10.0 800	20.0 1200	150	300	600
Naphthalene	ANT	Ave	2318 290279	6171 459276	45381	108447	211733	10.0 800	20.0 1200	150	300	600
Benzo(b)thiophene	ANT	Ave	1771 244970	4579 390349	37130	90815	178424	10.0 800	20.0 1200	150	300	600
Quinoline	ANT	Ave	+++++ 173501	3657 279930	25618	62162	125070	+++++ 800	20.0 1200	150	300	600
Indole	ANT	Ave	+++++ 165313	3572 259910	25853	60311	118838	+++++ 800	20.0 1200	150	300	600
2-Methylnaphthalene	ANT	Ave	+++++ 195666	4793 311505	29227	71365	142340	+++++ 800	20.0 1200	150	300	600
1-Methylnaphthalene	ANT	Ave	+++++ 183272	2676 290523	29428	67964	135213	+++++ 800	20.0 1200	150	300	600
Biphenyl	ANT	Ave	2660 246440	6136 385577	38463	92859	181141	10.0 800	20.0 1200	150	300	600
Acenaphthylene	ANT	Ave	2814 286815	6988 465294	44877	100801	210705	10.0 800	20.0 1200	150	300	600
Acenaphthene	ANT	Ave	1843 176340	4594 281628	28023	65720	130330	10.0 800	20.0 1200	150	300	600
Dibenzofuran	ANT	Ave	2607 240085	6501 392547	40393	99419	195194	10.0 800	20.0 1200	150	300	600
Fluorene	PHN	Ave	2028 207187	5067 341249	30773	77267	150005	10.0 800	20.0 1200	150	300	600
Dibenzothiophene	PHN	Ave	2842 292856	7066 475462	45149	107975	214797	10.0 800	20.0 1200	150	300	600

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-20371-1 Analy Batch No.: 89821

SDG No.:

Instrument ID: MSS_F GC Column: Vf-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/30/2011 08:31 Calibration End Date: 09/30/2011 08:31 Calibration ID: 7437

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Phenanthrene	PHN	Ave	3197 296977	6975 484829	44196	111283	219535	10.0 800	20.0 1200	150	300	600
Anthracene	PHN	Ave	+++++ 285011	8069 474954	39709	98641	202041	+++++ 800	20.0 1200	150	300	600
Acridine	PHN	Ave	1190 218268	3939 366091	29694	72164	155509	10.0 800	20.0 1200	150	300	600
Carbazole	PHN	Ave	2006 243078	4995 406040	37586	86774	175395	10.0 800	20.0 1200	150	300	600
Fluoranthene	PHN	Ave	3272 288410	7717 484334	48732	114575	207687	10.0 800	20.0 1200	150	300	600
Pyrene	PHN	Ave	3917 310085	8597 519860	52605	124153	245782	10.0 800	20.0 1200	150	300	600
Benzo[a]anthracene	PRY	Ave	+++++ 258383	3585 446508	29766	89593	183338	+++++ 800	20.0 1200	150	300	600
Chrysene	PRY	Ave	3000 354576	10369 575467	64018	126501	263357	10.0 800	20.0 1200	150	300	600
7,12-Dimethylbenz(a)anthracene	PRY	Ave	1435 145577	3684 244721	22780	53372	108055	10.0 800	20.0 1200	150	300	600
Benzo[b]fluoranthene	PRY	Ave	2572 305983	5833 534919	43567	120718	250292	10.0 800	20.0 1200	150	300	600
Benzo[k]fluoranthene	PRY	Ave	3875 418071	10177 683174	64794	145674	285275	10.0 800	20.0 1200	150	300	600
Benzo[e]pyrene	PRY	Ave	3317 334346	7936 569681	50676	123693	248756	10.0 800	20.0 1200	150	300	600
Benzo[a]pyrene	PRY	Ave	2174 335453	7618 564468	53243	123956	250613	10.0 800	20.0 1200	150	300	600
Perylene	PRY	Ave	3335 393751	9281 656381	59452	149781	293699	10.0 800	20.0 1200	150	300	600
3-Methylcholanthrene	PRY	Ave	1897 198844	4490 337068	31401	73635	149135	10.0 800	20.0 1200	150	300	600
Indeno[1,2,3-cd]pyrene	PRY	Ave	3591 441309	9819 756826	68903	163807	331569	10.0 800	20.0 1200	150	300	600
Dibenz(a,h)anthracene	PRY	Ave	2263 362267	7757 613459	55425	131144	269591	10.0 800	20.0 1200	150	300	600
Benzo[g,h,i]perylene	PRY	Ave	3598 379599	9134 644608	60535	141356	285792	10.0 800	20.0 1200	150	300	600
Naphthalene-d8 (Surr)	ANT	Ave	2141 267307	5323 423136	39330	99603	195350	10.0 800	20.0 1200	150	300	600
Fluorene-d10 (Surr)	PHN	Ave	2157 178972	4775 291709	28850	63334	133036	10.0 800	20.0 1200	150	300	600
Chrysene-d12 (Surr)	PRY	Ave	+++++ 297076	7282 504899	45457	110505	221729	+++++ 800	20.0 1200	150	300	600

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-20371-1 Analy Batch No.: 89821

SDG No.:

Instrument ID: MSS_F GC Column: Vf-5MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/30/2011 08:31 Calibration End Date: 09/30/2011 08:31 Calibration ID: 7437

Curve Type Legend:
Ave = Average ISTD

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\F1463.D
Lab Smp Id: icis-1014732
Inj Date : 30-SEP-2011 08:31
Operator : ILCZYSZD Inst ID: F.i
Smp Info : icis-1014732,cslp,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\CSLPSIM.m
Meth Date : 07-Oct-2011 06:05 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 12:14 Cal File: F1469.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	AMOUNTS ON-COL (ng/ml)
* 17 Acenaphthene-d10	164	9.769	9.769	(1.000)	119990	600.000	
* 24 Phenanthrene-d10	188	12.378	12.378	(1.000)	196405	600.000	
* 42 Perylene-d12	264	19.057	19.057	(1.000)	256508	600.000	
$ 5 Naphthalene-d8 (Surr)	136	6.550	6.550	(0.670)	99603	300.000	339.6
$ 21 Fluorene-d10 (Surr)	176	10.693	10.693	(0.864)	63334	300.000	289.0(M)
$ 33 Chrysene-d12 (Surr)	240	16.833	16.833	(0.883)	110505	300.000	306.2
1 2,3-Benzofuran	118	4.603	4.603	(0.471)	52432	300.000	325.2
2 2,3-Dihydroindene	117	5.000	5.000	(0.512)	64943	300.000	321.7
3 1H-Indene	116	5.109	5.109	(0.523)	63697	300.000	318.1
6 Naphthalene	128	6.576	6.576	(0.673)	108447	300.000	335.1
8 Benzo(b)thiophene	134	6.674	6.674	(0.683)	90815	300.000	342.8
9 Quinoline	129	7.175	7.175	(0.734)	62162	300.000	310.7
11 1H-Indole	117	7.721	7.721	(0.790)	60311	300.000	313.2
12 2-Methylnaphthalene	142	7.841	7.841	(0.803)	71365	300.000	307.6
13 1-Methylnaphthalene	142	8.026	8.026	(0.822)	67964	300.000	330.4
14 Biphenyl	154	8.702	8.702	(0.891)	92859	300.000	319.2
15 2,6-Dimethyl Naphthalene	156	8.993	8.993	(0.921)	66511	300.000	329.6
16 Acenaphthylene	152	9.511	9.511	(0.974)	100801	300.000	303.6
18 Acenaphthene	154	9.823	9.823	(1.006)	65720	300.000	313.4
19 Dibenzofuran	168	10.136	10.136	(1.038)	99419	300.000	330.7
20 2,3,5-Trimethyl Naphthalene	170	10.496	10.496	(0.848)	62804	300.000	315.2
22 Fluorene	166	10.746	10.746	(0.868)	77267	300.000	318.8

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.205	12.205	(0.986)	107975	300.000	315.3
25 Phenanthrene	178	12.421	12.421	(1.003)	111283	300.000	317.5
26 Anthracene	178	12.508	12.508	(1.010)	98641	300.000	287.2
27 Acridine	179	12.577	12.577	(1.016)	72164	300.000	321.2
28 Carbazole	167	12.802	12.802	(1.034)	86774	300.000	318.9
29 1-Methyl Phenanthrene	192	13.467	13.467	(1.088)	78735	300.000	315.4
30 Fluoranthene	202	14.441	14.441	(1.167)	114575	300.000	319.7
31 Pyrene	202	14.826	14.826	(1.198)	124153	300.000	311.0
34 Benzo(a)anthracene	228	16.807	16.807	(0.882)	89593	300.000	325.4
35 Chrysene	228	16.868	16.868	(0.885)	126501	300.000	295.0
36 6-Methyl Chrysene	242	17.594	17.594	(0.923)	89567	300.000	312.4
32 7,12-Dimethylbenz(a)anthracen	256	18.458	18.458	(0.969)	53372	300.000	307.8
38 Benzo(b)fluoranthene	252	18.481	18.481	(0.970)	120718	300.000	342.6
40 Benzo(k)fluoranthene	252	18.519	18.519	(0.972)	145674	300.000	304.1
41 Benzo(e)pyrene	252	18.890	18.890	(0.991)	123693	300.000	313.3
43 Benzo(a)pyrene	252	18.966	18.966	(0.995)	123956	300.000	327.7
44 Perylene	252	19.094	19.094	(1.002)	149781	300.000	328.2
45 3-Methylcholanthrene	268	19.476	19.476	(1.022)	73635	300.000	315.5
46 Dibenz(a,h)acridine	279	20.438	20.438	(1.072)	89201	300.000	344.1
47 Dibenz(a,j)acridine	279	20.525	20.525	(1.077)	126038	300.000	308.0
48 Indeno(1,2,3-cd)pyrene	276	20.901	20.901	(1.097)	163807	300.000	322.3
49 Dibenz(a,h)anthracene	278	20.914	20.914	(1.097)	131144	300.000	327.2
50 7H-dibenzo(c,g)carbazole	267	21.252	21.252	(1.115)	89464	300.000	316.4
51 Benzo(g,h,i)perylene	276	21.467	21.467	(1.126)	141356	300.000	313.8
52 Dibenzo(a,l)pyrene	302	24.392	24.392	(1.280)	113163	300.000	312.3
53 Dibenzo(a,e)pyrene	302	25.565	25.565	(1.342)	140751	300.000	311.1
54 Dibenzo(a,i)pyrene	302	26.037	26.037	(1.366)	93858	300.000	323.2
55 Dibenzo(a,h)pyrene	302	26.285	26.285	(1.379)	123383	300.000	303.9

QC Flag Legend

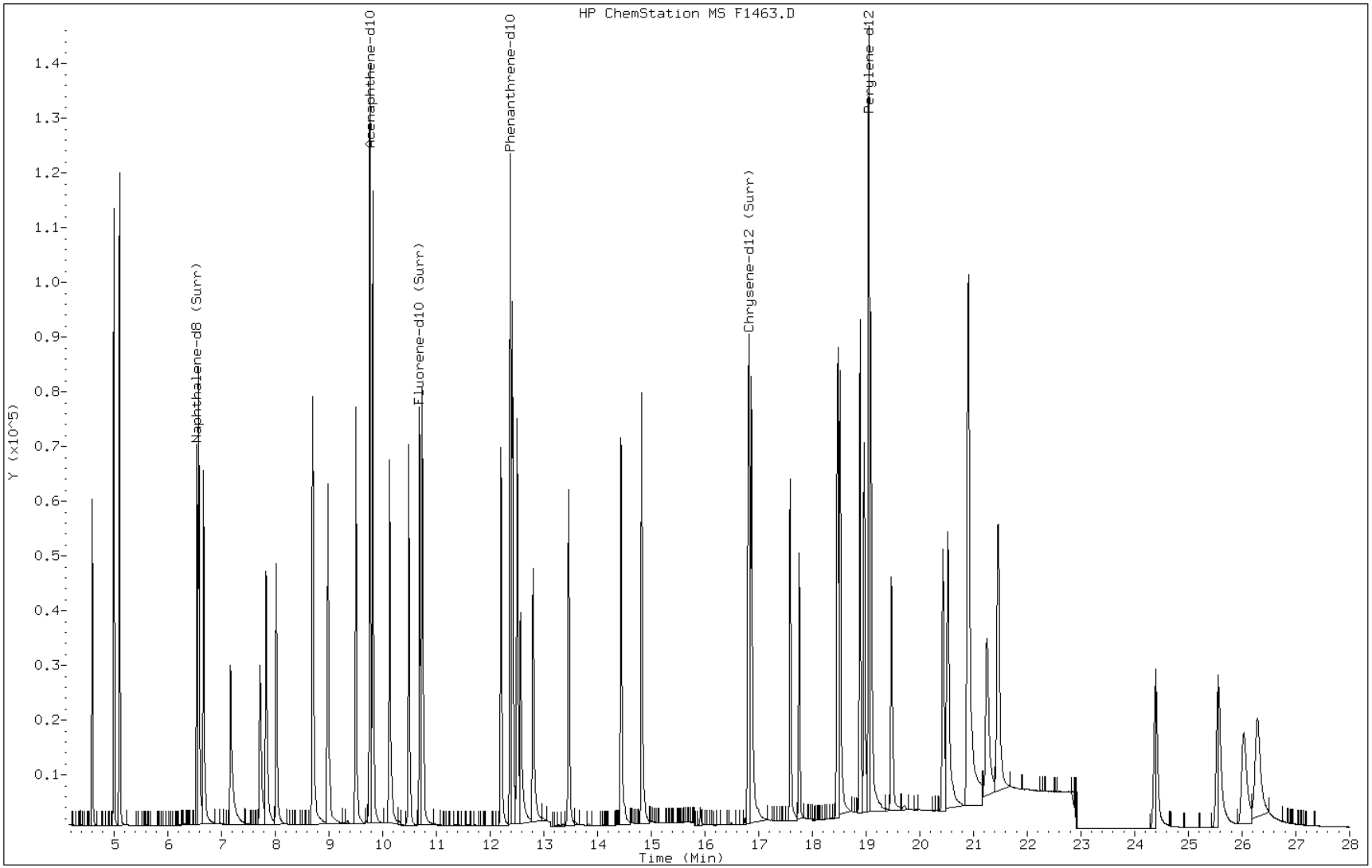
M - Compound response manually integrated.

Data File: F1463.D

Date: 30-SEP-2011 08:31

Client ID: Instrument: F.i

Sample Info: icis-1014732,cslp,092811p;111111e Operator: ILCZYSZD



Manual Integration Report

Data File: F1463.D
Inj. Date and Time: 30-SEP-2011 08:31
Instrument ID: F.i
Client ID:
Compound: 21 Fluorene-d10 (Surr)
CAS #:
Report Date: 10/07/2011

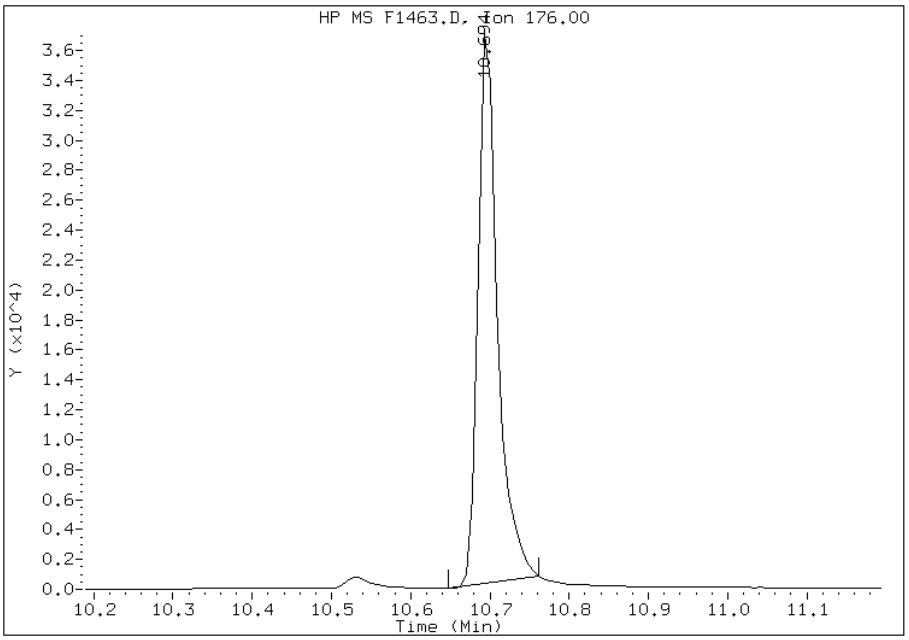
Processing Integration Results

RT: 10.69

Response: 63334

Amount: 327

Conc: 327



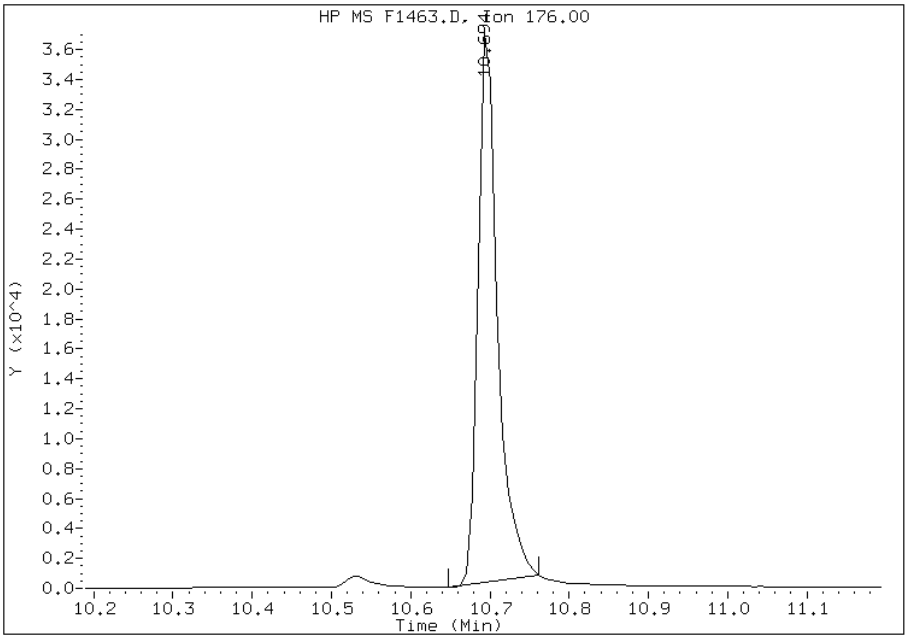
Manual Integration Results

RT: 10.69

Response: 63334

Amount: 289

Conc: 289



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte Misidentified by the Data System

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\F1464.D
Lab Smp Id: std10-1014704
Inj Date : 30-SEP-2011 09:08
Operator : ILCZYSZD Inst ID: F.i
Smp Info : std10-1014704,cslp,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\CSLPSIM.m
Meth Date : 07-Oct-2011 06:03 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 09:08 Cal File: F1464.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
* 17 Acenaphthene-d10	164	9.758	9.758	(1.000)	123088	600.000	
* 24 Phenanthrene-d10	188	12.378	12.378	(1.000)	194004	600.000	
* 42 Perylene-d12	264	19.057	19.057	(1.000)	246689	600.000	
$ 5 Naphthalene-d8 (Surr)	136	6.544	6.544	(0.671)	2141	10.0000	7.116(a)
$ 21 Fluorene-d10 (Surr)	176	10.693	10.693	(0.864)	2157	10.0000	9.964(a)
$ 33 Chrysene-d12 (Surr)	240	16.833	16.833	(0.883)	1407	10.0000	4.054(a)
1 2,3-Benzofuran	118	4.598	4.598	(0.471)	1392	10.0000	8.416(a)
2 2,3-Dihydroindene	117	5.000	5.000	(0.512)	1742	10.0000	8.413(a)
3 1H-Indene	116	5.103	5.103	(0.523)	1763	10.0000	8.583(a)
6 Naphthalene	128	6.576	6.576	(0.674)	2318	10.0000	6.982(a)
8 Benzo(b)thiophene	134	6.667	6.667	(0.683)	1771	10.0000	6.516(a)
9 Quinoline	129	7.175	7.175	(0.735)	1250	10.0000	6.090(a)
11 1H-Indole	117	7.732	7.732	(0.792)	1689	10.0000	8.550(a)
12 2-Methylnaphthalene	142	7.835	7.835	(0.803)	1075	10.0000	4.516(a)
13 1-Methylnaphthalene	142	8.026	8.026	(0.822)	919	10.0000	4.356(a)
14 Biphenyl	154	8.702	8.702	(0.892)	2660	10.0000	8.914(a)
15 2,6-Dimethyl Naphthalene	156	8.993	8.993	(0.922)	1538	10.0000	7.430(a)
16 Acenaphthylene	152	9.500	9.500	(0.973)	2814	10.0000	8.263(a)
18 Acenaphthene	154	9.812	9.812	(1.006)	1843	10.0000	8.569(a)
19 Dibenzofuran	168	10.136	10.136	(1.039)	2607	10.0000	8.453(a)
20 2,3,5-Trimethyl Naphthalene	170	10.496	10.496	(0.848)	1683	10.0000	8.552(a)
22 Fluorene	166	10.746	10.746	(0.868)	2028	10.0000	8.471(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.205	12.205	(0.986)	2842	10.0000	8.402(a)
25 Phenanthrene	178	12.421	12.421	(1.003)	3197	10.0000	9.235(a)
26 Anthracene	178	12.508	12.508	(1.010)	1746	10.0000	5.146(a)
27 Acridine	179	12.577	12.577	(1.016)	1190	10.0000	5.363(a)
28 Carbazole	167	12.802	12.802	(1.034)	2006	10.0000	7.462(a)
29 1-Methyl Phenanthrene	192	13.467	13.467	(1.088)	1963	10.0000	7.962(a)
30 Fluoranthene	202	14.441	14.441	(1.167)	3272	10.0000	9.242(a)
31 Pyrene	202	14.830	14.830	(1.198)	3917	10.0000	9.933(a)
34 Benzo(a)anthracene	228	16.816	16.816	(0.882)	1372	10.0000	5.181(a)
35 Chrysene	228	16.868	16.868	(0.885)	3000	10.0000	7.274(a)
36 6-Methyl Chrysene	242	17.594	17.594	(0.923)	2301	10.0000	8.346(a)
32 7,12-Dimethylbenz(a)anthracen	256	18.458	18.458	(0.969)	1435	10.0000	8.606(a)
38 Benzo(b)fluoranthene	252	18.481	18.481	(0.970)	2572	10.0000	7.591(a)
40 Benzo(k)fluoranthene	252	18.519	18.519	(0.972)	3875	10.0000	8.411(a)
41 Benzo(e)pyrene	252	18.890	18.890	(0.991)	3317	10.0000	8.736(a)
43 Benzo(a)pyrene	252	18.966	18.966	(0.995)	2174	10.0000	5.977(a)
44 Perylene	252	19.095	19.095	(1.002)	3335	10.0000	7.599(a)
45 3-Methylcholanthrene	268	19.486	19.486	(1.023)	1897	10.0000	8.452(a)
46 Dibenz(a,h)acridine	279	20.447	20.447	(1.073)	1389	10.0000	5.572(a)
47 Dibenz(a,j)acridine	279	20.535	20.535	(1.078)	3124	10.0000	7.937(a)
48 Indeno(1,2,3-cd)pyrene	276	20.907	20.907	(1.097)	3591	10.0000	7.346(a)
49 Dibenz(a,h)anthracene	278	20.920	20.920	(1.098)	2263	10.0000	5.871(a)
50 7H-dibenzo(c,g)carbazole	267	Compound Not Detected.					
51 Benzo(g,h,i)perylene	276	21.467	21.467	(1.126)	3598	10.0000	8.306(a)
52 Dibenzo(a,l)pyrene	302	24.394	24.394	(1.280)	3338	10.0000	9.578(a)
53 Dibenzo(a,e)pyrene	302	Compound Not Detected.					
54 Dibenzo(a,i)pyrene	302	Compound Not Detected.					
55 Dibenzo(a,h)pyrene	302	Compound Not Detected.					

QC Flag Legend

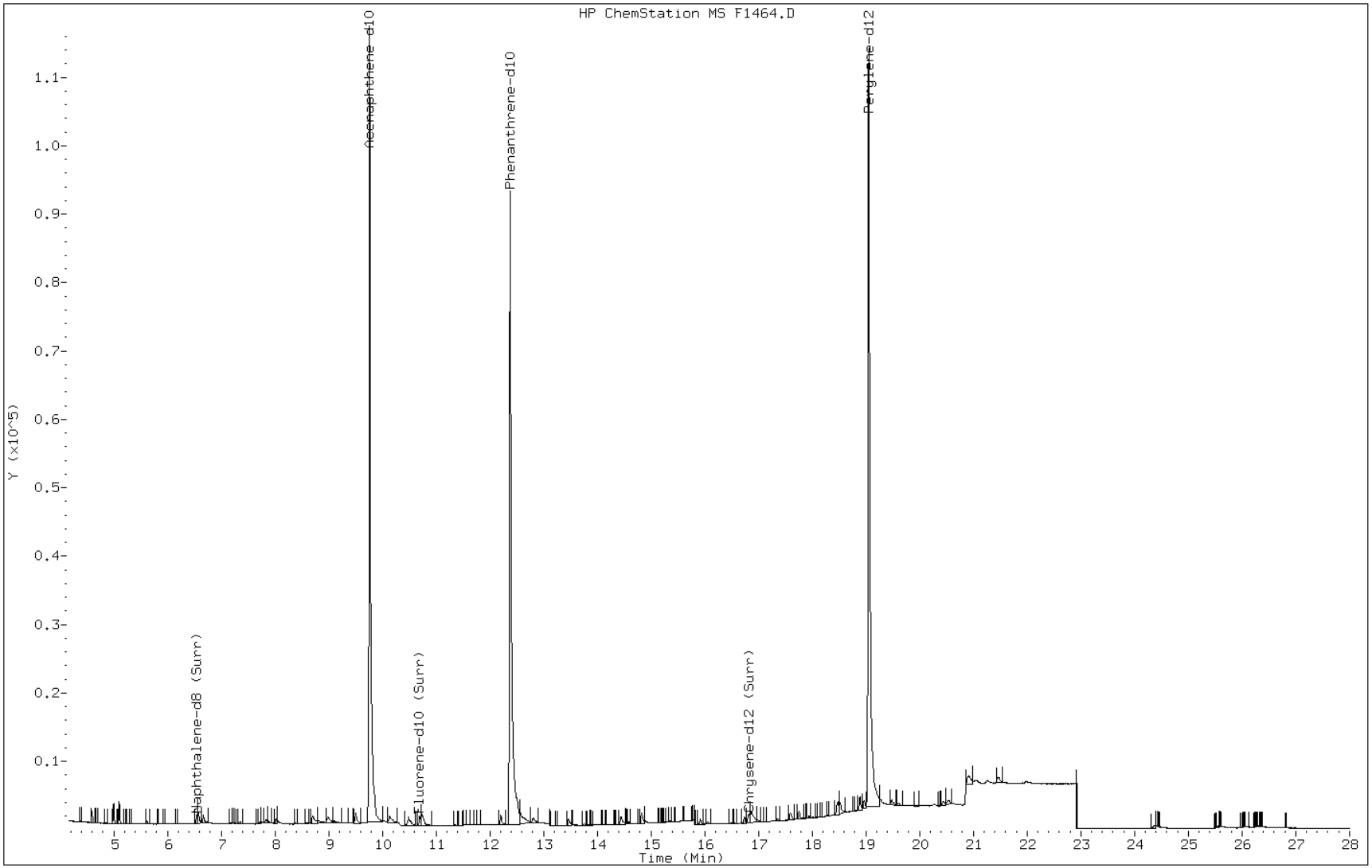
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: F1464.D

Date: 30-SEP-2011 09:08

Client ID: Instrument: F.i

Sample Info: std10-1014704,cslp,092811p;111111e Operator: ILCZYSZD



TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\F1465.D
Lab Smp Id: std20-1014730
Inj Date : 30-SEP-2011 09:45
Operator : ILCZYSZD Inst ID: F.i
Smp Info : std20-1014730,cslp,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\CSLPSIM.m
Meth Date : 07-Oct-2011 06:03 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 09:45 Cal File: F1465.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	AMOUNTS ON-COL (ng/ml)
* 17 Acenaphthene-d10	164	9.758	9.758	(1.000)	121717	600.000	
* 24 Phenanthrene-d10	188	12.378	12.378	(1.000)	193986	600.000	
* 42 Perylene-d12	264	19.049	19.049	(1.000)	261000	600.000	
$ 5 Naphthalene-d8 (Surr)	136	6.544	6.544	(0.671)	5323	20.0000	17.89
$ 21 Fluorene-d10 (Surr)	176	10.693	10.693	(0.864)	4775	20.0000	22.06
$ 33 Chrysene-d12 (Surr)	240	16.825	16.825	(0.883)	7282	20.0000	19.83
1 2,3-Benzofuran	118	4.598	4.598	(0.471)	3498	20.0000	21.39
2 2,3-Dihydroindene	117	5.000	5.000	(0.512)	4377	20.0000	21.38
3 1H-Indene	116	5.103	5.103	(0.523)	4308	20.0000	21.21
6 Naphthalene	128	6.576	6.576	(0.674)	6171	20.0000	18.80
8 Benzo(b)thiophene	134	6.667	6.667	(0.683)	4579	20.0000	17.04
9 Quinoline	129	7.181	7.181	(0.736)	3657	20.0000	18.02
11 1H-Indole	117	7.727	7.727	(0.792)	3572	20.0000	18.28
12 2-Methylnaphthalene	142	7.835	7.835	(0.803)	4793	20.0000	20.36
13 1-Methylnaphthalene	142	8.020	8.020	(0.822)	2676	20.0000	12.83
14 Biphenyl	154	8.702	8.702	(0.892)	6136	20.0000	20.79
15 2,6-Dimethyl Naphthalene	156	8.993	8.993	(0.922)	3786	20.0000	18.50
16 Acenaphthylene	152	9.500	9.500	(0.973)	6988	20.0000	20.75
18 Acenaphthene	154	9.812	9.812	(1.006)	4594	20.0000	21.60
19 Dibenzofuran	168	10.136	10.136	(1.039)	6501	20.0000	21.32
20 2,3,5-Trimethyl Naphthalene	170	10.489	10.489	(0.847)	4226	20.0000	21.47
22 Fluorene	166	10.746	10.746	(0.868)	5067	20.0000	21.17

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.205	12.205	(0.986)	7066	20.0000	20.89
25 Phenanthrene	178	12.413	12.413	(1.003)	6975	20.0000	20.15
26 Anthracene	178	12.508	12.508	(1.010)	8069	20.0000	23.78
27 Acridine	179	12.577	12.577	(1.016)	3939	20.0000	17.75
28 Carbazole	167	12.802	12.802	(1.034)	4995	20.0000	18.58
29 1-Methyl Phenanthrene	192	13.467	13.467	(1.088)	5108	20.0000	20.72
30 Fluoranthene	202	14.441	14.441	(1.167)	7717	20.0000	21.80
31 Pyrene	202	14.826	14.826	(1.198)	8597	20.0000	21.80
34 Benzo(a)anthracene	228	16.808	16.808	(0.882)	3585	20.0000	12.79
35 Chrysene	228	16.868	16.868	(0.886)	10369	20.0000	23.76
36 6-Methyl Chrysene	242	17.594	17.594	(0.924)	5856	20.0000	20.08
32 7,12-Dimethylbenz(a)anthracen	256	18.458	18.458	(0.969)	3684	20.0000	20.88
38 Benzo(b)fluoranthene	252	18.481	18.481	(0.970)	5833	20.0000	16.27
40 Benzo(k)fluoranthene	252	18.519	18.519	(0.972)	10177	20.0000	20.88
41 Benzo(e)pyrene	252	18.890	18.890	(0.992)	7936	20.0000	19.75
43 Benzo(a)pyrene	252	18.966	18.966	(0.996)	7618	20.0000	19.80
44 Perylene	252	19.087	19.087	(1.002)	9281	20.0000	19.99
45 3-Methylcholanthrene	268	19.476	19.476	(1.022)	4490	20.0000	18.91
46 Dibenz(a,h)acridine	279	20.438	20.438	(1.073)	4247	20.0000	16.10
47 Dibenz(a,j)acridine	279	20.525	20.525	(1.077)	9108	20.0000	21.87
48 Indeno(1,2,3-cd)pyrene	276	20.901	20.901	(1.097)	9819	20.0000	18.98
49 Dibenz(a,h)anthracene	278	20.907	20.907	(1.098)	7757	20.0000	19.02
50 7H-dibenzo(c,g)carbazole	267	21.252	21.252	(1.116)	5250	20.0000	18.25
51 Benzo(g,h,i)perylene	276	21.460	21.460	(1.127)	9134	20.0000	19.93
52 Dibenzo(a,l)pyrene	302	24.388	24.388	(1.280)	6757	20.0000	18.33
53 Dibenzo(a,e)pyrene	302	25.570	25.570	(1.342)	8199	20.0000	17.81(M)
54 Dibenzo(a,i)pyrene	302	26.048	26.048	(1.367)	3845	20.0000	13.01(M)
55 Dibenzo(a,h)pyrene	302	26.299	26.299	(1.381)	8068	20.0000	19.53(M)

QC Flag Legend

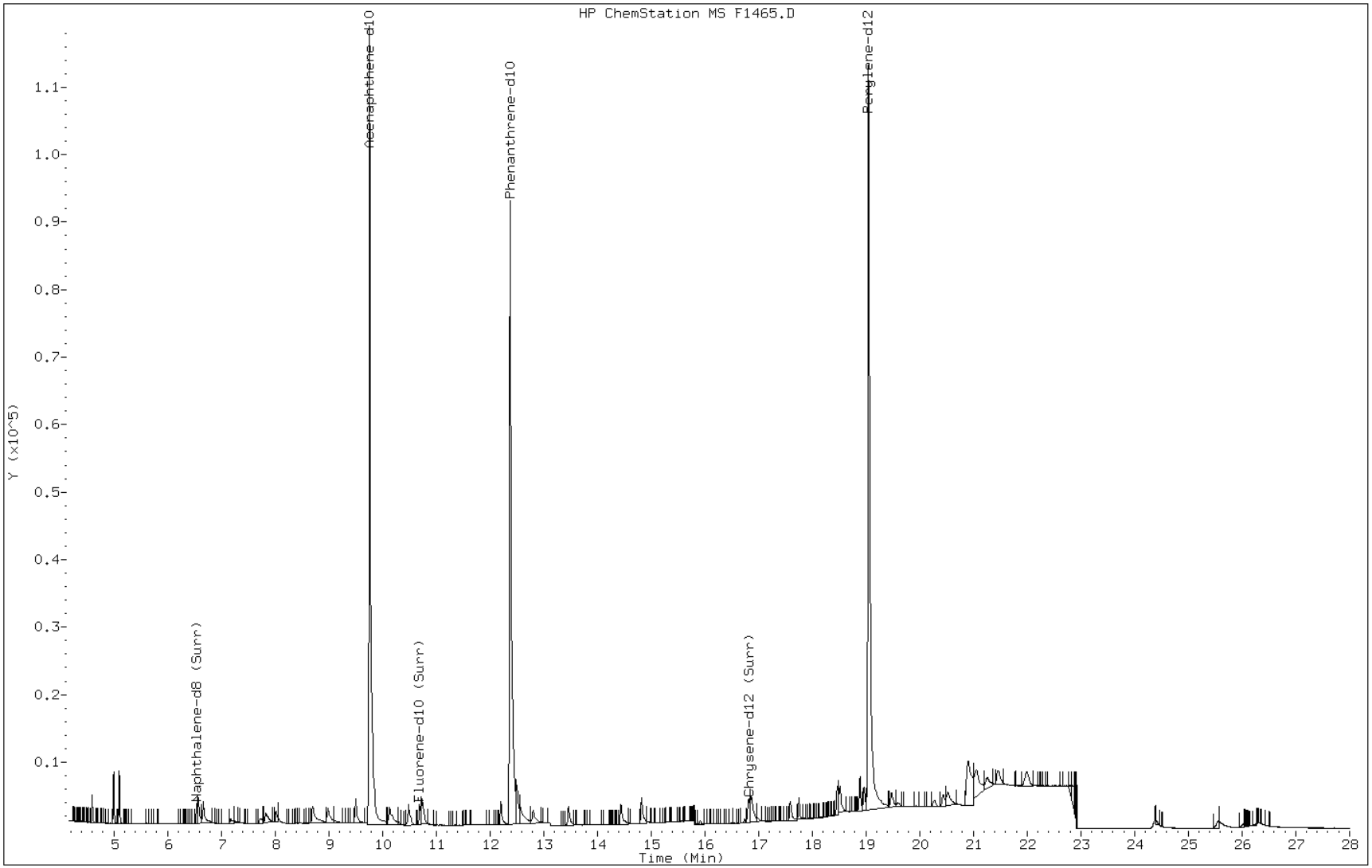
M - Compound response manually integrated.

Data File: F1465.D

Date: 30-SEP-2011 09:45

Client ID: Instrument: F.i

Sample Info: std20-1014730,cslp,092811p;111111e Operator: ILCZYSZD



TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\F1466.D
Lab Smp Id: std150-1014731
Inj Date : 30-SEP-2011 10:23
Operator : ILCZYSZD Inst ID: F.i
Smp Info : std150-1014731,cslp,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\CSLPSIM.m
Meth Date : 07-Oct-2011 06:03 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 10:23 Cal File: F1466.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	AMOUNTS ON-COL (ng/ml)
* 17 Acenaphthene-d10	164	9.758	9.758	(1.000)	122434	600.000	
* 24 Phenanthrene-d10	188	12.378	12.378	(1.000)	194931	600.000	
* 42 Perylene-d12	264	19.049	19.049	(1.000)	261341	600.000	
$ 5 Naphthalene-d8 (Surr)	136	6.544	6.544	(0.671)	39330	150.000	131.4
$ 21 Fluorene-d10 (Surr)	176	10.693	10.693	(0.864)	28850	150.000	132.6
$ 33 Chrysene-d12 (Surr)	240	16.825	16.825	(0.883)	45457	150.000	123.6
1 2,3-Benzofuran	118	4.598	4.598	(0.471)	21791	150.000	132.4
2 2,3-Dihydroindene	117	5.000	5.000	(0.512)	27394	150.000	133.0
3 1H-Indene	116	5.103	5.103	(0.523)	27045	150.000	132.4
6 Naphthalene	128	6.576	6.576	(0.674)	45381	150.000	137.4
8 Benzo(b)thiophene	134	6.667	6.667	(0.683)	37130	150.000	137.3
9 Quinoline	129	7.175	7.175	(0.735)	25618	150.000	125.5
11 1H-Indole	117	7.721	7.721	(0.791)	25853	150.000	131.6
12 2-Methylnaphthalene	142	7.835	7.835	(0.803)	29227	150.000	123.4
13 1-Methylnaphthalene	142	8.020	8.020	(0.822)	29428	150.000	140.2
14 Biphenyl	154	8.702	8.702	(0.892)	38463	150.000	129.6
15 2,6-Dimethyl Naphthalene	156	8.983	8.983	(0.920)	28420	150.000	138.0
16 Acenaphthylene	152	9.500	9.500	(0.973)	44877	150.000	132.5
18 Acenaphthene	154	9.812	9.812	(1.006)	28023	150.000	131.0
19 Dibenzofuran	168	10.136	10.136	(1.039)	40393	150.000	131.7
20 2,3,5-Trimethyl Naphthalene	170	10.489	10.489	(0.847)	26327	150.000	133.1
22 Fluorene	166	10.739	10.739	(0.868)	30773	150.000	127.9(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.206	12.206	(0.986)	45149	150.000	132.8
25 Phenanthrene	178	12.413	12.413	(1.003)	44196	150.000	127.0
26 Anthracene	178	12.499	12.499	(1.010)	39709	150.000	116.5
27 Acridine	179	12.568	12.568	(1.015)	29694	150.000	133.2
28 Carbazole	167	12.802	12.802	(1.034)	37586	150.000	139.2
29 1-Methyl Phenanthrene	192	13.462	13.462	(1.088)	33649	150.000	135.8
30 Fluoranthene	202	14.441	14.441	(1.167)	48732	150.000	137.0
31 Pyrene	202	14.826	14.826	(1.198)	52605	150.000	132.8
34 Benzo(a)anthracene	228	16.808	16.808	(0.882)	29766	150.000	106.1
35 Chrysene	228	16.868	16.868	(0.886)	64018	150.000	146.5
36 6-Methyl Chrysene	242	17.594	17.594	(0.924)	37910	150.000	129.8
32 7,12-Dimethylbenz(a)anthracen	256	18.458	18.458	(0.969)	22780	150.000	129.0
38 Benzo(b)fluoranthene	252	18.481	18.481	(0.970)	43567	150.000	121.4
40 Benzo(k)fluoranthene	252	18.519	18.519	(0.972)	64794	150.000	132.8
41 Benzo(e)pyrene	252	18.882	18.882	(0.991)	50676	150.000	126.0
43 Benzo(a)pyrene	252	18.958	18.958	(0.995)	53243	150.000	138.2
44 Perylene	252	19.087	19.087	(1.002)	59452	150.000	127.9
45 3-Methylcholanthrene	268	19.476	19.476	(1.022)	31401	150.000	132.1
46 Dibenz(a,h)acridine	279	20.428	20.428	(1.072)	33335	150.000	126.2
47 Dibenz(a,j)acridine	279	20.525	20.525	(1.077)	56523	150.000	135.6
48 Indeno(1,2,3-cd)pyrene	276	20.894	20.894	(1.097)	68903	150.000	133.0
49 Dibenz(a,h)anthracene	278	20.907	20.907	(1.098)	55425	150.000	135.7
50 7H-dibenzo(c,g)carbazole	267	21.252	21.252	(1.116)	37620	150.000	130.6
51 Benzo(g,h,i)perylene	276	21.454	21.454	(1.126)	60535	150.000	131.9
52 Dibenzo(a,l)pyrene	302	24.385	24.385	(1.280)	48399	150.000	131.1
53 Dibenzo(a,e)pyrene	302	25.552	25.552	(1.341)	59002	150.000	128.0
54 Dibenzo(a,i)pyrene	302	26.030	26.030	(1.366)	34714	150.000	117.3(H)
55 Dibenzo(a,h)pyrene	302	26.279	26.279	(1.380)	49100	150.000	118.7

QC Flag Legend

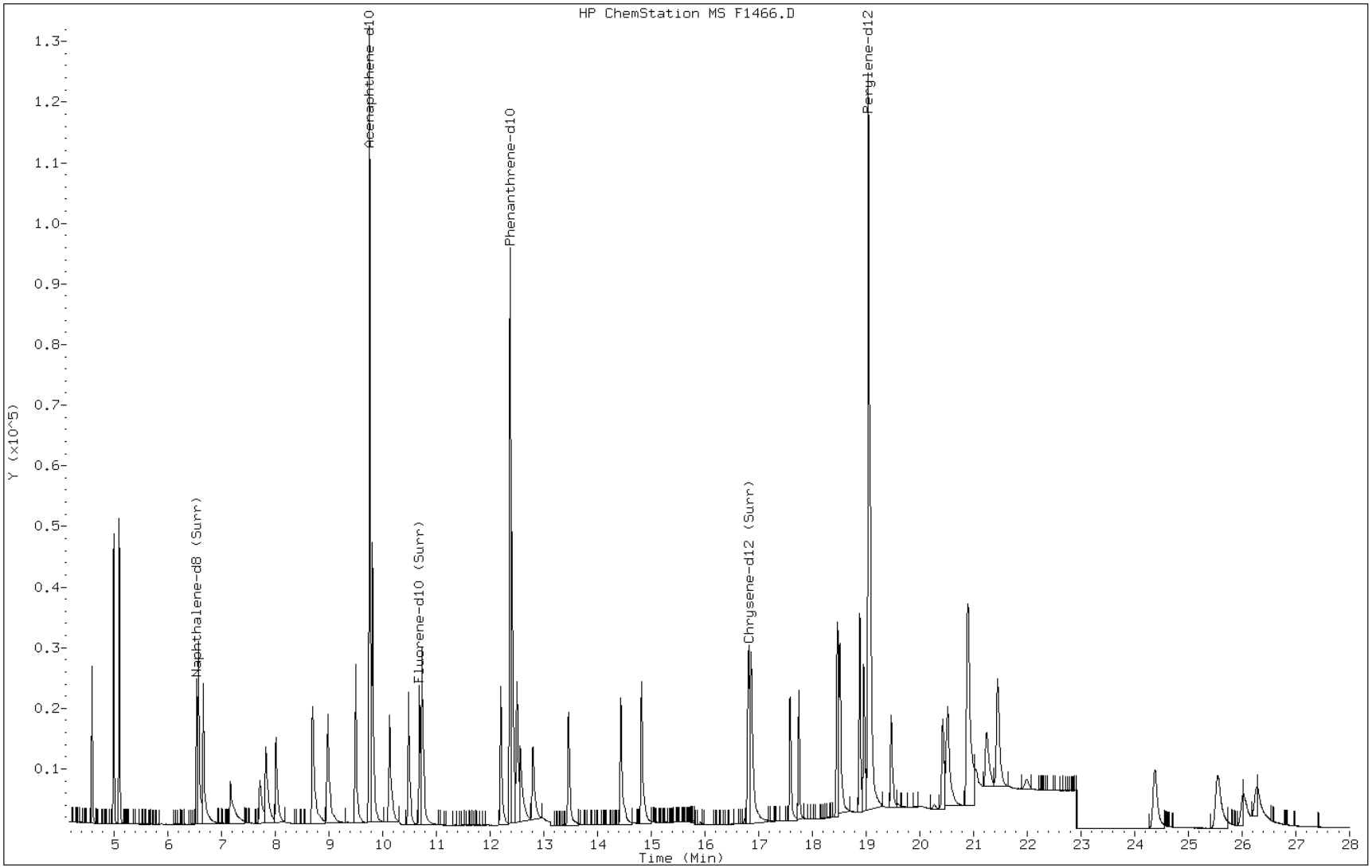
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: F1466.D

Date: 30-SEP-2011 10:23

Client ID: Instrument: F.i

Sample Info: std150-1014731,cslp,092811p;111111e Operator: ILCZYSZD



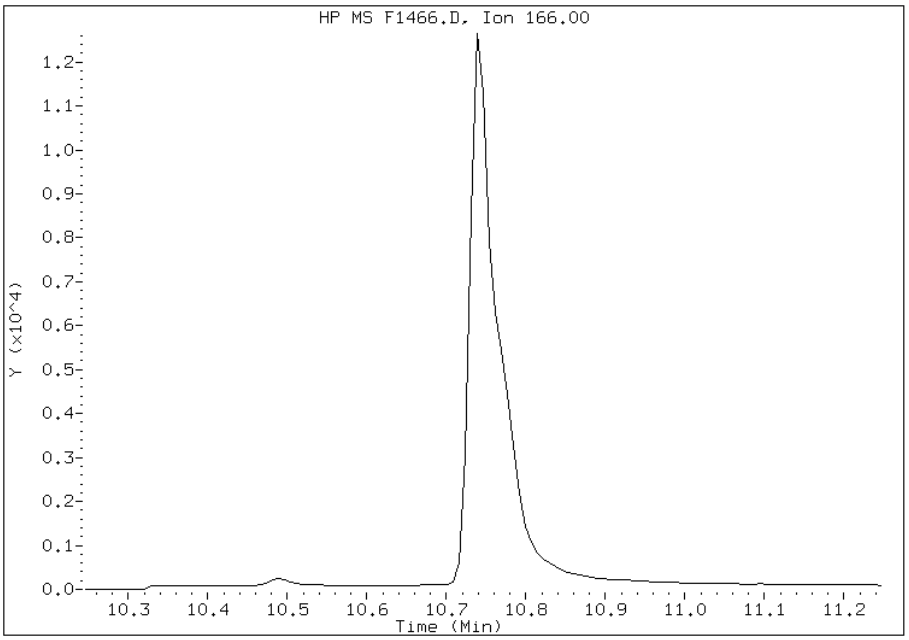
Manual Integration Report

Data File: F1466.D
Inj. Date and Time: 30-SEP-2011 10:23
Instrument ID: F.i
Client ID:
Compound: 22 Fluorene
CAS #: 86-73-7
Report Date: 10/07/2011

Processing Integration Results

Not Detected

Expected RT: 10.75



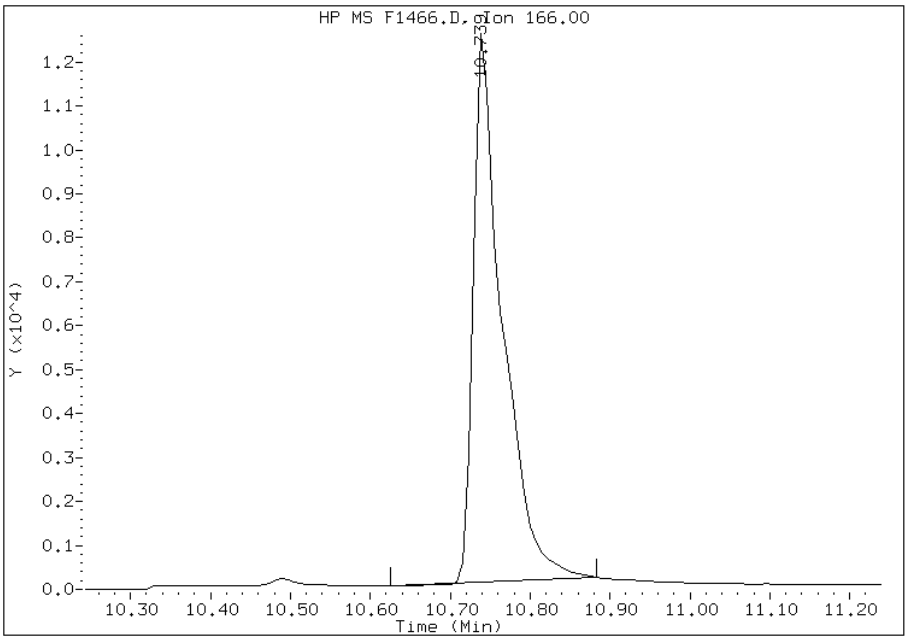
Manual Integration Results

RT: 10.74

Response: 30773

Amount: 128

Conc: 128



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte not Identified by the Data System

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\F1467.D
Lab Smp Id: std600-1014733
Inj Date : 30-SEP-2011 11:00
Operator : ILCZYSZD Inst ID: F.i
Smp Info : std600-1014733,cslp,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\CSLPSIM.m
Meth Date : 07-Oct-2011 06:03 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 11:00 Cal File: F1467.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ml)	ON-COL (ng/ml)
*	17 Acenaphthene-d10	164	9.758	9.758	(1.000)	119124	600.000	
*	24 Phenanthrene-d10	188	12.378	12.378	(1.000)	196165	600.000	
*	42 Perylene-d12	264	19.049	19.049	(1.000)	251934	600.000	
$	5 Naphthalene-d8 (Surr)	136	6.544	6.544	(0.671)	195350	600.000	670.9
$	21 Fluorene-d10 (Surr)	176	10.685	10.685	(0.863)	133036	600.000	607.8(MH)
$	33 Chrysene-d12 (Surr)	240	16.825	16.825	(0.883)	221729	600.000	625.5
	1 2,3-Benzofuran	118	4.598	4.598	(0.471)	99893	600.000	624.0
	2 2,3-Dihydroindene	117	5.000	5.000	(0.512)	125398	600.000	625.7
	3 1H-Indene	116	5.103	5.103	(0.523)	124535	600.000	626.5
	6 Naphthalene	128	6.576	6.576	(0.674)	211733	600.000	658.9
	8 Benzo(b)thiophene	134	6.667	6.667	(0.683)	178424	600.000	678.3
	9 Quinoline	129	7.175	7.175	(0.735)	125070	600.000	629.6
	11 1H-Indole	117	7.716	7.716	(0.791)	118838	600.000	621.6
	12 2-Methylnaphthalene	142	7.830	7.830	(0.802)	142340	600.000	617.9
	13 1-Methylnaphthalene	142	8.020	8.020	(0.822)	135213	600.000	662.2
	14 Biphenyl	154	8.702	8.702	(0.892)	181141	600.000	627.2
	15 2,6-Dimethyl Naphthalene	156	8.983	8.983	(0.920)	132489	600.000	661.3
	16 Acenaphthylene	152	9.500	9.500	(0.973)	210705	600.000	639.3
	18 Acenaphthene	154	9.812	9.812	(1.006)	130330	600.000	626.1
	19 Dibenzofuran	168	10.136	10.136	(1.039)	195194	600.000	654.0
	20 2,3,5-Trimethyl Naphthalene	170	10.489	10.489	(0.847)	123486	600.000	620.5
	22 Fluorene	166	10.738	10.738	(0.868)	150005	600.000	619.7(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.205	12.205	(0.986)	214797	600.000	628.0
25 Phenanthrene	178	12.413	12.413	(1.003)	219535	600.000	627.2
26 Anthracene	178	12.499	12.499	(1.010)	202041	600.000	588.9
27 Acridine	179	12.568	12.568	(1.015)	155509	600.000	693.1
28 Carbazole	167	12.793	12.793	(1.034)	175395	600.000	645.3
29 1-Methyl Phenanthrene	192	13.458	13.458	(1.087)	156532	600.000	627.9
30 Fluoranthene	202	14.437	14.437	(1.166)	207687	600.000	580.2
31 Pyrene	202	14.821	14.821	(1.197)	245782	600.000	616.4
34 Benzo(a)anthracene	228	16.799	16.799	(0.882)	183338	600.000	677.9
35 Chrysene	228	16.859	16.859	(0.885)	263357	600.000	625.2
36 6-Methyl Chrysene	242	17.585	17.585	(0.923)	180723	600.000	641.8
32 7,12-Dimethylbenz(a)anthracen	256	18.450	18.450	(0.969)	108055	600.000	634.5
38 Benzo(b)fluoranthene	252	18.473	18.473	(0.970)	250292	600.000	723.3
40 Benzo(k)fluoranthene	252	18.511	18.511	(0.972)	285275	600.000	606.3
41 Benzo(e)pyrene	252	18.882	18.882	(0.991)	248756	600.000	641.5
43 Benzo(a)pyrene	252	18.958	18.958	(0.995)	250613	600.000	674.7
44 Perylene	252	19.087	19.087	(1.002)	293699	600.000	655.2
45 3-Methylcholanthrene	268	19.466	19.466	(1.022)	149135	600.000	650.6
46 Dibenz(a,h)acridine	279	20.418	20.418	(1.072)	180045	600.000	707.2
47 Dibenz(a,j)acridine	279	20.515	20.515	(1.077)	256911	600.000	639.2
48 Indeno(1,2,3-cd)pyrene	276	20.888	20.888	(1.097)	331569	600.000	664.2
49 Dibenz(a,h)anthracene	278	20.894	20.894	(1.097)	269591	600.000	684.8
50 7H-dibenzo(c,g)carbazole	267	21.239	21.239	(1.115)	179894	600.000	647.9
51 Benzo(g,h,i)perylene	276	21.447	21.447	(1.126)	285792	600.000	646.0
52 Dibenzo(a,l)pyrene	302	24.374	24.374	(1.280)	227530	600.000	639.3
53 Dibenzo(a,e)pyrene	302	25.534	25.534	(1.340)	283503	600.000	638.0
54 Dibenzo(a,i)pyrene	302	26.008	26.008	(1.365)	191161	600.000	670.3(H)
55 Dibenzo(a,h)pyrene	302	26.263	26.263	(1.379)	250982	600.000	629.4

QC Flag Legend

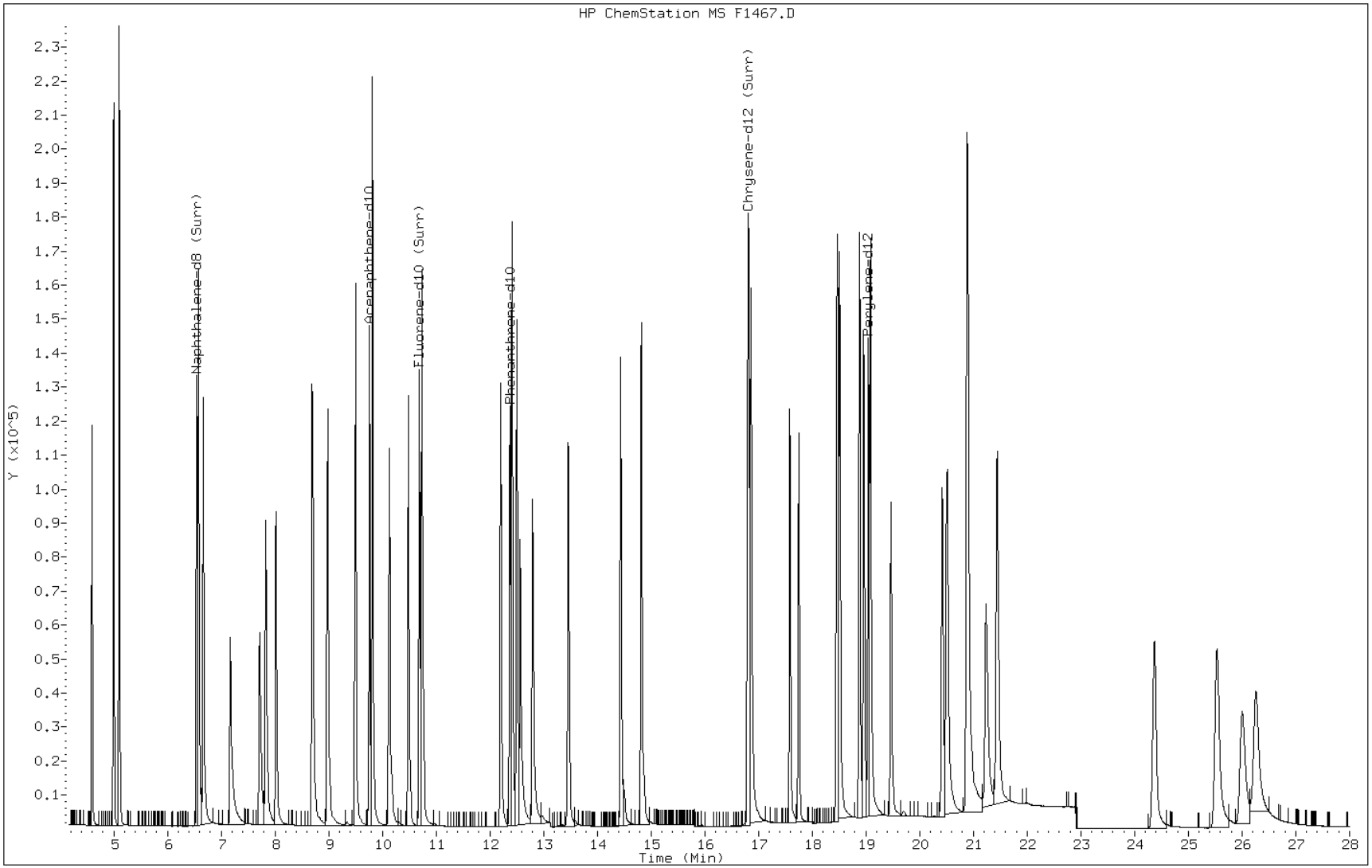
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: F1467.D

Date: 30-SEP-2011 11:00

Client ID: Instrument: F.i

Sample Info: std600-1014733,cslp,092811p;111111e Operator: ILCZYSZD



Manual Integration Report

Data File: F1467.D
Inj. Date and Time: 30-SEP-2011 11:00
Instrument ID: F.i
Client ID:
Compound: 22 Fluorene
CAS #: 86-73-7
Report Date: 10/07/2011

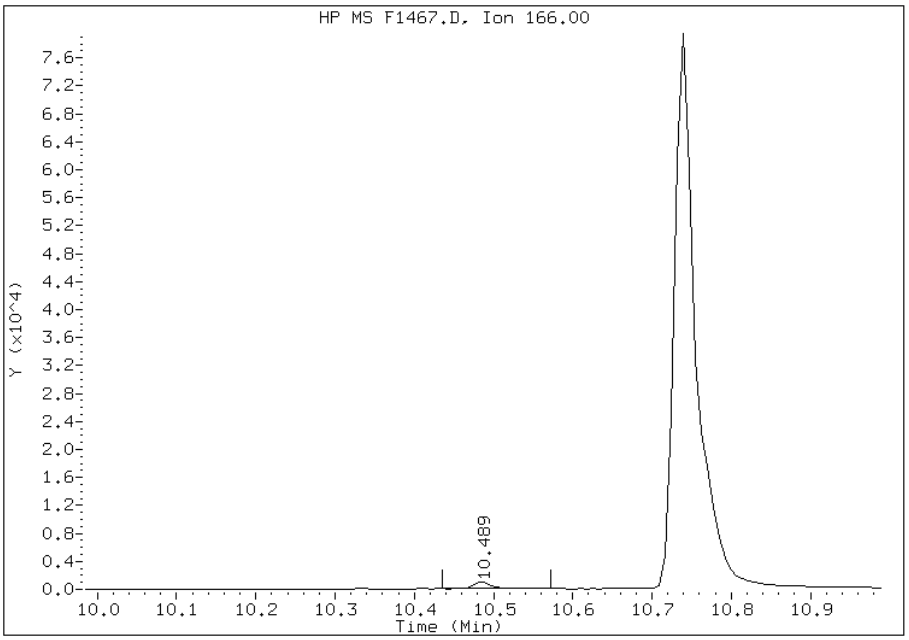
Processing Integration Results

RT: 10.49

Response: 1638

Amount: 12

Conc: 12



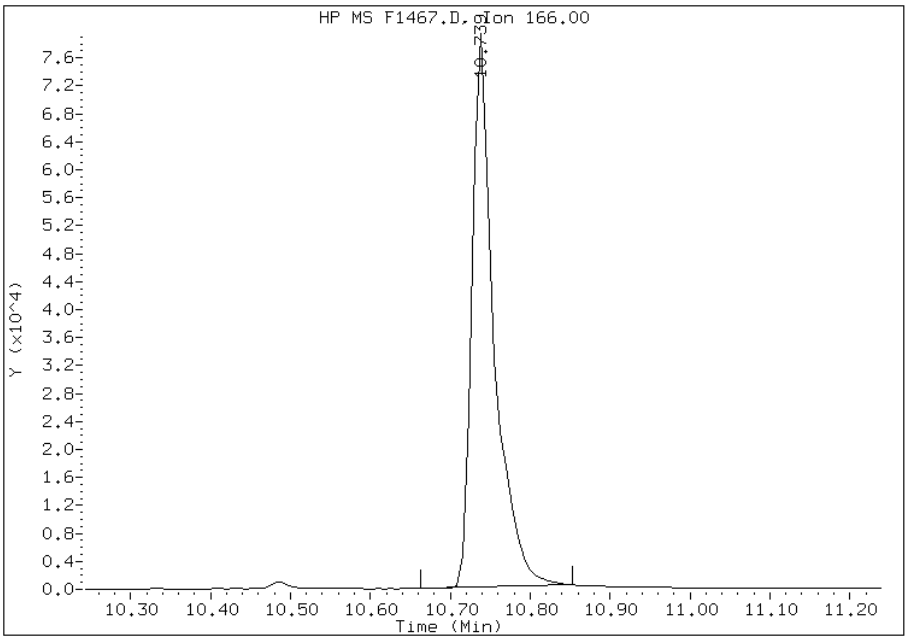
Manual Integration Results

RT: 10.74

Response: 150005

Amount: 620

Conc: 620



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte Misidentified by the Data System

Manual Integration Report

Data File: F1467.D
Inj. Date and Time: 30-SEP-2011 11:00
Instrument ID: F.i
Client ID:
Compound: 21 Fluorene-d10 (Surr)
CAS #:
Report Date: 10/07/2011

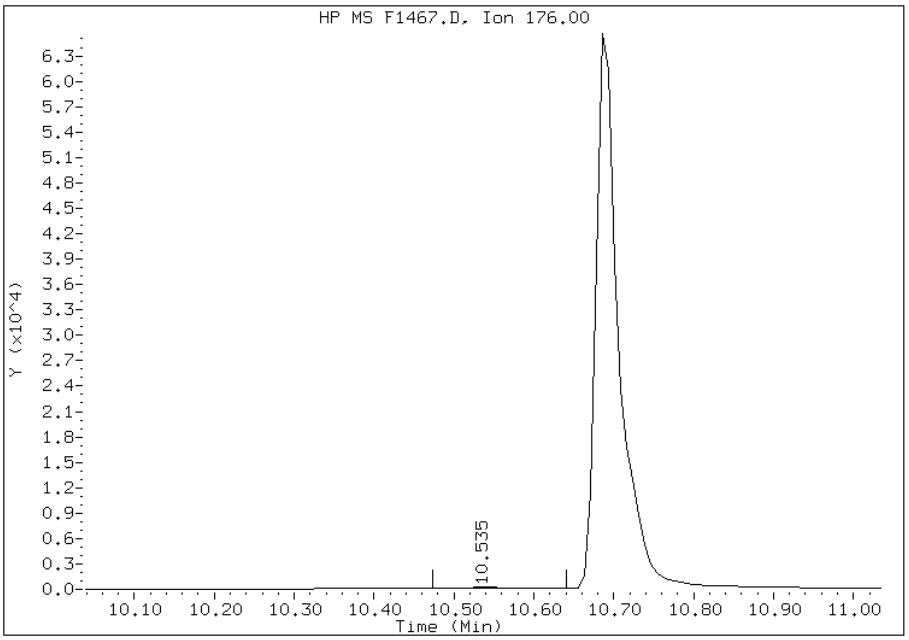
Processing Integration Results

RT: 10.53

Response: 570

Amount: 3

Conc: 0



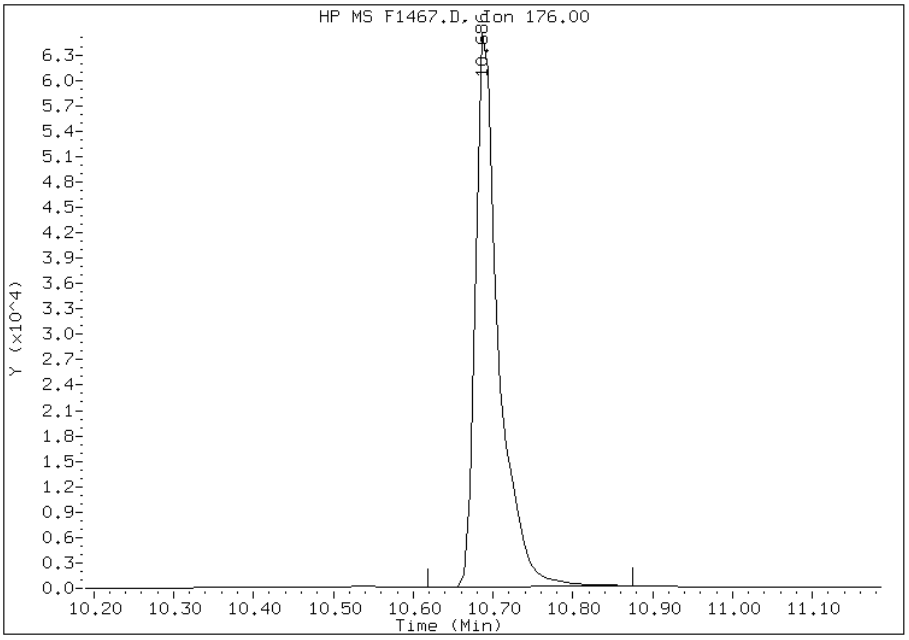
Manual Integration Results

RT: 10.69

Response: 133036

Amount: 608

Conc: 608



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte Misidentified by the Data System

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\F1468.D
Lab Smp Id: std800-1014734
Inj Date : 30-SEP-2011 11:37
Operator : ILCZYSZD Inst ID: F.i
Smp Info : std800-1014734,cslp,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\CSLPSIM.m
Meth Date : 07-Oct-2011 06:03 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 11:37 Cal File: F1468.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ml)	ON-COL (ng/ml)
*	17 Acenaphthene-d10	164	9.758	9.758	(1.000)	118052	600.000	
*	24 Phenanthrene-d10	188	12.378	12.378	(1.000)	194408	600.000	
*	42 Perylene-d12	264	19.049	19.049	(1.000)	249999	600.000	
$	5 Naphthalene-d8 (Surr)	136	6.544	6.544	(0.671)	267307	800.000	926.3
$	21 Fluorene-d10 (Surr)	176	10.685	10.685	(0.863)	178972	800.000	825.1(M)
$	33 Chrysene-d12 (Surr)	240	16.825	16.825	(0.883)	297076	800.000	844.5
	1 2,3-Benzofuran	118	4.598	4.598	(0.471)	135422	800.000	853.7
	2 2,3-Dihydroindene	117	5.000	5.000	(0.512)	170223	800.000	857.1
	3 1H-Indene	116	5.103	5.103	(0.523)	169030	800.000	858.0
	6 Naphthalene	128	6.576	6.576	(0.674)	290279	800.000	911.6
	8 Benzo(b)thiophene	134	6.667	6.667	(0.683)	244970	800.000	939.8
	9 Quinoline	129	7.168	7.168	(0.735)	173501	800.000	881.3
	11 1H-Indole	117	7.716	7.716	(0.791)	165313	800.000	872.5
	12 2-Methylnaphthalene	142	7.830	7.830	(0.802)	195666	800.000	857.1
	13 1-Methylnaphthalene	142	8.020	8.020	(0.822)	183272	800.000	905.7
	14 Biphenyl	154	8.692	8.692	(0.891)	246440	800.000	861.0
	15 2,6-Dimethyl Naphthalene	156	8.983	8.983	(0.920)	180922	800.000	911.3
	16 Acenaphthylene	152	9.500	9.500	(0.973)	286815	800.000	878.1
	18 Acenaphthene	154	9.812	9.812	(1.006)	176340	800.000	854.8
	19 Dibenzofuran	168	10.136	10.136	(1.039)	240085	800.000	811.7
	20 2,3,5-Trimethyl Naphthalene	170	10.489	10.489	(0.847)	167931	800.000	851.5
	22 Fluorene	166	10.739	10.739	(0.868)	207187	800.000	863.6(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.197	12.197	(0.985)	292856	800.000	864.0
25 Phenanthrene	178	12.413	12.413	(1.003)	296977	800.000	856.1
26 Anthracene	178	12.499	12.499	(1.010)	285011	800.000	838.3
27 Acridine	179	12.568	12.568	(1.015)	218268	800.000	981.7
28 Carbazole	167	12.793	12.793	(1.034)	243078	800.000	902.4
29 1-Methyl Phenanthrene	192	13.458	13.458	(1.087)	214670	800.000	868.9
30 Fluoranthene	202	14.437	14.437	(1.166)	288410	800.000	812.9
31 Pyrene	202	14.821	14.821	(1.197)	310085	800.000	784.7
34 Benzo(a)anthracene	228	16.799	16.799	(0.882)	258383	800.000	962.7
35 Chrysene	228	16.859	16.859	(0.885)	354576	800.000	848.3
36 6-Methyl Chrysene	242	17.585	17.585	(0.923)	245783	800.000	879.7
32 7,12-Dimethylbenz(a)anthracen	256	18.450	18.450	(0.969)	145577	800.000	861.5
38 Benzo(b)fluoranthene	252	18.473	18.473	(0.970)	305983	800.000	891.1
40 Benzo(k)fluoranthene	252	18.511	18.511	(0.972)	418071	800.000	895.4
41 Benzo(e)pyrene	252	18.882	18.882	(0.991)	334346	800.000	868.9
43 Benzo(a)pyrene	252	18.958	18.958	(0.995)	335453	800.000	910.0
44 Perylene	252	19.087	19.087	(1.002)	393751	800.000	885.3
45 3-Methylcholanthrene	268	19.466	19.466	(1.022)	198844	800.000	874.2
46 Dibenz(a,h)acridine	279	20.418	20.418	(1.072)	244434	800.000	967.5
47 Dibenz(a,j)acridine	279	20.515	20.515	(1.077)	339709	800.000	851.7
48 Indeno(1,2,3-cd)pyrene	276	20.881	20.881	(1.096)	441309	800.000	890.8
49 Dibenz(a,h)anthracene	278	20.894	20.894	(1.097)	362267	800.000	927.4
50 7H-dibenzo(c,g)carbazole	267	21.239	21.239	(1.115)	225897	800.000	819.9(M)
51 Benzo(g,h,i)perylene	276	21.447	21.447	(1.126)	379599	800.000	864.7
52 Dibenzo(a,l)pyrene	302	24.370	24.370	(1.279)	302323	800.000	856.0
53 Dibenzo(a,e)pyrene	302	25.534	25.534	(1.340)	380156	800.000	862.1
54 Dibenzo(a,i)pyrene	302	26.004	26.004	(1.365)	264176	800.000	933.5(H)
55 Dibenzo(a,h)pyrene	302	26.256	26.256	(1.378)	341433	800.000	862.9

QC Flag Legend

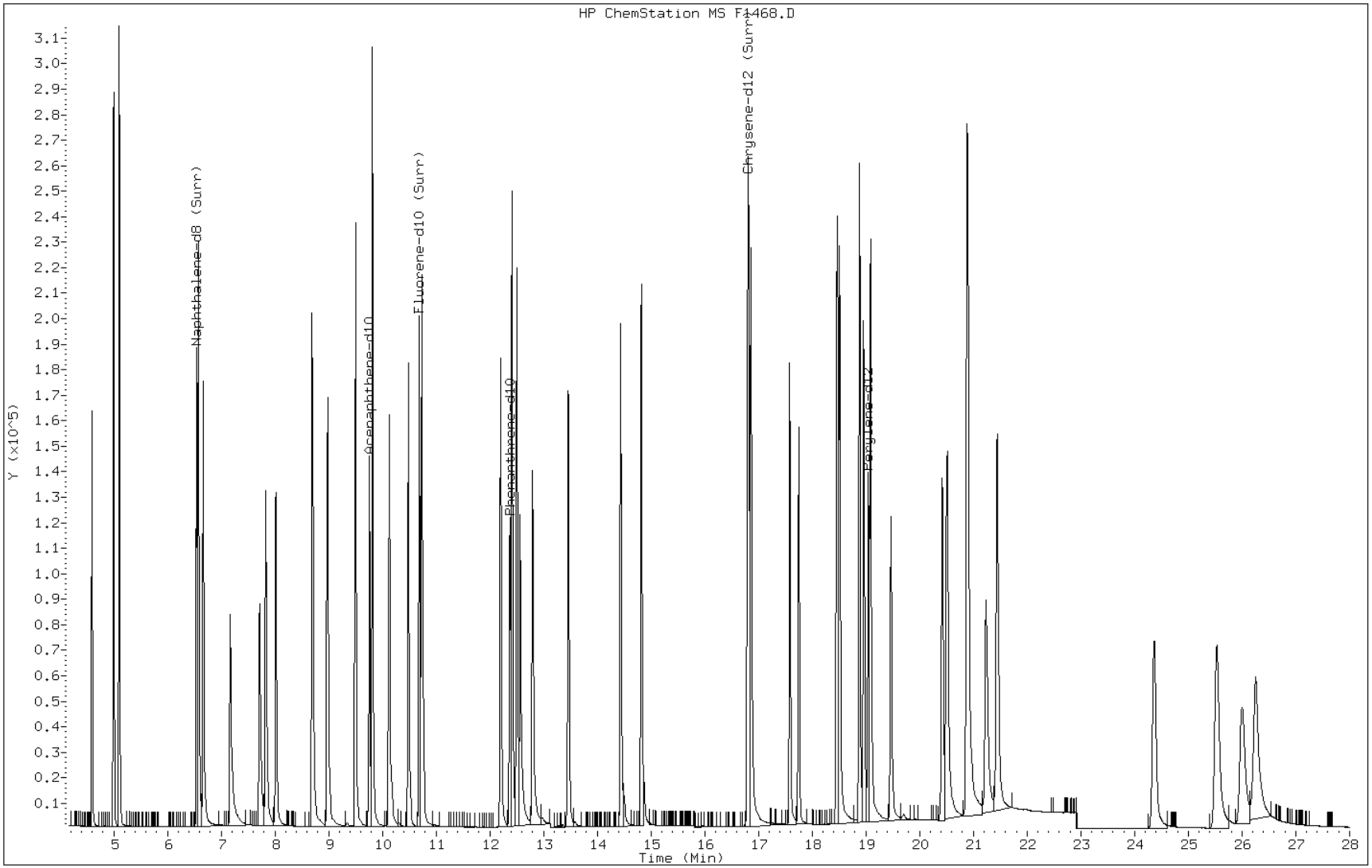
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: F1468.D

Date: 30-SEP-2011 11:37

Client ID: Instrument: F.i

Sample Info: std800-1014734,cslp,092811p;111111e Operator: ILCZYSZD



Manual Integration Report

Data File: F1468.D
Inj. Date and Time: 30-SEP-2011 11:37
Instrument ID: F.i
Client ID:
Compound: 22 Fluorene
CAS #: 86-73-7
Report Date: 10/07/2011

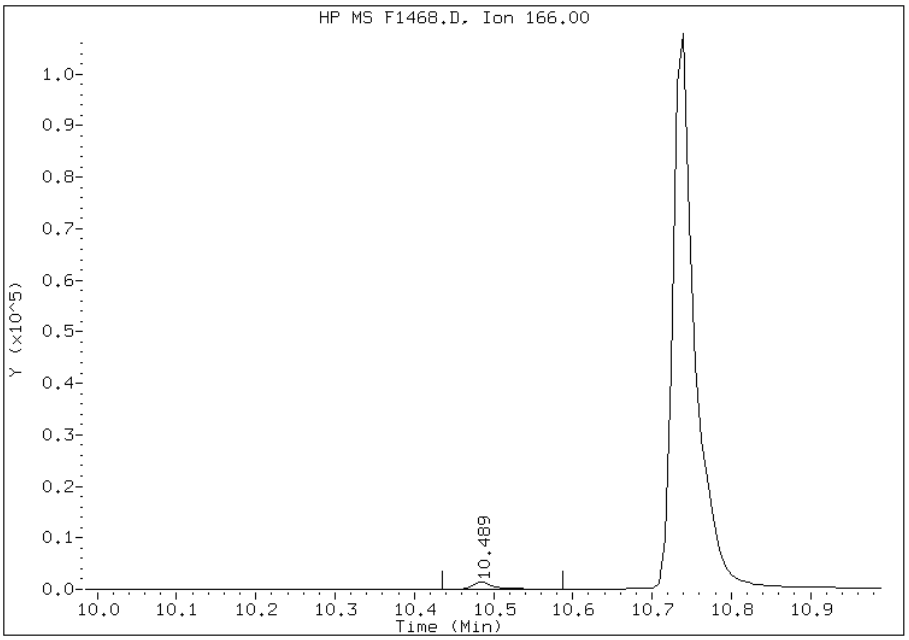
Processing Integration Results

RT: 10.49

Response: 2268

Amount: 12

Conc: 12



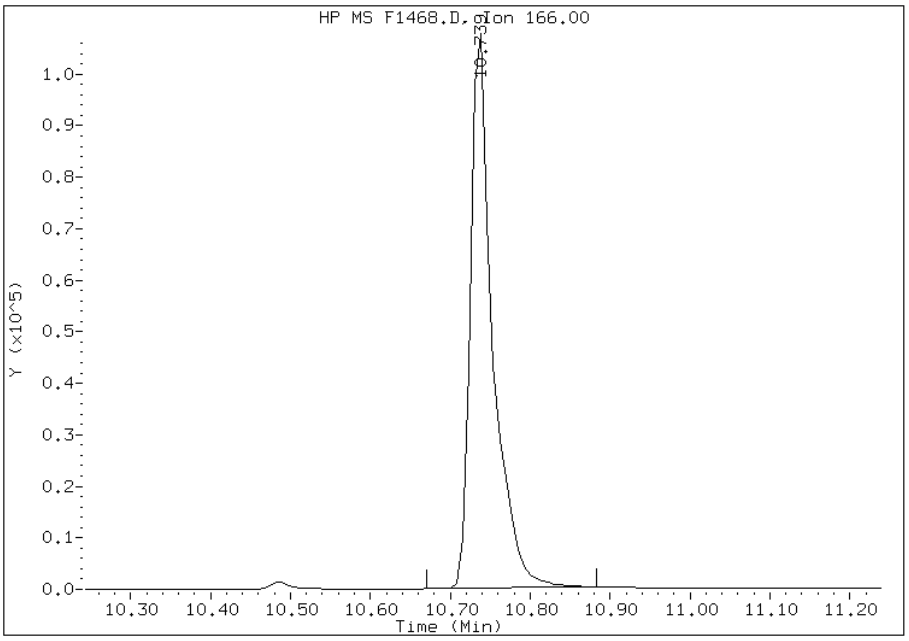
Manual Integration Results

RT: 10.74

Response: 207187

Amount: 864

Conc: 864



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte Misidentified by the Data System

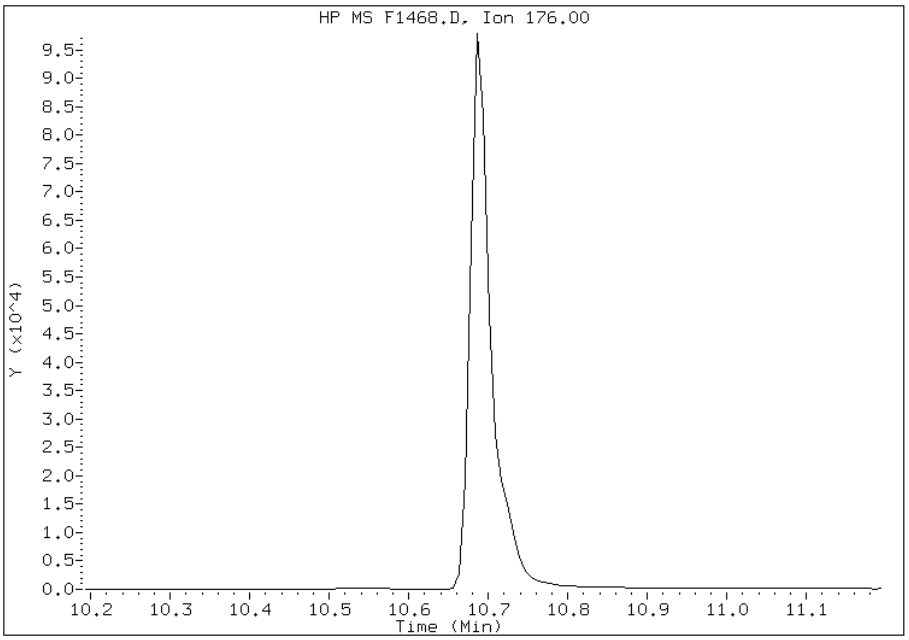
Manual Integration Report

Data File: F1468.D
Inj. Date and Time: 30-SEP-2011 11:37
Instrument ID: F.i
Client ID:
Compound: 21 Fluorene-d10 (Surr)
CAS #:
Report Date: 10/07/2011

Processing Integration Results

Not Detected

Expected RT: 10.69



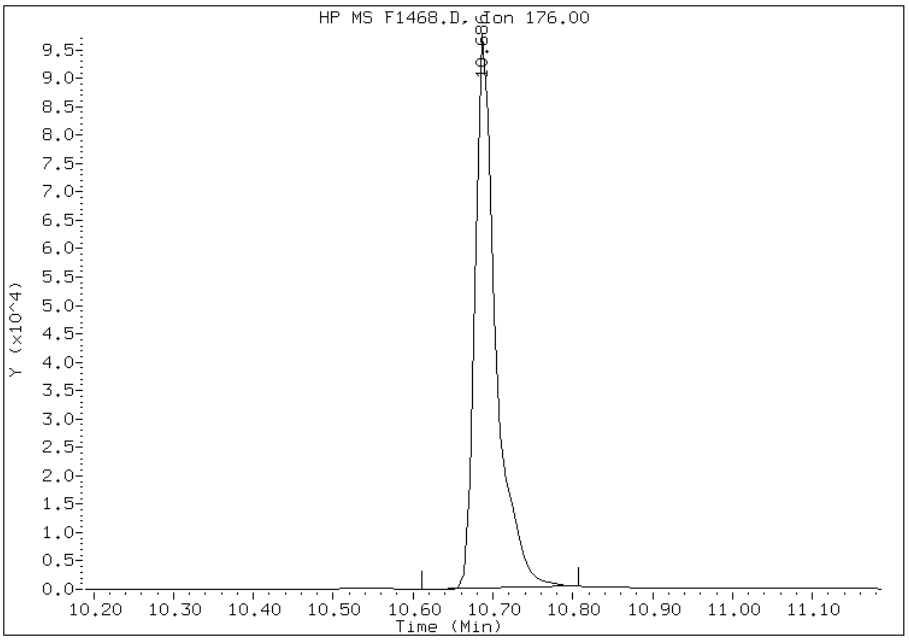
Manual Integration Results

RT: 10.69

Response: 178972

Amount: 825

Conc: 825



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte not Identified by the Data System

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\F1469.D
Lab Smp Id: std1200-1014735
Inj Date : 30-SEP-2011 12:14
Operator : ILCZYSZD Inst ID: F.i
Smp Info : std1200-1014735,cslp,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\CSLPSIM.m
Meth Date : 13-Oct-2011 16:46 vasquezk Quant Type: ISTD
Cal Date : 30-SEP-2011 12:14 Cal File: F1469.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC365

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ml)	ON-COL (ng/ml)
*	17 Acenaphthene-d10	164	9.758	9.758	(1.000)	130006	600.000	
*	24 Phenanthrene-d10	188	12.378	12.378	(1.000)	216016	600.000	
*	42 Perylene-d12	264	19.049	19.049	(1.000)	280610	600.000	
$	5 Naphthalene-d8 (Surr)	136	6.543	6.543	(0.671)	423136	1200.00	1332(A)
$	21 Fluorene-d10 (Surr)	176	10.685	10.685	(0.863)	291709	1200.00	1210(AM)
$	33 Chrysene-d12 (Surr)	240	16.816	16.816	(0.883)	504899	1200.00	1279(A)
	1 2,3-Benzofuran	118	4.598	4.598	(0.471)	212774	1200.00	1218(A)
	2 2,3-Dihydroindene	117	5.000	5.000	(0.512)	266757	1200.00	1220(A)
	3 1H-Indene	116	5.103	5.103	(0.523)	266008	1200.00	1226(A)
	6 Naphthalene	128	6.576	6.576	(0.674)	459276	1200.00	1310(A)
	8 Benzo(b)thiophene	134	6.667	6.667	(0.683)	390349	1200.00	1360(A)
	9 Quinoline	129	7.168	7.168	(0.735)	279930	1200.00	1291(A)
	11 1H-Indole	117	7.716	7.716	(0.791)	259910	1200.00	1246(A)
	12 2-Methylnaphthalene	142	7.830	7.830	(0.802)	311505	1200.00	1239(A)
	13 1-Methylnaphthalene	142	8.020	8.020	(0.822)	290523	1200.00	1304(A)
	14 Biphenyl	154	8.692	8.692	(0.891)	385577	1200.00	1223(A)
	15 2,6-Dimethyl Naphthalene	156	8.982	8.982	(0.920)	281253	1200.00	1286(A)
	16 Acenaphthylene	152	9.500	9.500	(0.973)	465294	1200.00	1294(A)
	18 Acenaphthene	154	9.812	9.812	(1.006)	281628	1200.00	1240(A)
	19 Dibenzofuran	168	10.135	10.135	(1.039)	392547	1200.00	1205(A)
	20 2,3,5-Trimethyl Naphthalene	170	10.488	10.488	(0.847)	271960	1200.00	1241(A)
	22 Fluorene	166	10.738	10.738	(0.868)	341249	1200.00	1280(AM)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.197	12.197	(0.985)	475462	1200.00	1262(A)
25 Phenanthrene	178	12.413	12.413	(1.003)	484829	1200.00	1258(A)
26 Anthracene	178	12.499	12.499	(1.010)	474954	1200.00	1257(A)
27 Acridine	179	12.568	12.568	(1.015)	366091	1200.00	1482(A)
28 Carbazole	167	12.793	12.793	(1.034)	406040	1200.00	1356(A)
29 1-Methyl Phenanthrene	192	13.458	13.458	(1.087)	355196	1200.00	1294(A)
30 Fluoranthene	202	14.437	14.437	(1.166)	484334	1200.00	1229(A)
31 Pyrene	202	14.821	14.821	(1.197)	519860	1200.00	1184
34 Benzo(a)anthracene	228	16.799	16.799	(0.882)	446508	1200.00	1482(A)
35 Chrysene	228	16.859	16.859	(0.885)	575467	1200.00	1226(A)
36 6-Methyl Chrysene	242	17.585	17.585	(0.923)	408561	1200.00	1303(A)
32 7,12-Dimethylbenz(a)anthracen	256	18.450	18.450	(0.969)	244721	1200.00	1290(A)
38 Benzo(b)fluoranthene	252	18.473	18.473	(0.970)	534919	1200.00	1388(A)
40 Benzo(k)fluoranthene	252	18.511	18.511	(0.972)	683174	1200.00	1304(A)
41 Benzo(e)pyrene	252	18.882	18.882	(0.991)	569681	1200.00	1319(A)
43 Benzo(a)pyrene	252	18.958	18.958	(0.995)	564468	1200.00	1364(A)
44 Perylene	252	19.087	19.087	(1.002)	656381	1200.00	1315(A)
45 3-Methylcholanthrene	268	19.466	19.466	(1.022)	337068	1200.00	1320(A)
46 Dibenz(a,h)acridine	279	20.418	20.418	(1.072)	429138	1200.00	1513(A)
47 Dibenz(a,j)acridine	279	20.505	20.505	(1.076)	565423	1200.00	1263(A)
48 Indeno(1,2,3-cd)pyrene	276	20.881	20.881	(1.096)	756826	1200.00	1361(A)
49 Dibenz(a,h)anthracene	278	20.894	20.894	(1.097)	613459	1200.00	1399(A)
50 7H-dibenzo(c,g)carbazole	267	21.239	21.239	(1.115)	392352	1200.00	1269(AM)
51 Benzo(g,h,i)perylene	276	21.447	21.447	(1.126)	644608	1200.00	1308(A)
52 Dibenzo(a,l)pyrene	302	24.365	24.365	(1.279)	511514	1200.00	1290(A)
53 Dibenzo(a,e)pyrene	302	25.530	25.530	(1.340)	640450	1200.00	1294(A)
54 Dibenzo(a,i)pyrene	302	25.999	25.999	(1.365)	459524	1200.00	1447(AH)
55 Dibenzo(a,h)pyrene	302	26.249	26.249	(1.378)	581708	1200.00	1310(A)

QC Flag Legend

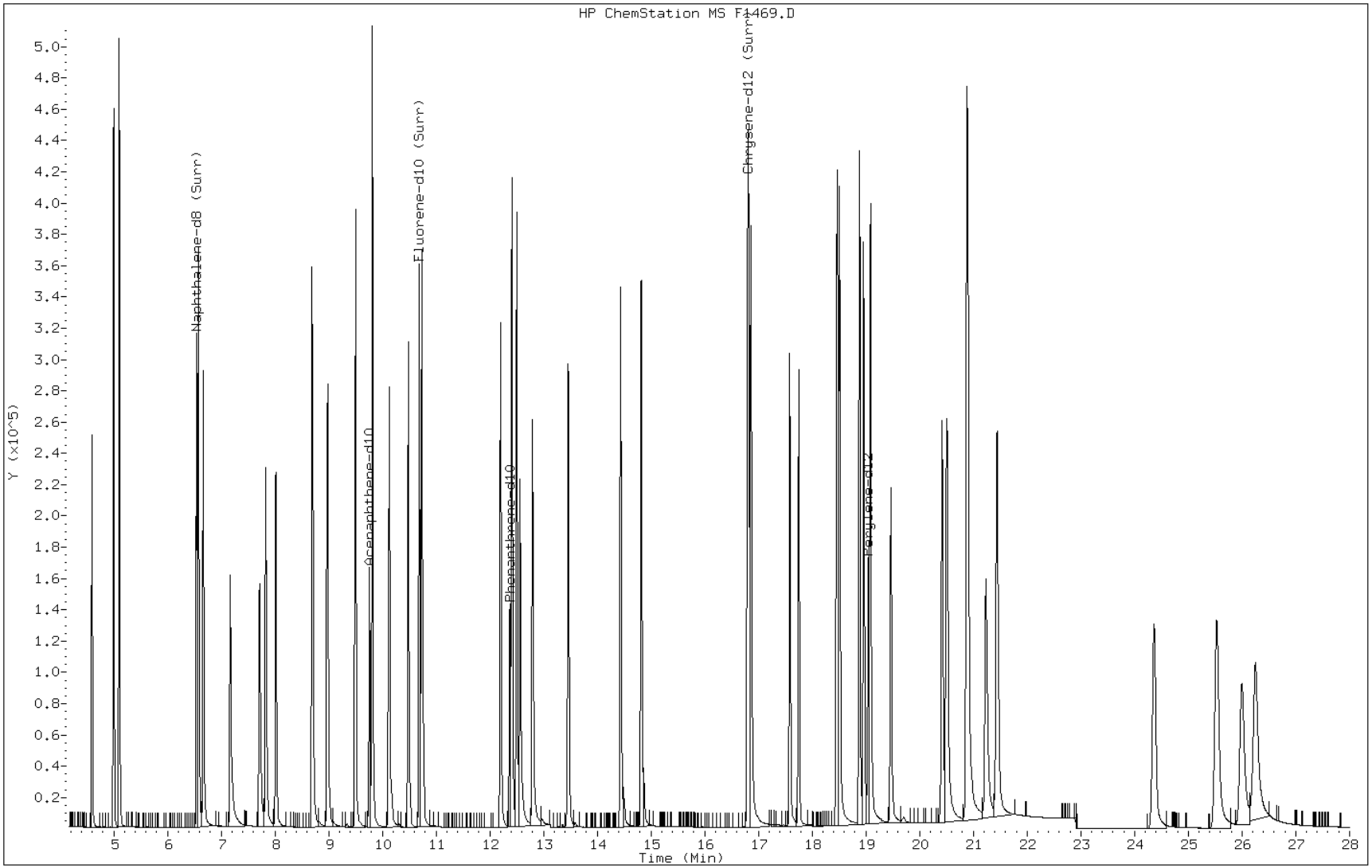
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: F1469.D

Date: 30-SEP-2011 12:14

Client ID: Instrument: F.i

Sample Info: std1200-1014735,cslp,092811p;111111e Operator: ILCZYSZD



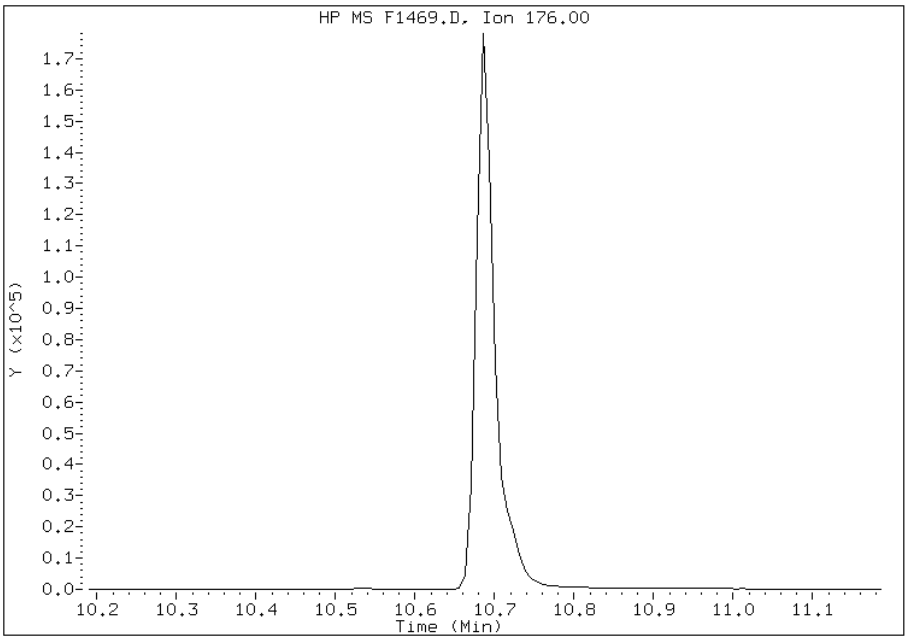
Manual Integration Report

Data File: F1469.D
Inj. Date and Time: 30-SEP-2011 12:14
Instrument ID: F.i
Client ID:
Compound: 21 Fluorene-d10 (Surr)
CAS #:
Report Date: 10/14/2011

Processing Integration Results

Not Detected

Expected RT: 10.69



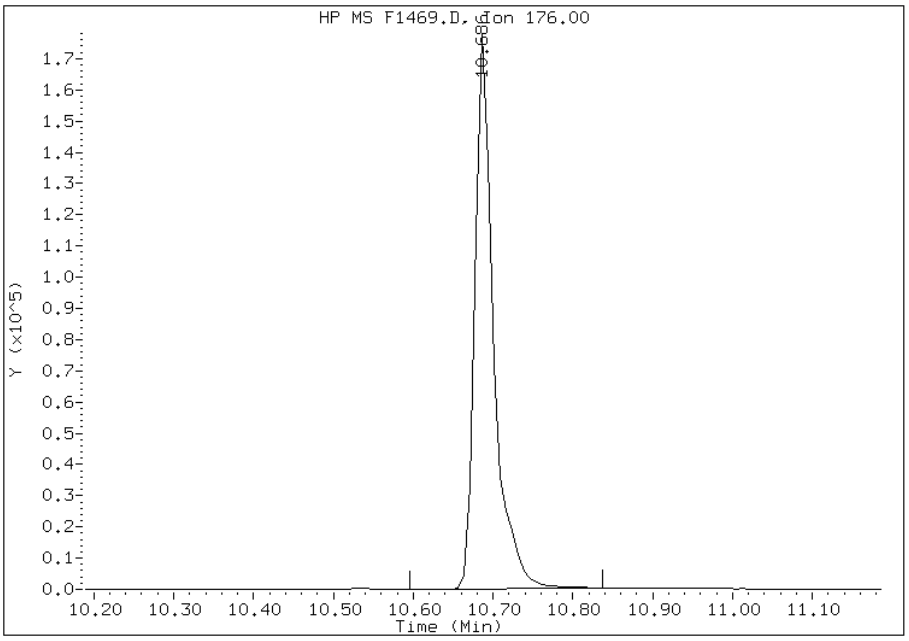
Manual Integration Results

RT: 10.69

Response: 291709

Amount: 1210

Conc: 1210



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte not Identified by the Data System

Manual Integration Report

Data File: F1469.D
Inj. Date and Time: 30-SEP-2011 12:14
Instrument ID: F.i
Client ID:
Compound: 22 Fluorene
CAS #: 86-73-7
Report Date: 10/14/2011

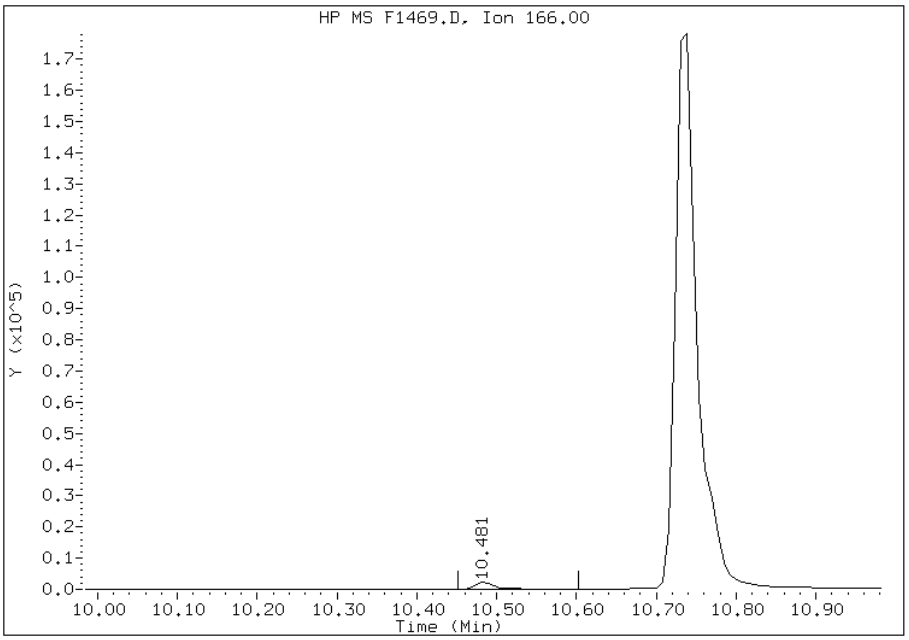
Processing Integration Results

RT: 10.48

Response: 3632

Amount: 14

Conc: 14



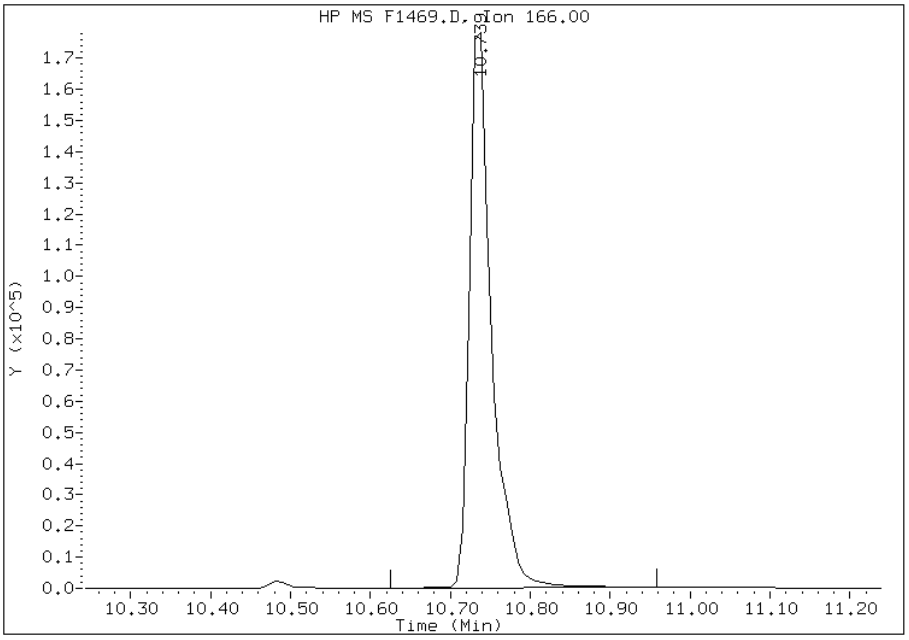
Manual Integration Results

RT: 10.74

Response: 341249

Amount: 1280

Conc: 1280



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte Misidentified by the Data System

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Lab Sample ID: ICV 280-89821/8 Calibration Date: 09/30/2011 12:50

Instrument ID: MSS_F Calib Start Date: 09/30/2011 08:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 09/30/2011 08:31

Lab File ID: F1470.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Indene	Ave	1.001	0.9146		548000	600000	-8.7	35.0
Naphthalene	Ave	1.618	1.776		658000	600000	9.7	35.0
2-Methylnaphthalene	Ave	1.160	1.195		618000	600000	3.0	35.0
1-Methylnaphthalene	Ave	1.028	1.204		703000	600000	17.1	35.0
Acenaphthylene	Ave	1.660	1.857		671000	600000	11.9	35.0
Acenaphthene	Ave	1.048	1.099		629000	600000	4.8	35.0
Dibenzofuran	Ave	1.503	1.504		600000	600000	0.0	35.0
Fluorene	Ave	0.7404	0.8006		649000	600000	8.1	35.0
Phenanthrene	Ave	1.071	1.110		622000	600000	3.6	35.0
Anthracene	Ave	1.049	1.172		670000	600000	11.7	35.0
Carbazole	Ave	0.8314	0.8888		641000	600000	6.9	35.0
Fluoranthene	Ave	1.095	1.252		686000	600000	14.3	35.0
Pyrene	Ave	1.220	1.303		641000	600000	6.8	35.0
Benzo[a]anthracene	Ave	0.6441	0.7949		740000	600000	23.4	35.0
Chrysene	Ave	1.003	1.114		667000	600000	11.1	35.0
Benzo[b]fluoranthene	Ave	0.8241	0.9671		704000	600000	17.4	35.0
Benzo[k]fluoranthene	Ave	1.121	1.273		682000	600000	13.6	35.0
Benzo[a]pyrene	Ave	0.8847	0.9475		643000	600000	7.1	35.0
Indeno[1,2,3-cd]pyrene	Ave	1.189	1.392		702000	600000	17.1	35.0
Dibenz(a,h)anthracene	Ave	0.9375	1.160		742000	600000	23.7	35.0
Benzo[g,h,i]perylene	Ave	1.054	1.170		666000	600000	11.0	35.0

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\F1470.D
Lab Smp Id: icv-1014736
Inj Date : 30-SEP-2011 12:50
Operator : ILCZYSZD Inst ID: F.i
Smp Info : icv-1014736,cslp,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\093011B.B\CSLPSIM.m
Meth Date : 07-Oct-2011 06:05 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 12:14 Cal File: F1469.D
Als bottle: 8 QC Sample: SSV
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PAHSSV.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
* 17 Acenaphthene-d10	164	9.758	9.769	(1.000)	121792	600.000	
* 24 Phenanthrene-d10	188	12.378	12.378	(1.000)	198462	600.000	
* 42 Perylene-d12	264	19.049	19.057	(1.000)	250403	600.000	
$ 5 Naphthalene-d8 (Surr)	136	Compound Not Detected.					
$ 21 Fluorene-d10 (Surr)	176	Compound Not Detected.					
$ 33 Chrysene-d12 (Surr)	240	Compound Not Detected.					
3 1H-Indene	116	5.103	5.109	(0.523)	111388	548.054	548.0
6 Naphthalene	128	6.576	6.576	(0.674)	216304	658.415	658.4
12 2-Methylnaphthalene	142	7.830	7.841	(0.802)	145565	618.048	618.0
13 1-Methylnaphthalene	142	8.020	8.026	(0.822)	146679	702.628	702.6
16 Acenaphthylene	152	9.500	9.511	(0.973)	226179	671.189	671.2
18 Acenaphthene	154	9.812	9.823	(1.006)	133809	628.738	628.7
19 Dibenzofuran	168	10.136	10.136	(1.039)	183188	600.298	600.3
22 Fluorene	166	10.738	10.746	(0.868)	158892	648.779	648.8(M)
25 Phenanthrene	178	12.413	12.421	(1.003)	220235	621.887	621.9
26 Anthracene	178	12.499	12.508	(1.010)	232520	669.916	669.9
28 Carbazole	167	12.793	12.802	(1.034)	176385	641.429	641.4
30 Fluoranthene	202	14.432	14.441	(1.166)	248405	685.878	685.9
31 Pyrene	202	14.821	14.826	(1.197)	258541	640.897	640.9
34 Benzo(a)anthracene	228	16.799	16.807	(0.882)	199041	740.441	740.4
35 Chrysene	228	16.859	16.868	(0.885)	279065	666.571	666.6
38 Benzo(b)fluoranthene	252	18.473	18.481	(0.970)	242160	704.105	704.1

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
40 Benzo(k)fluoranthene	252	18.511	18.519	(0.972)	318784	681.692	681.7
43 Benzo(a)pyrene	252	18.958	18.966	(0.995)	237249	642.589	642.6
48 Indeno(1,2,3-cd)pyrene	276	20.881	20.901	(1.096)	348525	702.417	702.4
49 Dibenz(a,h)anthracene	278	20.894	20.914	(1.097)	290450	742.317	742.3
51 Benzo(g,h,i)perylene	276	21.447	21.467	(1.126)	292933	666.176	666.2

QC Flag Legend

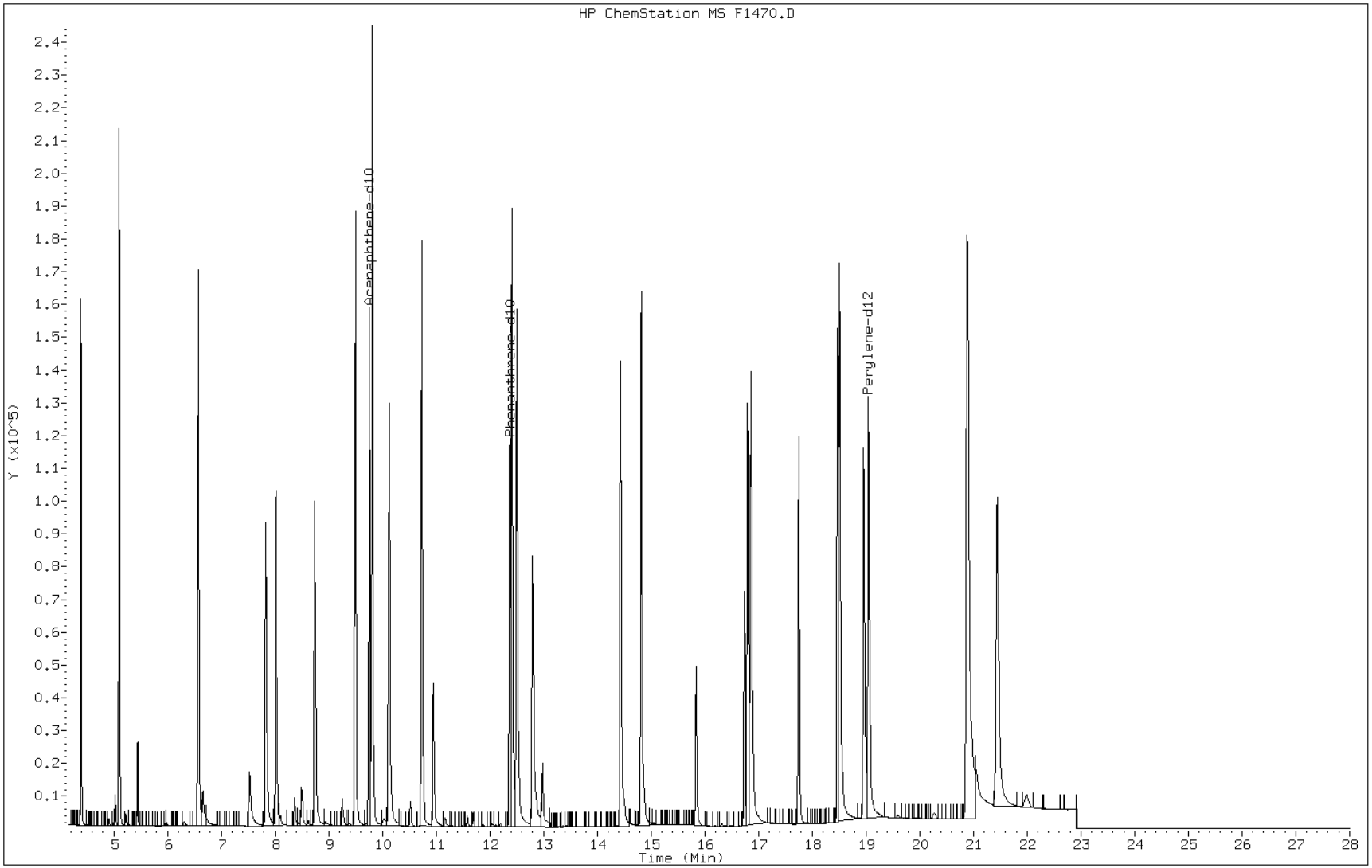
M - Compound response manually integrated.

Data File: F1470.D

Date: 30-SEP-2011 12:50

Client ID: Instrument: F.i

Sample Info: icv-1014736,cslp,092811p;111111e Operator: ILCZYSZD



Manual Integration Report

Data File: F1470.D
Inj. Date and Time: 30-SEP-2011 12:50
Instrument ID: F.i
Client ID:
Compound: 22 Fluorene
CAS #: 86-73-7
Report Date: 10/07/2011

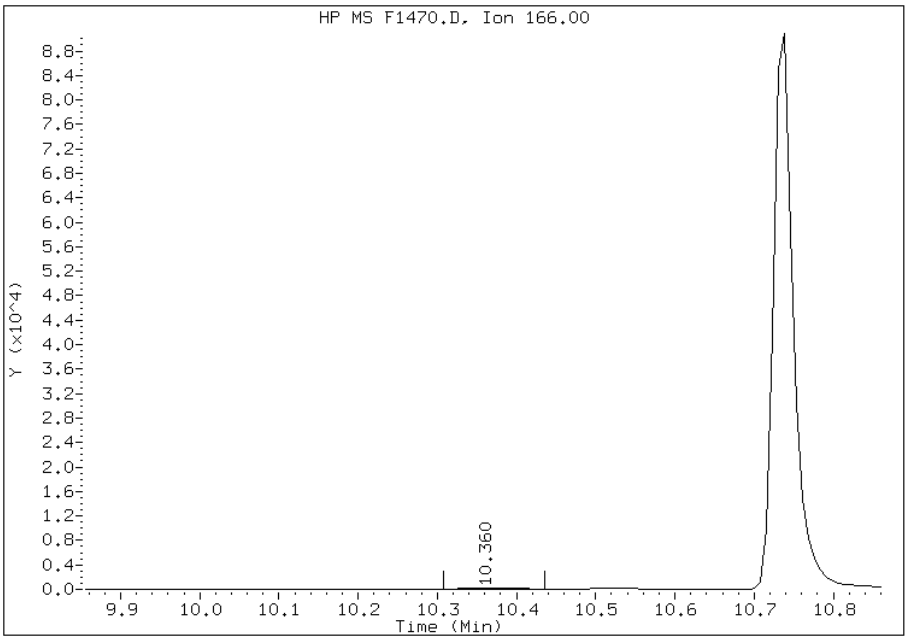
Processing Integration Results

RT: 10.36

Response: 780

Amount: 3

Conc: 3



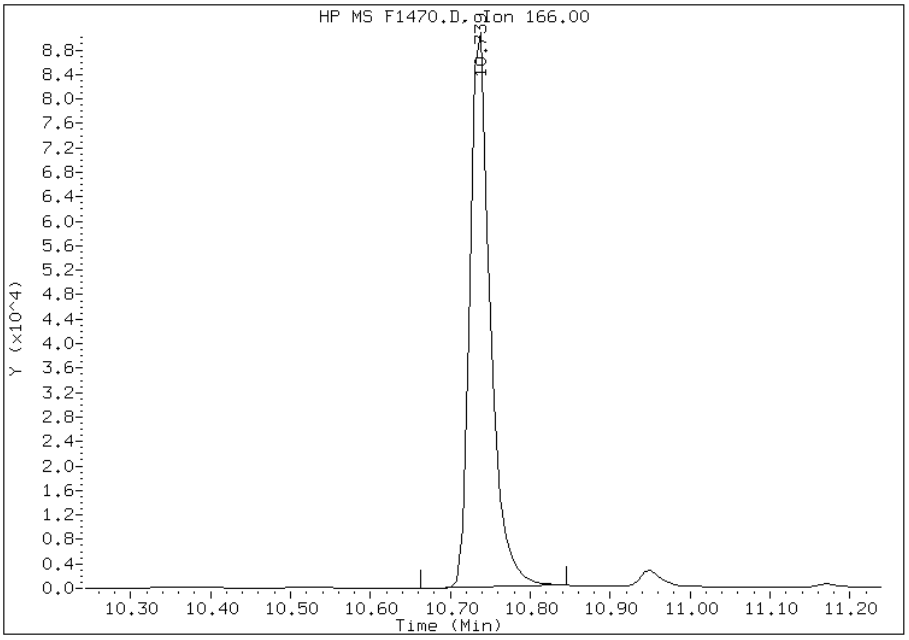
Manual Integration Results

RT: 10.74

Response: 158892

Amount: 649

Conc: 649



Manually Integrated By:
Manual Integration Reason: Analyte Misidentified by the Data System

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Lab Sample ID: CCV 280-89849/1 Calibration Date: 10/05/2011 12:59

Instrument ID: MSS_F Calib Start Date: 09/30/2011 08:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 09/30/2011 08:31

Lab File ID: F1585.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,3-Benzofuran	Ave	0.8063	0.8859		330000	300000	9.9	35.0
2,3-Dihydroindene	Ave	1.009	1.110		330000	300000	10.0	35.0
Indene	Ave	1.001	1.073		321000	300000	7.1	35.0
Naphthalene	Ave	1.618	1.874		347000	300000	15.8	35.0
Benzo(b)thiophene	Ave	1.325	1.529		346000	300000	15.4	35.0
Quinoline	Ave	1.001	0.9634		289000	300000	-3.7	35.0
Indole	Ave	0.9630	0.9649		301000	300000	0.2	35.0
2-Methylnaphthalene	Ave	1.160	1.214		314000	300000	4.6	35.0
1-Methylnaphthalene	Ave	1.028	1.173		342000	300000	14.0	35.0
Biphenyl	Ave	1.455	1.561		322000	300000	7.3	35.0
Acenaphthylene	Ave	1.660	1.567		283000	300000	-5.6	35.0
Acenaphthene	Ave	1.048	1.102		315000	300000	5.1	20.0
Dibenzofuran	Ave	1.503	1.568		313000	300000	4.3	35.0
Fluorene	Ave	0.7404	0.7999		324000	300000	8.0	35.0
Dibenzothiophene	Ave	1.046	1.121		321000	300000	7.2	35.0
Phenanthrene	Ave	1.071	1.155		324000	300000	7.9	35.0
Anthracene	Ave	1.049	0.9463		271000	300000	-9.8	35.0
Acridine	Ave	0.6862	0.6769		296000	300000	-1.4	35.0
Carbazole	Ave	0.8314	0.8531		308000	300000	2.6	35.0
Fluoranthene	Ave	1.095	1.204		330000	300000	9.9	20.0
Pyrene	Ave	1.220	1.236		304000	300000	1.3	35.0
Benzo[a]anthracene	Ave	0.6441	0.7878		367000	300000	22.3	35.0
Chrysene	Ave	1.003	1.109		332000	300000	10.5	35.0
7,12-Dimethylbenz(a)anthracene	Ave	0.4056	0.4438		328000	300000	9.4	35.0
Benzo[b]fluoranthene	Ave	0.8241	0.9289		338000	300000	12.7	35.0
Benzo[k]fluoranthene	Ave	1.121	1.285		344000	300000	14.6	35.0
Benzo[e]pyrene	Ave	0.9235	1.052		342000	300000	13.9	20.0
Benzo[a]pyrene	Ave	0.8847	1.005		341000	300000	13.6	35.0
Perylene	Ave	1.067	1.141		321000	300000	6.9	35.0
3-Methylcholanthrene	Ave	0.5459	0.6245		343000	300000	14.4	35.0
Indeno[1,2,3-cd]pyrene	Ave	1.189	1.255		317000	300000	5.6	35.0
Dibenz(a,h)anthracene	Ave	0.9375	1.014		325000	300000	8.2	35.0
Benzo[g,h,i]perylene	Ave	1.054	1.128		321000	300000	7.1	35.0
Naphthalene-d8 (Surr)	Ave	1.467	1.683		344000	300000	14.8	35.0
Fluorene-d10 (Surr)	Ave	0.6695	0.6957		312000	300000	3.9	35.0
Chrysene-d12 (Surr)	Ave	0.8442	0.9563		340000	300000	13.3	35.0

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\100511.B\F1585.D
Lab Smp Id: ccv-1014732
Inj Date : 05-OCT-2011 12:59
Operator : ILCZYSZD Inst ID: F.i
Smp Info : ccv-1014732,cslpsim,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\100511.B\CSLPSIM.m
Meth Date : 07-Oct-2011 07:20 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 08:31 Cal File: F1463.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ml)	ON-COL (ng/ml)
*	17 Acenaphthene-d10	164	9.801	9.801	(1.000)	135342	600.000	
*	24 Phenanthrene-d10	188	12.421	12.421	(1.000)	217976	600.000	
*	42 Perylene-d12	264	19.094	19.094	(1.000)	241935	600.000	
$	5 Naphthalene-d8 (Surr)	136	6.582	6.582	(0.672)	113914	300.000	344.3
$	21 Fluorene-d10 (Surr)	176	10.731	10.731	(0.864)	75827	300.000	311.8(M)
$	33 Chrysene-d12 (Surr)	240	16.868	16.868	(0.883)	115685	300.000	339.8
	1 2,3-Benzofuran	118	4.630	4.630	(0.472)	59948	300.000	329.6
	2 2,3-Dihydroindene	117	5.033	5.033	(0.513)	75102	300.000	329.8
	3 1H-Indene	116	5.136	5.136	(0.524)	72584	300.000	321.4
	6 Naphthalene	128	6.615	6.615	(0.675)	126835	300.000	347.4
	8 Benzo(b)thiophene	134	6.706	6.706	(0.684)	103450	300.000	346.2
	9 Quinoline	129	7.214	7.214	(0.736)	65193	300.000	288.8
	11 1H-Indole	117	7.759	7.759	(0.792)	65297	300.000	300.6
	12 2-Methylnaphthalene	142	7.879	7.879	(0.804)	82161	300.000	313.9
	13 1-Methylnaphthalene	142	8.064	8.064	(0.823)	79354	300.000	342.1
	14 Biphenyl	154	8.745	8.745	(0.892)	105610	300.000	321.8
	15 2,6-Dimethyl Naphthalene	156	9.026	9.026	(0.921)	74350	300.000	326.6
	16 Acenaphthylene	152	9.543	9.543	(0.974)	106023	300.000	283.1
	18 Acenaphthene	154	9.855	9.855	(1.005)	74552	300.000	315.2
	19 Dibenzofuran	168	10.179	10.179	(1.038)	106113	300.000	312.9
	20 2,3,5-Trimethyl Naphthalene	170	10.534	10.534	(0.848)	69146	300.000	312.7
	22 Fluorene	166	10.784	10.784	(0.868)	87180	300.000	324.1(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.249	12.249	(0.986)	122179	300.000	321.5
25 Phenanthrene	178	12.456	12.456	(1.003)	125881	300.000	323.6
26 Anthracene	178	12.542	12.542	(1.010)	103140	300.000	270.6
27 Acridine	179	12.611	12.611	(1.015)	73771	300.000	295.9
28 Carbazole	167	12.836	12.836	(1.033)	92976	300.000	307.8
29 1-Methyl Phenanthrene	192	13.501	13.501	(1.087)	88004	300.000	317.7
30 Fluoranthene	202	14.480	14.480	(1.166)	131197	300.000	329.8
31 Pyrene	202	14.865	14.865	(1.197)	134667	300.000	303.9
34 Benzo(a)anthracene	228	16.851	16.851	(0.882)	95303	300.000	366.9
35 Chrysene	228	16.911	16.911	(0.886)	134093	300.000	331.5
36 6-Methyl Chrysene	242	17.628	17.628	(0.923)	94000	300.000	347.6
32 7,12-Dimethylbenz(a)anthracen	256	18.496	18.496	(0.969)	53683	300.000	328.3
38 Benzo(b)fluoranthene	252	18.519	18.519	(0.970)	112369	300.000	338.2
40 Benzo(k)fluoranthene	252	18.556	18.556	(0.972)	155385	300.000	343.9
41 Benzo(e)pyrene	252	18.928	18.928	(0.991)	127294	300.000	341.8
43 Benzo(a)pyrene	252	19.003	19.003	(0.995)	121612	300.000	340.9
44 Perylene	252	19.132	19.132	(1.002)	137982	300.000	320.6
45 3-Methylcholanthrene	268	19.524	19.524	(1.023)	75541	300.000	343.2
46 Dibenz(a,h)acridine	279	20.486	20.486	(1.073)	79696	300.000	326.0
47 Dibenz(a,j)acridine	279	20.573	20.573	(1.077)	98411	300.000	255.0
48 Indeno(1,2,3-cd)pyrene	276	20.953	20.953	(1.097)	151835	300.000	316.7
49 Dibenz(a,h)anthracene	278	20.966	20.966	(1.098)	122691	300.000	324.5
50 7H-dibenzo(c,g)carbazole	267	21.317	21.317	(1.116)	85721	300.000	321.5
51 Benzo(g,h,i)perylene	276	21.525	21.525	(1.127)	136469	300.000	321.2
52 Dibenzo(a,l)pyrene	302	24.488	24.488	(1.282)	95066	300.000	278.2
53 Dibenzo(a,e)pyrene	302	25.670	25.670	(1.344)	127266	300.000	298.2(M)
54 Dibenzo(a,i)pyrene	302	26.155	26.155	(1.370)	86920	300.000	317.4
55 Dibenzo(a,h)pyrene	302	26.403	26.403	(1.383)	93875	300.000	245.2

QC Flag Legend

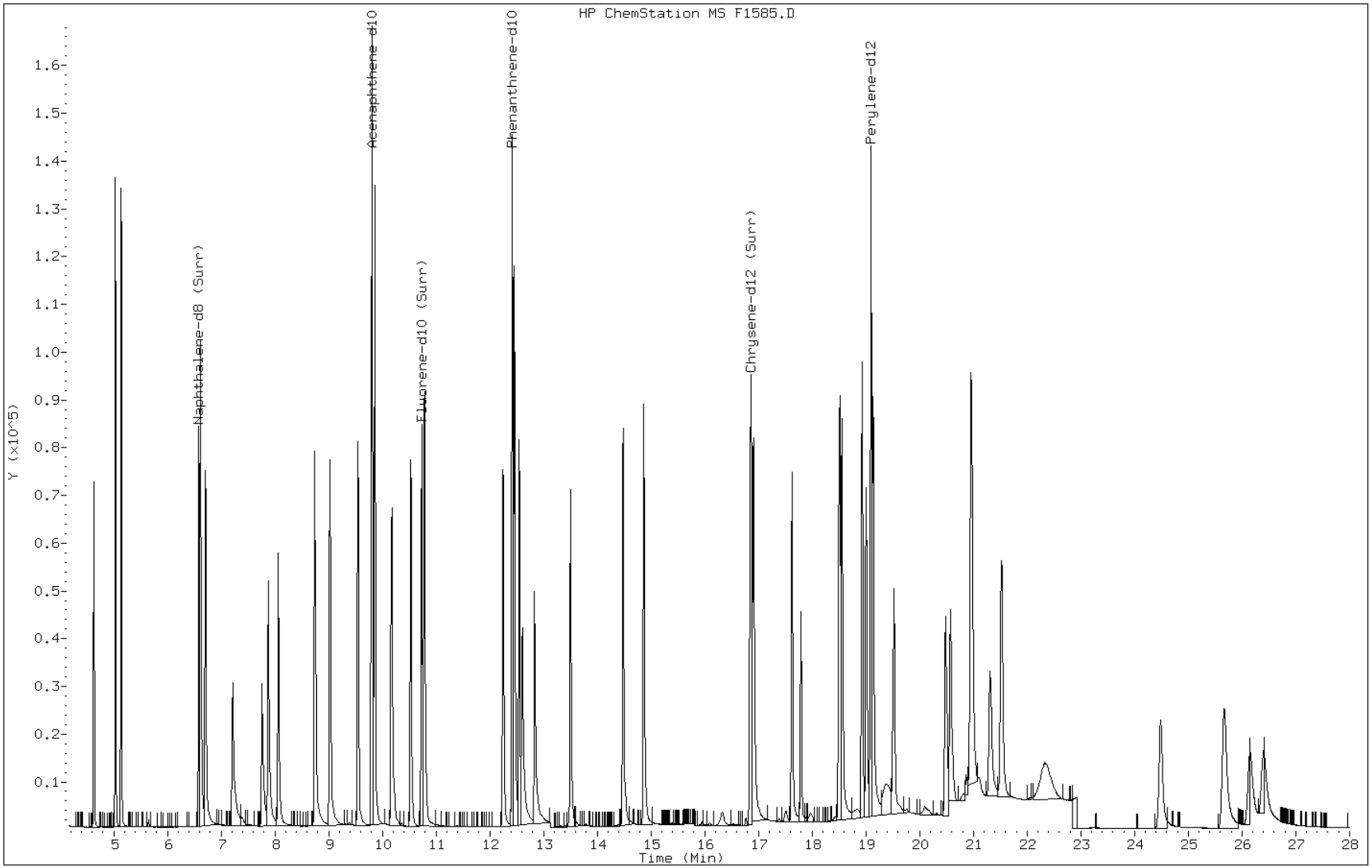
M - Compound response manually integrated.

Data File: F1585.D

Date: 05-OCT-2011 12:59

Client ID: Instrument: F.i

Sample Info: ccv-1014732,cslpsim,092811p;111111e Operator: ILCZYSZD



Manual Integration Report

Data File: F1585.D
Inj. Date and Time: 05-OCT-2011 12:59
Instrument ID: F.i
Client ID:
Compound: 22 Fluorene
CAS #: 86-73-7
Report Date: 10/07/2011

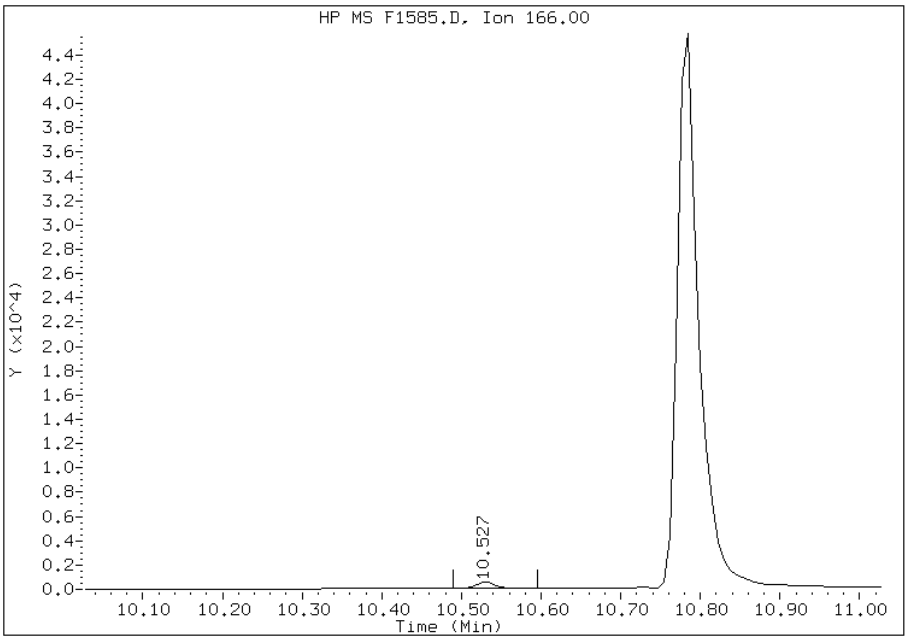
Processing Integration Results

RT: 10.53

Response: 915

Amount: 3

Conc: 3



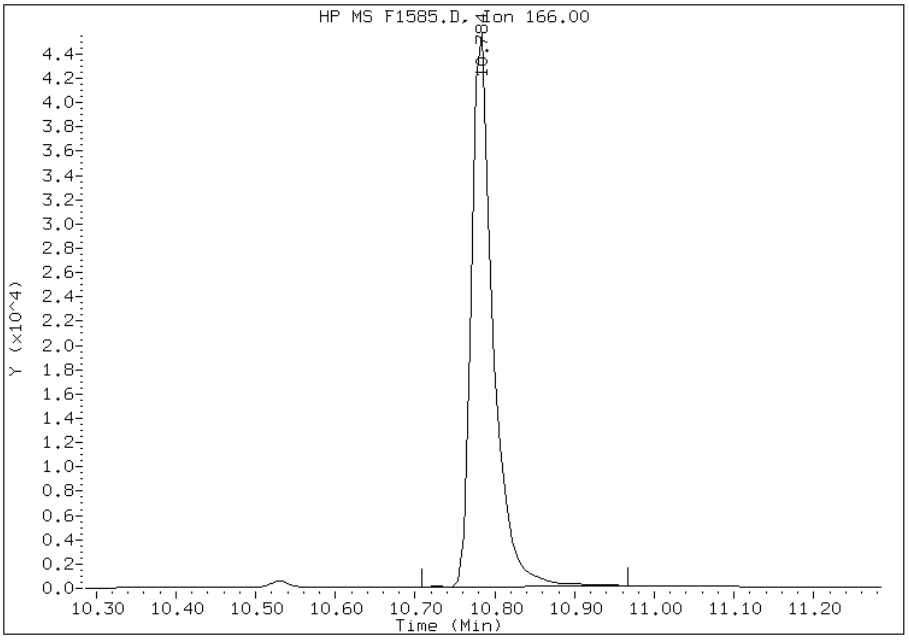
Manual Integration Results

RT: 10.78

Response: 87180

Amount: 324

Conc: 324



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte Misidentified by the Data System

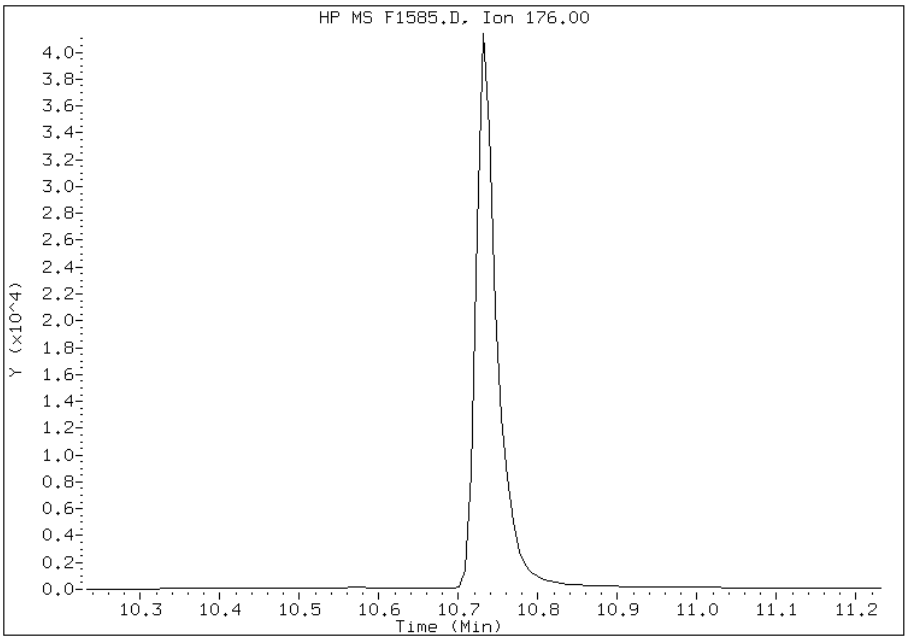
Manual Integration Report

Data File: F1585.D
Inj. Date and Time: 05-OCT-2011 12:59
Instrument ID: F.i
Client ID:
Compound: 21 Fluorene-d10 (Surr)
CAS #:
Report Date: 10/07/2011

Processing Integration Results

Not Detected

Expected RT: 10.73



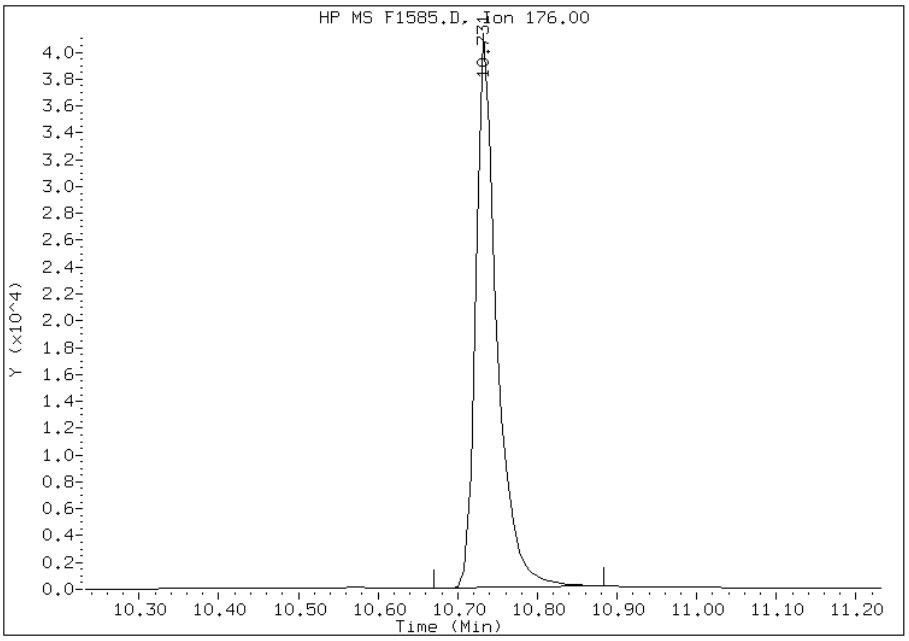
Manual Integration Results

RT: 10.73

Response: 75827

Amount: 312

Conc: 312



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte not Identified by the Data System

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Lab Sample ID: CCV 280-89868/1 Calibration Date: 10/06/2011 13:24

Instrument ID: MSS_F Calib Start Date: 09/30/2011 08:31

GC Column: Vf-5MS (30.25) ID: 0.25(mm) Calib End Date: 09/30/2011 08:31

Lab File ID: F1625.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,3-Benzofuran	Ave	0.8063	0.9331		347000	300000	15.7	35.0
2,3-Dihydroindene	Ave	1.009	1.164		346000	300000	15.4	35.0
Indene	Ave	1.001	1.129		338000	300000	12.8	35.0
Naphthalene	Ave	1.618	1.899		352000	300000	17.3	35.0
Benzo(b)thiophene	Ave	1.325	1.589		360000	300000	19.9	35.0
Quinoline	Ave	1.001	0.9629		289000	300000	-3.8	35.0
Indole	Ave	0.9630	0.9607		299000	300000	-0.2	35.0
2-Methylnaphthalene	Ave	1.160	1.199		310000	300000	3.3	35.0
1-Methylnaphthalene	Ave	1.028	1.213		354000	300000	17.9	35.0
Biphenyl	Ave	1.455	1.549		320000	300000	6.5	35.0
Acenaphthylene	Ave	1.660	1.652		298000	300000	-0.5	35.0
Acenaphthene	Ave	1.048	1.099		314000	300000	4.8	20.0
Dibenzofuran	Ave	1.503	1.469		293000	300000	-2.3	35.0
Fluorene	Ave	0.7404	0.7931		321000	300000	7.1	35.0
Dibenzothiophene	Ave	1.046	1.121		322000	300000	7.2	35.0
Phenanthrene	Ave	1.071	1.103		309000	300000	3.0	35.0
Anthracene	Ave	1.049	0.9547		273000	300000	-9.0	35.0
Acridine	Ave	0.6862	0.7145		312000	300000	4.1	35.0
Carbazole	Ave	0.8314	0.7586		274000	300000	-8.7	35.0
Fluoranthene	Ave	1.095	1.150		315000	300000	5.0	20.0
Pyrene	Ave	1.220	1.247		307000	300000	2.2	35.0
Benzo[a]anthracene	Ave	0.6441	0.7126		332000	300000	10.6	35.0
Chrysene	Ave	1.003	1.101		329000	300000	9.7	35.0
7,12-Dimethylbenz(a)anthracene	Ave	0.4056	0.4213		312000	300000	3.9	35.0
Benzo[b]fluoranthene	Ave	0.8241	0.9474		345000	300000	15.0	35.0
Benzo[k]fluoranthene	Ave	1.121	1.190		319000	300000	6.2	35.0
Benzo[e]pyrene	Ave	0.9235	1.020		331000	300000	10.4	20.0
Benzo[a]pyrene	Ave	0.8847	1.020		346000	300000	15.3	35.0
Perylene	Ave	1.067	1.210		340000	300000	13.4	35.0
3-Methylcholanthrene	Ave	0.5459	0.6000		330000	300000	9.9	35.0
Indeno[1,2,3-cd]pyrene	Ave	1.189	1.376		347000	300000	15.7	35.0
Dibenz(a,h)anthracene	Ave	0.9375	1.115		357000	300000	19.0	35.0
Benzo[g,h,i]perylene	Ave	1.054	1.273		362000	300000	20.8	35.0
Naphthalene-d8 (Surr)	Ave	1.467	1.664		340000	300000	13.4	35.0
Fluorene-d10 (Surr)	Ave	0.6695	0.7021		315000	300000	4.9	35.0
Chrysene-d12 (Surr)	Ave	0.8442	0.8755		311000	300000	3.7	35.0

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\100611.B\F1625.D
Lab Smp Id: ccv-1014732
Inj Date : 06-OCT-2011 13:24
Operator : ILCZYSZD Inst ID: F.i
Smp Info : ccv-1014732,cslpsim,092811p;111111e
Misc Info :
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\100611.B\CSLPSIM.m
Meth Date : 07-Oct-2011 07:29 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 08:31 Cal File: F1463.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allpah.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	1000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng/ml)	ON-COL (ng/ml)
*	17 Acenaphthene-d10	164	9.802	9.802	(1.000)	134307	600.000	
*	24 Phenanthrene-d10	188	12.422	12.422	(1.000)	207337	600.000	
*	42 Perylene-d12	264	19.095	19.095	(1.000)	256534	600.000	
$	5 Naphthalene-d8 (Surr)	136	6.583	6.583	(0.672)	111719	300.000	340.3
$	21 Fluorene-d10 (Surr)	176	10.731	10.731	(0.864)	72784	300.000	314.6(M)
$	33 Chrysene-d12 (Surr)	240	16.868	16.868	(0.883)	112294	300.000	311.1
	1 2,3-Benzofuran	118	4.630	4.630	(0.472)	62659	300.000	347.2
	2 2,3-Dihydroindene	117	5.033	5.033	(0.513)	78192	300.000	346.1
	3 1H-Indene	116	5.136	5.136	(0.524)	75839	300.000	338.4
	6 Naphthalene	128	6.615	6.615	(0.675)	127518	300.000	352.0
	8 Benzo(b)thiophene	134	6.713	6.713	(0.685)	106687	300.000	359.7
	9 Quinoline	129	7.220	7.220	(0.737)	64664	300.000	288.7
	11 1H-Indole	117	7.765	7.765	(0.792)	64515	300.000	299.3
	12 2-Methylnaphthalene	142	7.879	7.879	(0.804)	80514	300.000	310.0
	13 1-Methylnaphthalene	142	8.069	8.069	(0.823)	81435	300.000	353.7
	14 Biphenyl	154	8.745	8.745	(0.892)	104048	300.000	319.5
	15 2,6-Dimethyl Naphthalene	156	9.026	9.026	(0.921)	72856	300.000	322.6
	16 Acenaphthylene	152	9.543	9.543	(0.974)	110906	300.000	298.4
	18 Acenaphthene	154	9.866	9.866	(1.007)	73779	300.000	314.4
	19 Dibenzofuran	168	10.179	10.179	(1.038)	98637	300.000	293.1
	20 2,3,5-Trimethyl Naphthalene	170	10.534	10.534	(0.848)	67294	300.000	319.9
	22 Fluorene	166	10.784	10.784	(0.868)	82216	300.000	321.3(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng/ml)	ON-COL (ng/ml)
23 Dibenzothiophene	184	12.249	12.249	(0.986)	116242	300.000	321.5
25 Phenanthrene	178	12.456	12.456	(1.003)	114370	300.000	309.1
26 Anthracene	178	12.543	12.543	(1.010)	98973	300.000	272.9
27 Acridine	179	12.612	12.612	(1.015)	74067	300.000	312.3
28 Carbazole	167	12.836	12.836	(1.033)	78645	300.000	273.8
29 1-Methyl Phenanthrene	192	13.506	13.506	(1.087)	78278	300.000	297.1
30 Fluoranthene	202	14.485	14.485	(1.166)	119194	300.000	315.0
31 Pyrene	202	14.869	14.869	(1.197)	129225	300.000	306.6
34 Benzo(a)anthracene	228	16.851	16.851	(0.882)	91399	300.000	331.9
35 Chrysene	228	16.911	16.911	(0.886)	141198	300.000	329.2
36 6-Methyl Chrysene	242	17.629	17.629	(0.923)	91988	300.000	320.8
32 7,12-Dimethylbenz(a)anthracen	256	18.496	18.496	(0.969)	54041	300.000	311.6
38 Benzo(b)fluoranthene	252	18.519	18.519	(0.970)	121515	300.000	344.9
40 Benzo(k)fluoranthene	252	18.557	18.557	(0.972)	152604	300.000	318.5
41 Benzo(e)pyrene	252	18.928	18.928	(0.991)	130783	300.000	331.2
43 Benzo(a)pyrene	252	19.011	19.011	(0.996)	130852	300.000	345.9
44 Perylene	252	19.140	19.140	(1.002)	155253	300.000	340.2
45 3-Methylcholanthrene	268	19.525	19.525	(1.023)	76964	300.000	329.7
46 Dibenz(a,h)acridine	279	20.486	20.486	(1.073)	94408	300.000	364.2
47 Dibenz(a,j)acridine	279	20.583	20.583	(1.078)	134390	300.000	328.3
48 Indeno(1,2,3-cd)pyrene	276	20.959	20.959	(1.098)	176467	300.000	347.2
49 Dibenz(a,h)anthracene	278	20.972	20.972	(1.098)	143064	300.000	356.9
50 7H-dibenzo(c,g)carbazole	267	21.311	21.311	(1.116)	98154	300.000	347.2
51 Benzo(g,h,i)perylene	276	21.525	21.525	(1.127)	163243	300.000	362.4
52 Dibenzo(a,l)pyrene	302	24.497	24.497	(1.283)	120027	300.000	331.2
53 Dibenzo(a,e)pyrene	302	25.682	25.682	(1.345)	151196	300.000	334.1(M)
54 Dibenzo(a,i)pyrene	302	26.153	26.153	(1.370)	104397	300.000	359.5
55 Dibenzo(a,h)pyrene	302	26.413	26.413	(1.383)	130739	300.000	322.0

QC Flag Legend

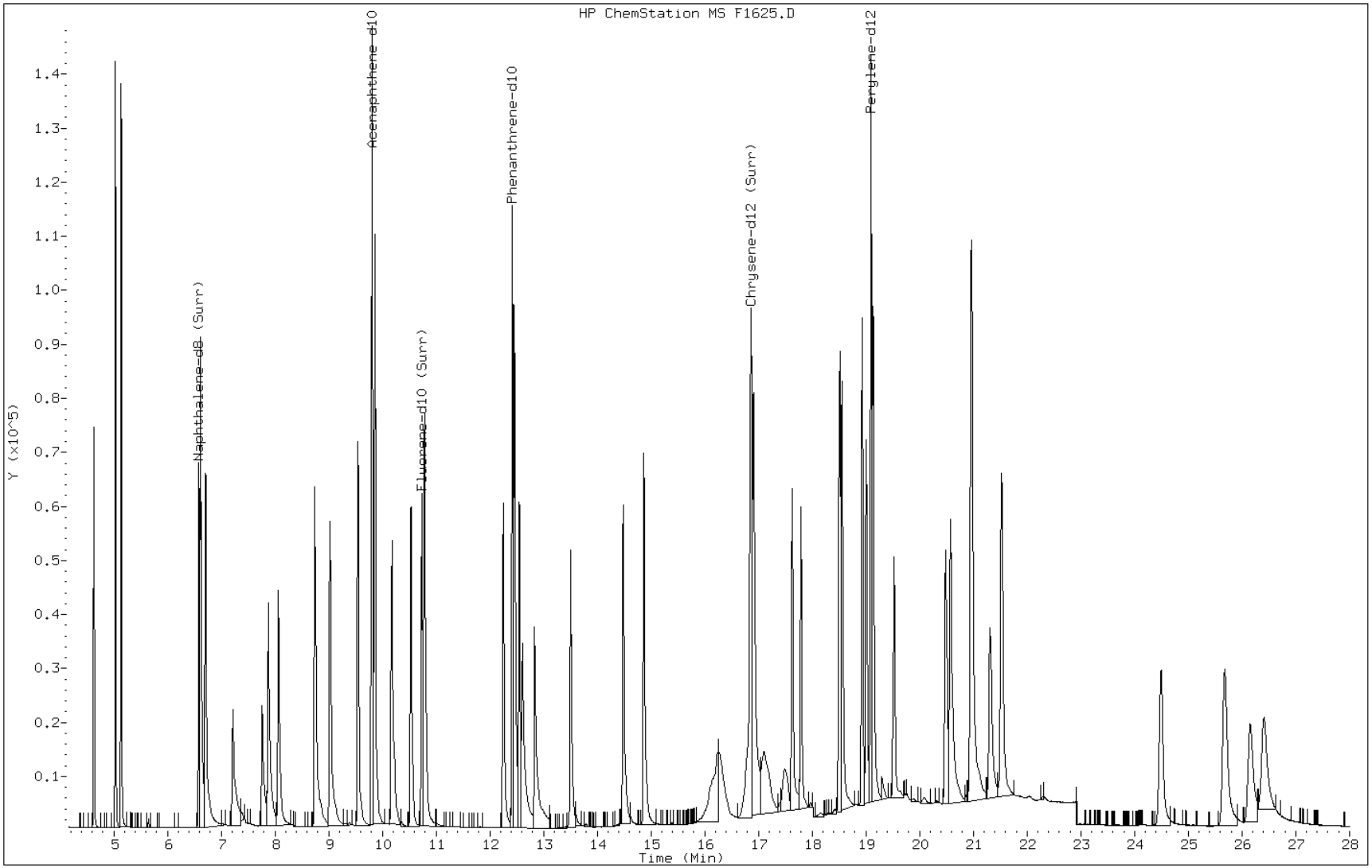
M - Compound response manually integrated.

Data File: F1625.D

Date: 06-OCT-2011 13:24

Client ID: Instrument: F.i

Sample Info: ccv-1014732,cslpsim,092811p;111111e Operator: ILCZYSZD



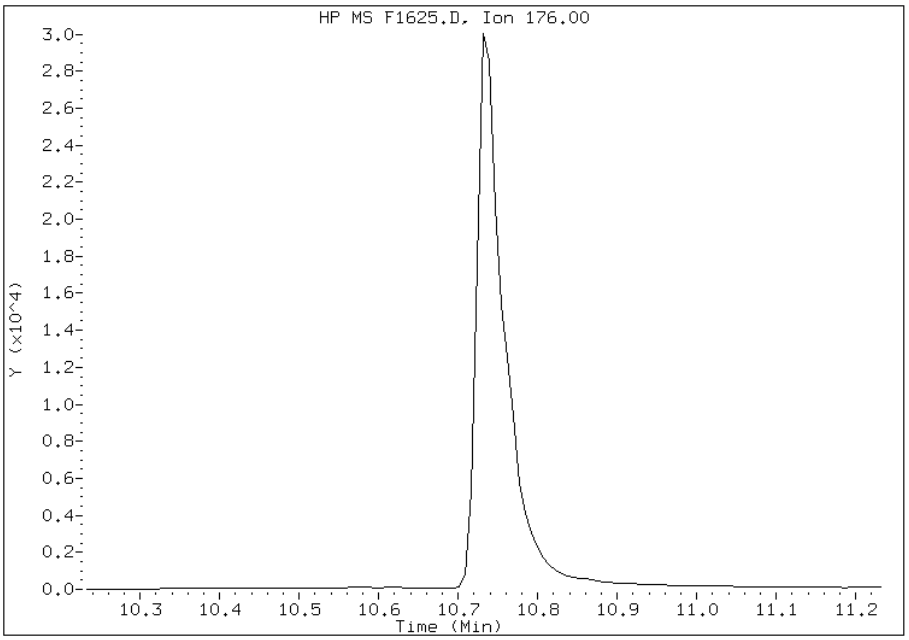
Manual Integration Report

Data File: F1625.D
Inj. Date and Time: 06-OCT-2011 13:24
Instrument ID: F.i
Client ID:
Compound: 21 Fluorene-d10 (Surr)
CAS #:
Report Date: 10/07/2011

Processing Integration Results

Not Detected

Expected RT: 10.73



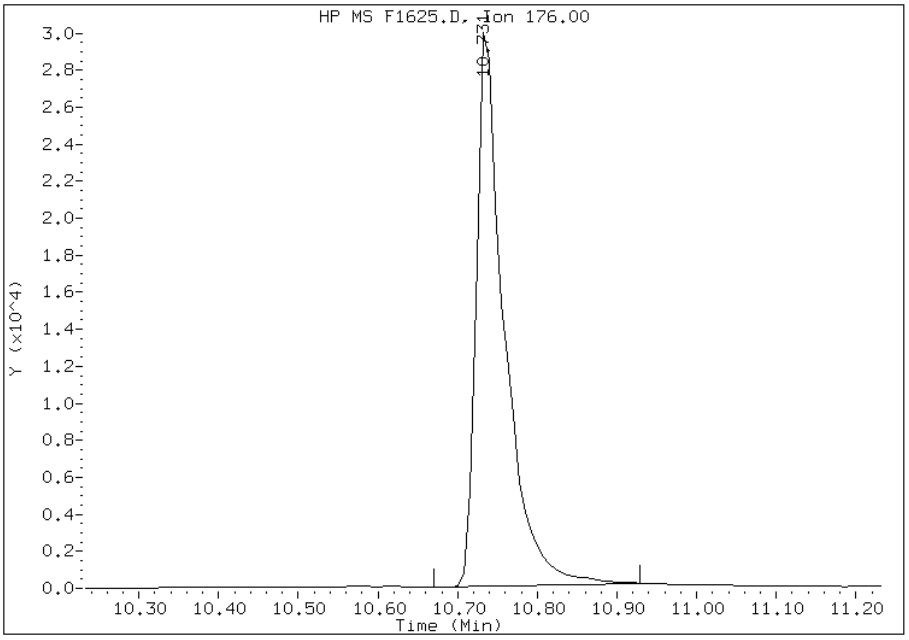
Manual Integration Results

RT: 10.73

Response: 72784

Amount: 315

Conc: 315



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte not Identified by the Data System

Manual Integration Report

Data File: F1625.D
Inj. Date and Time: 06-OCT-2011 13:24
Instrument ID: F.i
Client ID:
Compound: 22 Fluorene
CAS #: 86-73-7
Report Date: 10/07/2011

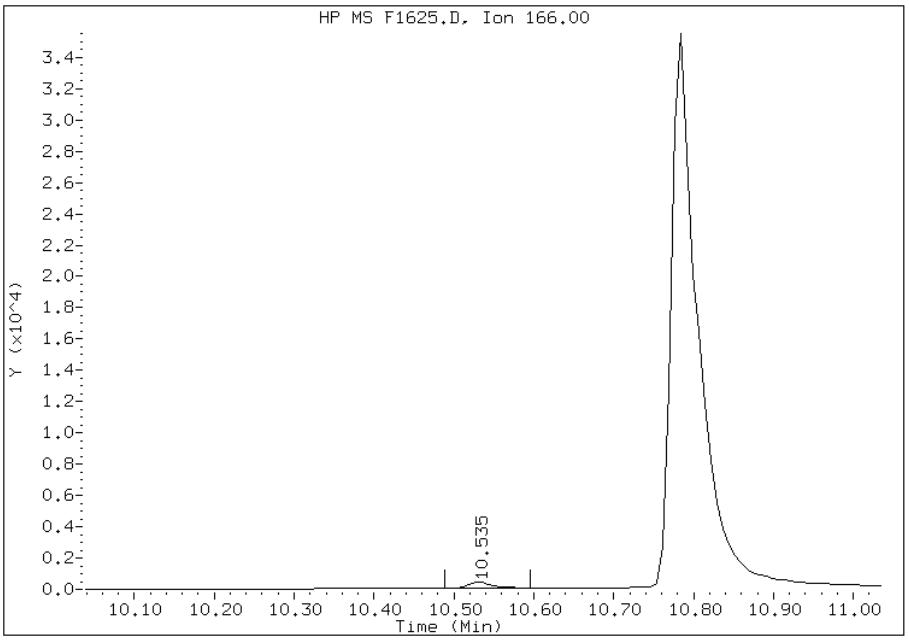
Processing Integration Results

RT: 10.53

Response: 885

Amount: 3

Conc: 3



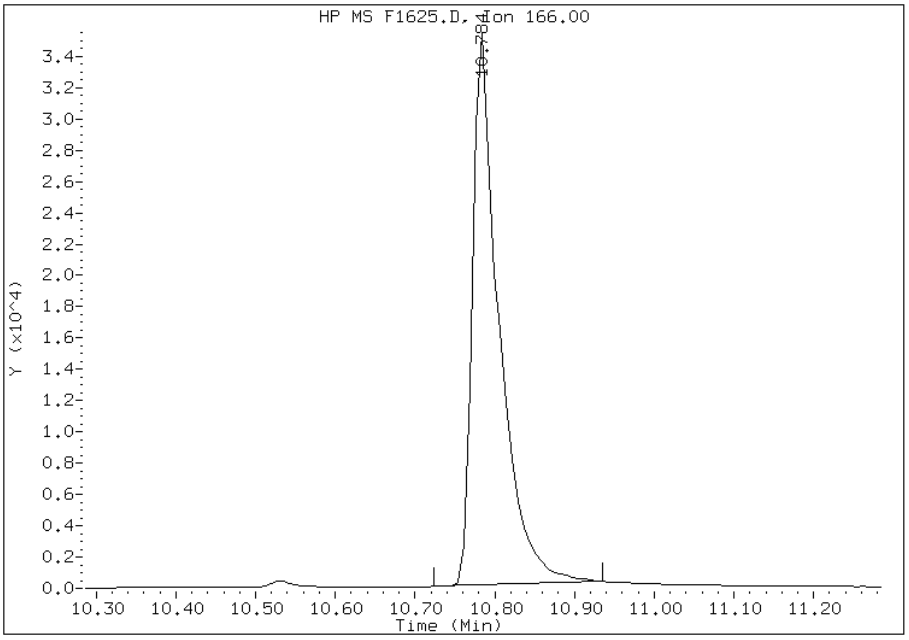
Manual Integration Results

RT: 10.78

Response: 82216

Amount: 321

Conc: 321



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte Misidentified by the Data System

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-20371-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-87039/1-A

Matrix: Water | Lab File ID: F1595.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 09/20/2011 18:38

Sample wt/vol: 4000(mL) | Date Analyzed: 10/05/2011 19:59

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 89849 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
271-89-6	2,3-Benzofuran	ND		5.4	0.68
496-11-7	2,3-Dihydroindene	ND		5.0	0.70
90-12-0	1-Methylnaphthalene	ND		5.6	0.89
91-57-6	2-Methylnaphthalene	ND		5.9	0.98
83-32-9	Acenaphthene	1.07	J	5.7	0.50
208-96-8	Acenaphthylene	ND		4.8	0.77
260-94-6	Acridine	ND		6.5	6.5
120-12-7	Anthracene	ND		4.2	0.80
56-55-3	Benzo[a]anthracene	2.94	J	4.3	0.92
50-32-8	Benzo[a]pyrene	1.82	J	2.5	1.2
192-97-2	Benzo[e]pyrene	1.70	J	4.3	1.1
205-99-2	Benzo[b]fluoranthene	2.51	J	4.7	1.4
95-15-8	Benzo(b)thiophene	ND		5.2	0.75
207-08-9	Benzo[k]fluoranthene	4.91		4.1	1.2
191-24-2	Benzo[g,h,i]perylene	1.78	J	6.2	1.2
86-74-8	Carbazole	ND		3.8	0.72
218-01-9	Chrysene	ND		5.6	1.2
53-70-3	Dibenz(a,h)anthracene	1.26	J	5.9	1.0
132-64-9	Dibenzofuran	ND		5.7	0.99
132-65-0	Dibenzothiophene	19.5		4.1	0.98
206-44-0	Fluoranthene	ND		4.6	1.7
86-73-7	Fluorene	ND		4.1	0.85
95-13-6	Indene	ND		4.7	3.3
120-72-9	Indole	ND		4.7	1.7
193-39-5	Indeno[1,2,3-cd]pyrene	1.30	J	5.4	1.3
91-20-3	Naphthalene	ND		8.6	1.1
198-55-0	Perylene	ND		3.8	3.8
85-01-8	Phenanthrene	ND		6.3	3.2
129-00-0	Pyrene	ND		4.2	0.99
91-22-5	Quinoline	ND		9.0	5.7
92-52-4	Biphenyl	ND		5.6	1.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-20371-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-87039/1-A

Matrix: Water | Lab File ID: F1595.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 09/20/2011 18:38

Sample wt/vol: 4000(mL) | Date Analyzed: 10/05/2011 19:59

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 89849 | Units: ng/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
81103-79-9	Fluorene-d10 (Surr)	74		23-84
1719-03-5	Chrysene-d12 (Surr)	82		28-101
1146-65-2	Naphthalene-d8 (Surr)	67		22-97

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\100511.B\F1595.D
Lab Smp Id: MB 280-87039/1-A
Inj Date : 05-OCT-2011 19:59
Operator : ILCZYSZD Inst ID: F.i
Smp Info : MB280-87039_1-A
Misc Info : MB 280-87039_1-A
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\100511.B\CSLPSIM.m
Meth Date : 07-Oct-2011 07:20 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 08:31 Cal File: F1463.D
Als bottle: 11 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 3E-CSLP4L.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	4000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
* 17 Acenaphthene-d10	164	9.802	9.801	(1.000)	142935	600.000	
* 24 Phenanthrene-d10	188	12.422	12.421	(1.000)	223752	600.000	
* 42 Perylene-d12	264	19.095	19.094	(1.000)	259731	600.000	
$ 5 Naphthalene-d8 (Surr)	136	6.583	6.582	(0.672)	69752	199.644	49.91
$ 21 Fluorene-d10 (Surr)	176	10.731	10.731	(0.864)	55603	222.714	55.68(M)
$ 33 Chrysene-d12 (Surr)	240	16.868	16.868	(0.883)	89429	244.707	61.18
1 2,3-Benzofuran	118	Compound Not Detected.					
2 2,3-Dihydroindene	117	Compound Not Detected.					
3 1H-Indene	116	Compound Not Detected.					
6 Naphthalene	128	6.615	6.615	(0.675)	1680	4.35737	1.089(a)
8 Benzo(b)thiophene	134	6.661	6.706	(0.680)	840	2.66146	0.6654(a)
9 Quinoline	129	Compound Not Detected.					
11 1H-Indole	117	7.792	7.759	(0.795)	529	2.30600	0.5765(a)
12 2-Methylnaphthalene	142	7.879	7.879	(0.804)	632	2.28645	0.5716(a)
13 1-Methylnaphthalene	142	Compound Not Detected.					
14 Biphenyl	154	Compound Not Detected.					
16 Acenaphthylene	152	Compound Not Detected.					
18 Acenaphthene	154	9.855	9.855	(1.005)	1073	4.29600	1.074(a)
19 Dibenzofuran	168	Compound Not Detected.					
22 Fluorene	166	Compound Not Detected.					
23 Dibenzothiophene	184	12.413	12.249	(0.999)	30393	77.9054	19.48
25 Phenanthrene	178	12.456	12.456	(1.003)	777	1.94606	0.4865(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
26 Anthracene	178	12.542	12.542	(1.010)	788	2.01371	0.5034(a)
27 Acridine	179	Compound Not Detected.					
28 Carbazole	167	Compound Not Detected.					
30 Fluoranthene	202	14.485	14.480	(1.166)	1623	3.97480	0.9937(a)
31 Pyrene	202	14.869	14.865	(1.197)	1366	3.00345	0.7509(a)
34 Benzo(a)anthracene	228	16.842	16.851	(0.882)	3279	11.7599	2.940(a)
35 Chrysene	228	Compound Not Detected.					
32 7,12-Dimethylbenz(a)anthracen	256	Compound Not Detected.					
38 Benzo(b)fluoranthene	252	18.519	18.519	(0.970)	3581	10.0382	2.510(a)
40 Benzo(k)fluoranthene	252	18.557	18.556	(0.972)	9536	19.6595	4.915(a)
41 Benzo(e)pyrene	252	19.004	18.928	(0.995)	2714	6.78889	1.697(a)
43 Benzo(a)pyrene	252	19.004	19.003	(0.995)	2794	7.29577	1.824(a)
44 Perylene	252	19.095	19.132	(1.000)	1060	2.29391	0.5735(aQ)
45 3-Methylcholanthrene	268	Compound Not Detected.					
48 Indeno(1,2,3-cd)pyrene	276	20.966	20.953	(1.098)	2679	5.20534	1.301(a)
49 Dibenz(a,h)anthracene	278	20.979	20.966	(1.099)	2042	5.03141	1.258(a)
51 Benzo(g,h,i)perylene	276	21.532	21.525	(1.128)	3243	7.11023	1.778(a)

QC Flag Legend

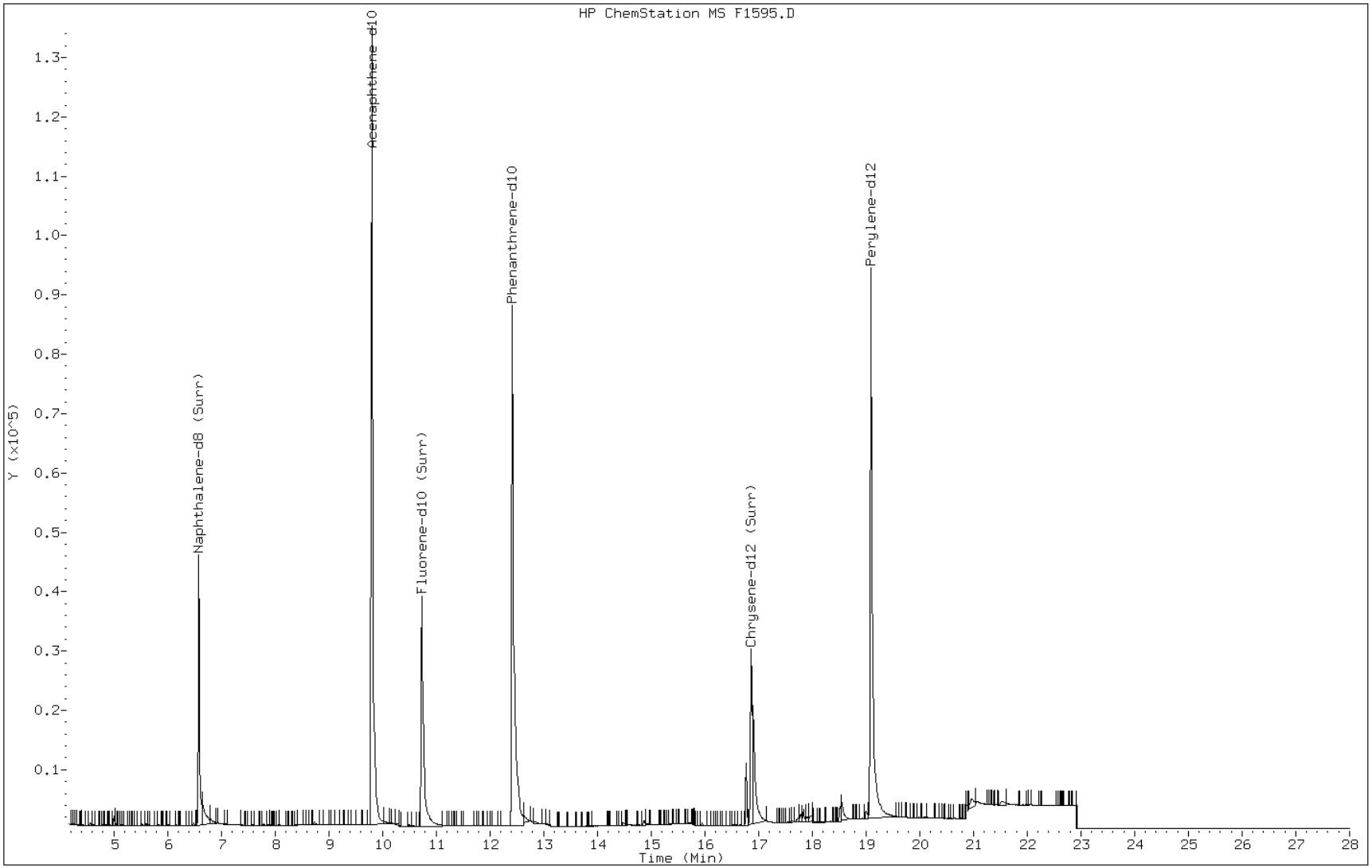
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: F1595.D

Date: 05-OCT-2011 19:59

Client ID: Instrument: F.i

Sample Info: MB280-87039_1-A Operator: ILCZYSZD



Data File: F1595.D

Date: 05-OCT-2011 19:59

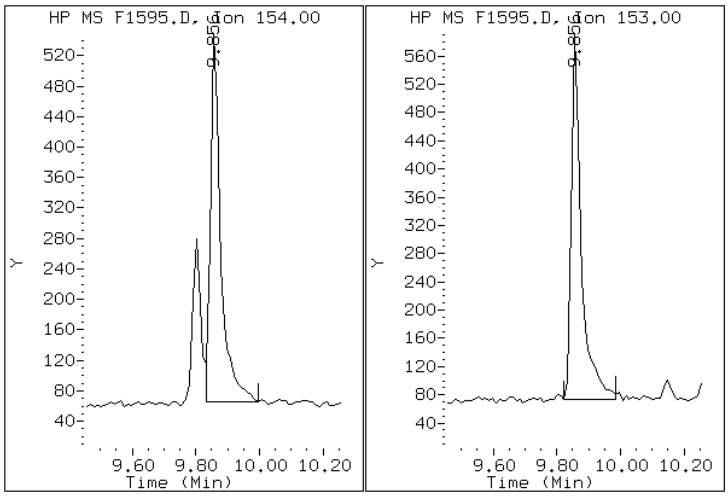
Client ID:

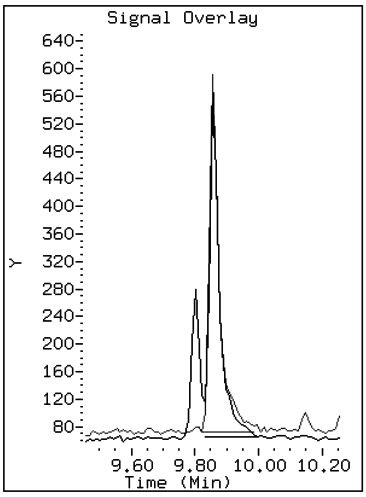
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

18 Acenaphthene





Data File: F1595.D

Date: 05-OCT-2011 19:59

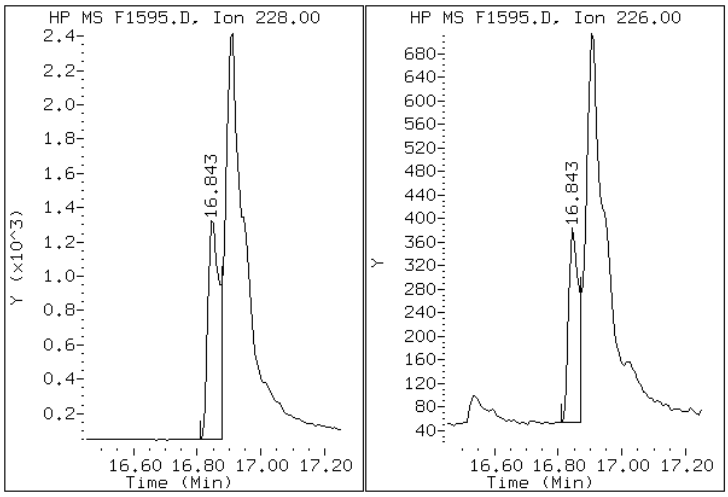
Client ID:

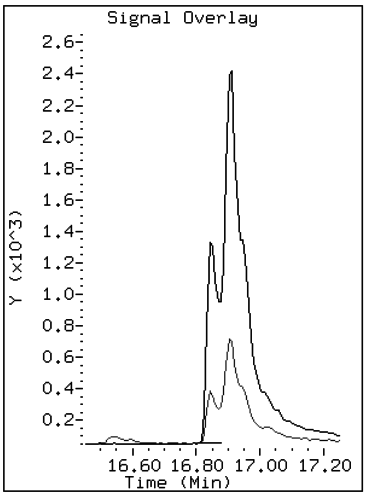
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

34 Benzo(a)anthracene





Data File: F1595.D

Date: 05-OCT-2011 19:59

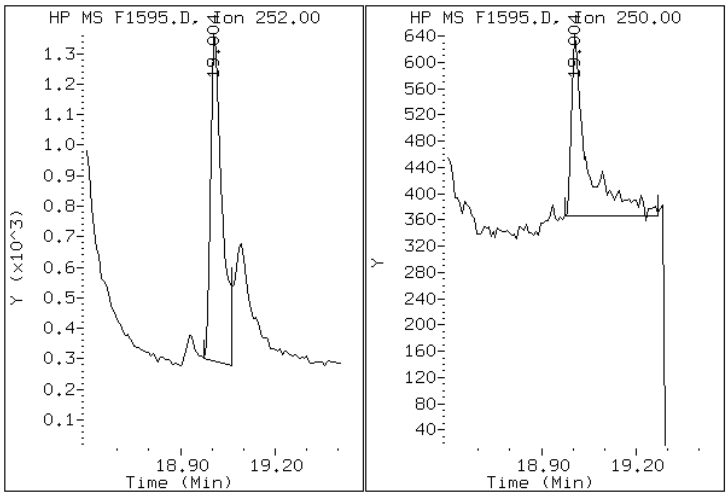
Client ID:

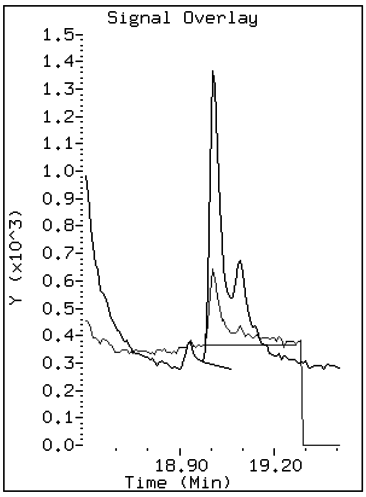
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

43 Benzo(a)pyrene





Data File: F1595.D

Date: 05-OCT-2011 19:59

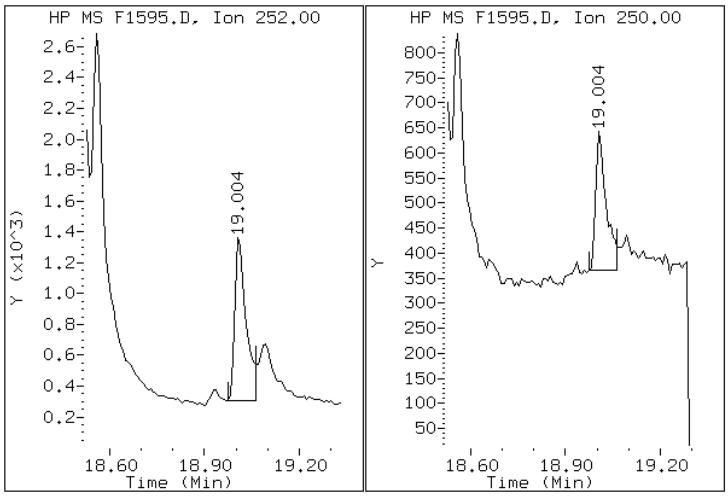
Client ID:

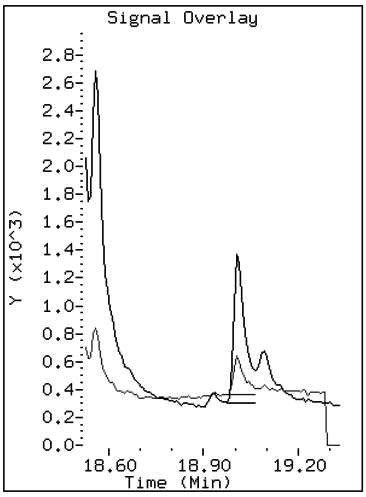
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

41 Benzo(e)pyrene





Data File: F1595.D

Date: 05-OCT-2011 19:59

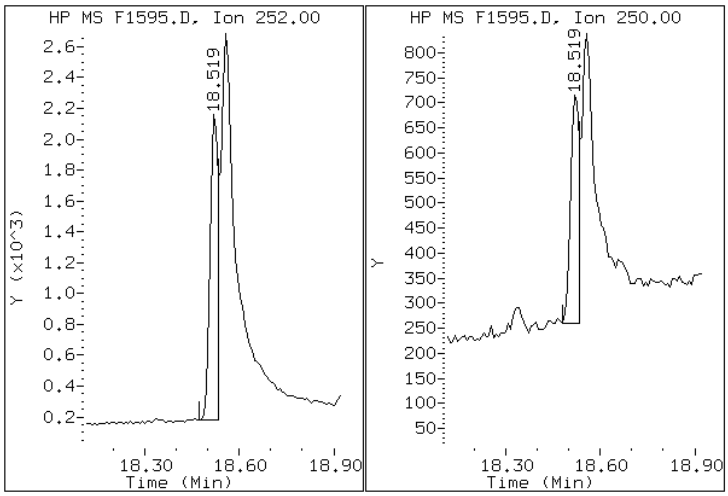
Client ID:

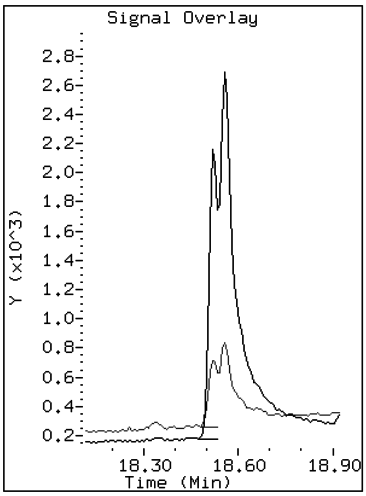
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

38 Benzo(b)fluoranthene





Data File: F1595.D

Date: 05-OCT-2011 19:59

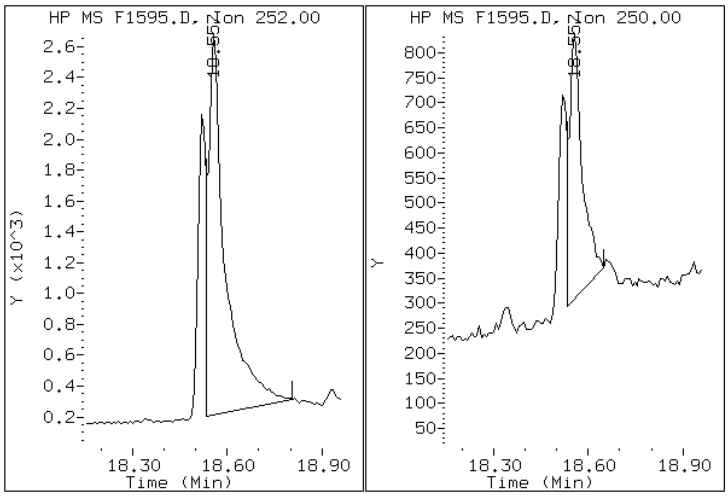
Client ID:

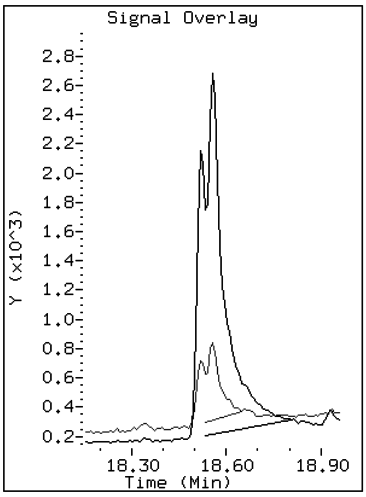
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

40 Benzo(k)fluoranthene





Data File: F1595.D

Date: 05-OCT-2011 19:59

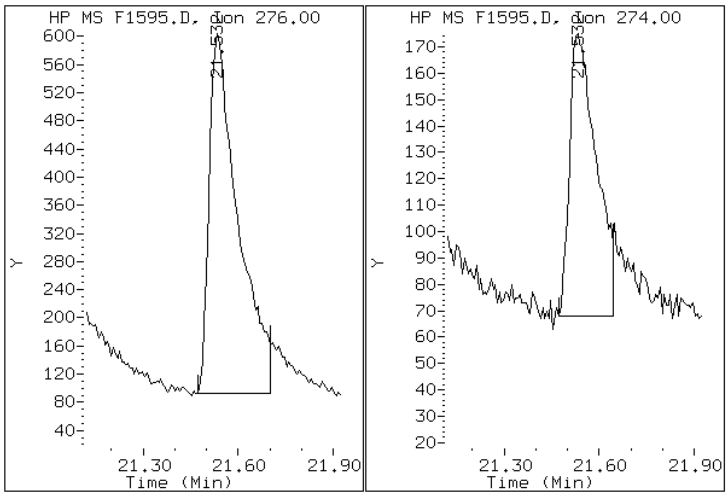
Client ID:

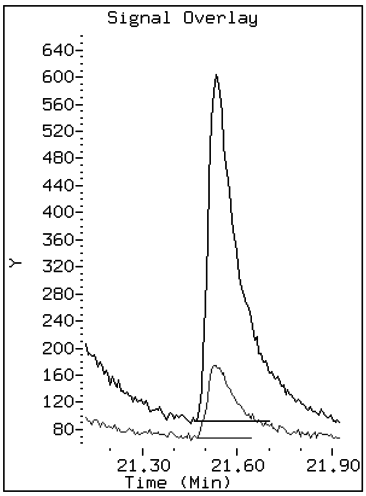
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

51 Benzo(g,h,i)perylene





Data File: F1595.D

Date: 05-OCT-2011 19:59

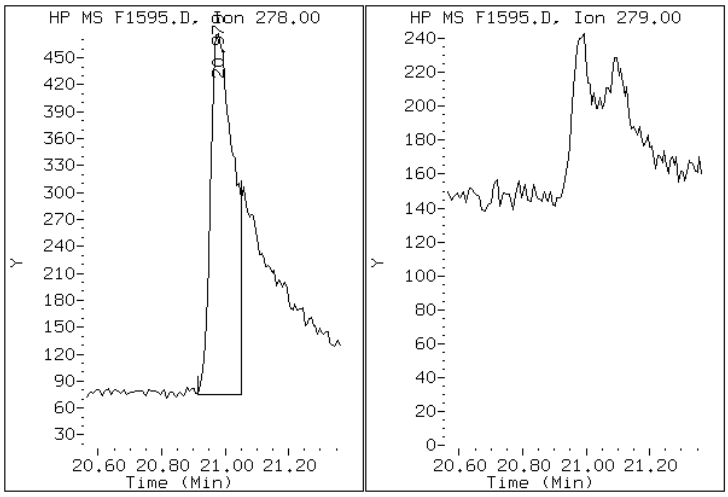
Client ID:

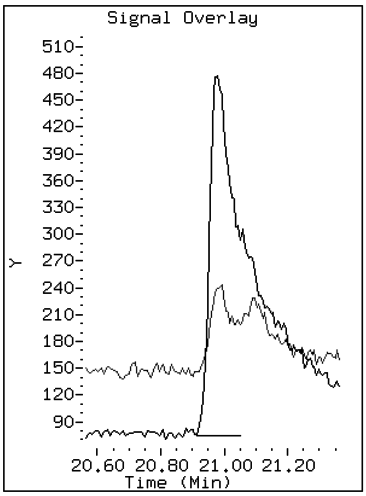
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

49 Dibenz(a,h)anthracene





Data File: F1595.D

Date: 05-OCT-2011 19:59

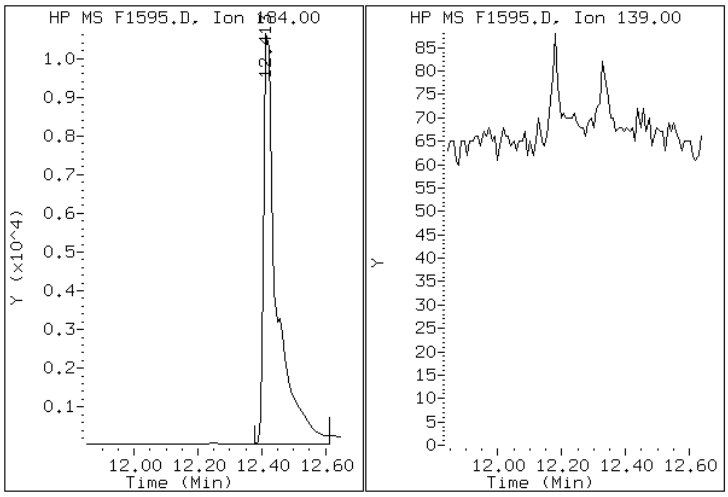
Client ID:

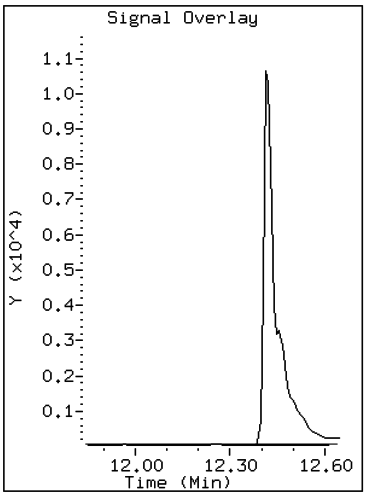
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

23 Dibenzothiophene





Data File: F1595.D

Date: 05-OCT-2011 19:59

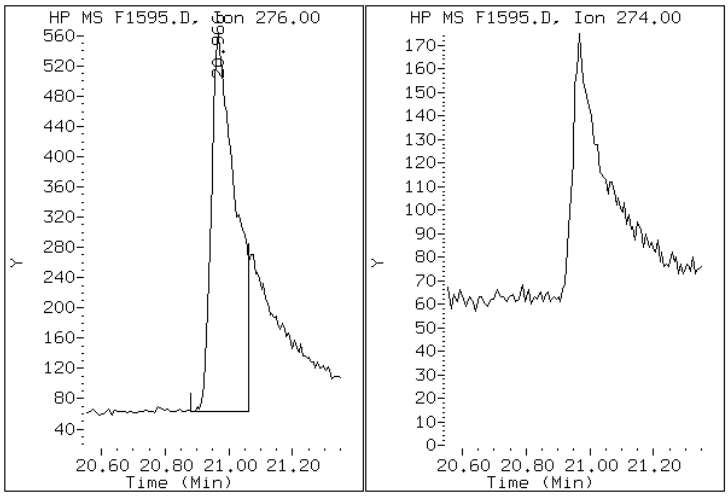
Client ID:

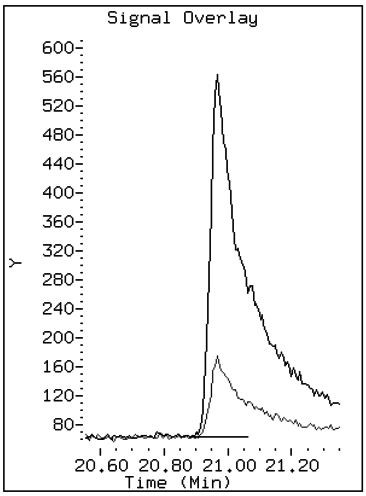
Instrument: F.i

Sample Info: MB280-87039_1-A

Operator: ILCZYSZD

48 Indeno(1,2,3-cd)pyrene





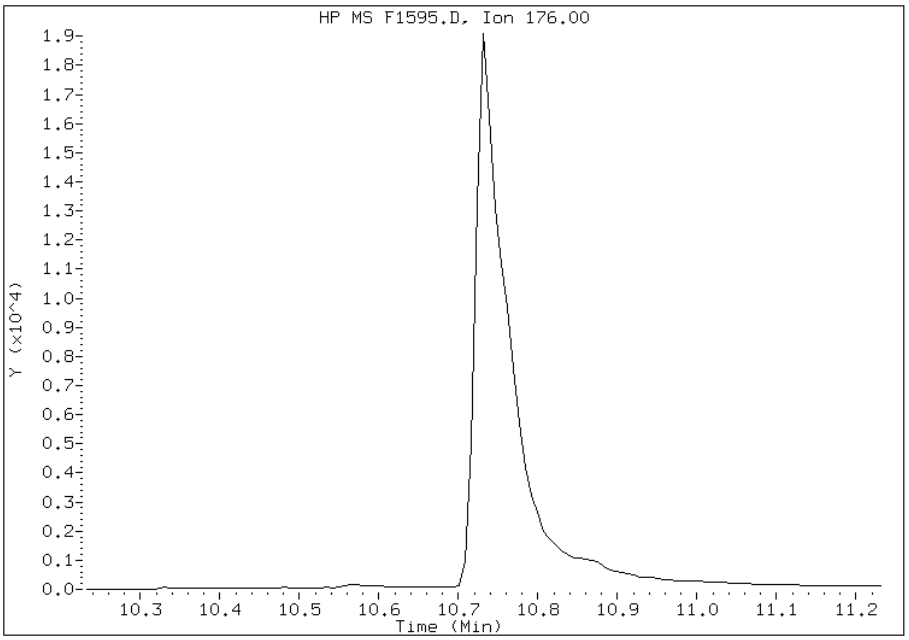
Manual Integration Report

Data File: F1595.D
Inj. Date and Time: 05-OCT-2011 19:59
Instrument ID: F.i
Client ID:
Compound: 21 Fluorene-d10 (Surr)
CAS #:
Report Date: 10/07/2011

Processing Integration Results

Not Detected

Expected RT: 10.73



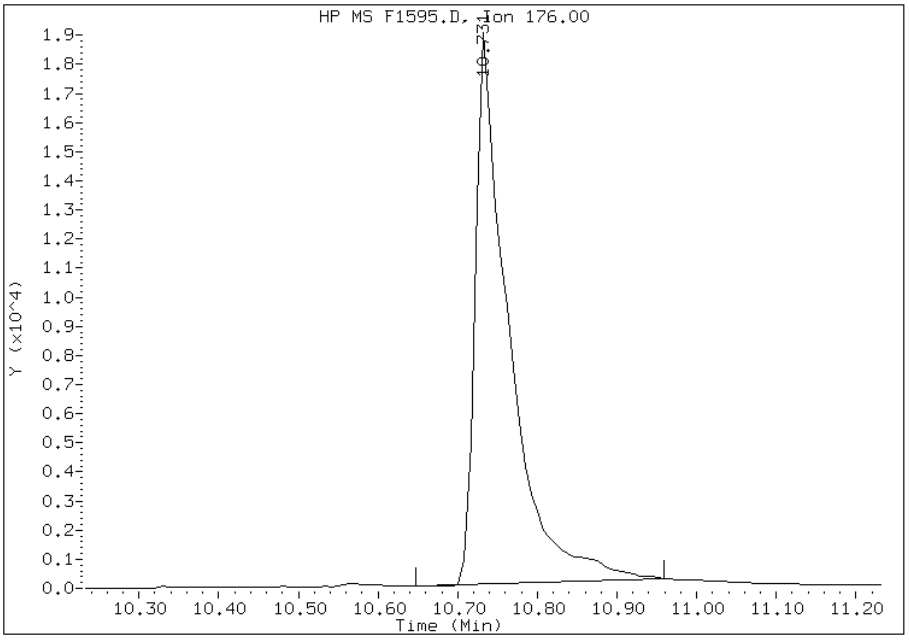
Manual Integration Results

RT: 10.73

Response: 55603

Amount: 223

Conc: 56



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte not Identified by the Data System

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-20371-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-87039/2-A

Matrix: Water | Lab File ID: F1596.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 09/20/2011 18:38

Sample wt/vol: 4000(mL) | Date Analyzed: 10/05/2011 20:35

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 89849 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
271-89-6	2,3-Benzofuran	64.0		5.4	0.68
496-11-7	2,3-Dihydroindene	65.3		5.0	0.70
90-12-0	1-Methylnaphthalene	75.1		5.6	0.89
91-57-6	2-Methylnaphthalene	65.7		5.9	0.98
83-32-9	Acenaphthene	69.4		5.7	0.50
208-96-8	Acenaphthylene	63.7		4.8	0.77
260-94-6	Acridine	32.5		6.5	6.5
120-12-7	Anthracene	73.2		4.2	0.80
56-55-3	Benzo[a]anthracene	68.5		4.3	0.92
50-32-8	Benzo[a]pyrene	66.1		2.5	1.2
192-97-2	Benzo[e]pyrene	67.3		4.3	1.1
205-99-2	Benzo[b]fluoranthene	64.7		4.7	1.4
95-15-8	Benzo(b)thiophene	70.0		5.2	0.75
207-08-9	Benzo[k]fluoranthene	76.6		4.1	1.2
191-24-2	Benzo[g,h,i]perylene	61.3		6.2	1.2
86-74-8	Carbazole	61.8		3.8	0.72
218-01-9	Chrysene	83.0		5.6	1.2
53-70-3	Dibenz(a,h)anthracene	58.2		5.9	1.0
132-64-9	Dibenzofuran	63.3		5.7	0.99
132-65-0	Dibenzothiophene	68.3		4.1	0.98
206-44-0	Fluoranthene	71.1		4.6	1.7
86-73-7	Fluorene	70.3		4.1	0.85
95-13-6	Indene	63.1		4.7	3.3
120-72-9	Indole	52.1		4.7	1.7
193-39-5	Indeno[1,2,3-cd]pyrene	58.3		5.4	1.3
91-20-3	Naphthalene	72.7		8.6	1.1
198-55-0	Perylene	67.4		3.8	3.8
85-01-8	Phenanthrene	68.4		6.3	3.2
129-00-0	Pyrene	68.2		4.2	0.99
91-22-5	Quinoline	43.1		9.0	5.7
92-52-4	Biphenyl	66.7		5.6	1.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-20371-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-87039/2-A

Matrix: Water | Lab File ID: F1596.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 09/20/2011 18:38

Sample wt/vol: 4000(mL) | Date Analyzed: 10/05/2011 20:35

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 89849 | Units: ng/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
81103-79-9	Fluorene-d10 (Surr)	87	X	23-84
1719-03-5	Chrysene-d12 (Surr)	98		28-101
1146-65-2	Naphthalene-d8 (Surr)	90		22-97

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\100511.B\F1596.D
Lab Smp Id: LCS 280-87039/2-A
Inj Date : 05-OCT-2011 20:35
Operator : ILCZYSZD Inst ID: F.i
Smp Info : LCS280-87039_2-A
Misc Info : LCS 280-87039_2-A
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\100511.B\CSLPSIM.m
Meth Date : 07-Oct-2011 07:20 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 08:31 Cal File: F1463.D
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 3E-CSLP4L.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	4000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
* 17 Acenaphthene-d10	164	9.801	9.801	(1.000)	146762	600.000	
* 24 Phenanthrene-d10	188	12.421	12.421	(1.000)	239042	600.000	
* 42 Perylene-d12	264	19.094	19.094	(1.000)	272492	600.000	
$ 5 Naphthalene-d8 (Surr)	136	6.583	6.582	(0.672)	97116	270.717	67.68
$ 21 Fluorene-d10 (Surr)	176	10.731	10.731	(0.864)	69246	259.619	64.90
$ 33 Chrysene-d12 (Surr)	240	16.868	16.868	(0.883)	112238	292.738	73.18
1 2,3-Benzofuran	118	4.630	4.630	(0.472)	50482	255.976	63.99
2 2,3-Dihydroindene	117	5.027	5.033	(0.513)	64451	261.050	65.26
3 1H-Indene	116	5.136	5.136	(0.524)	61834	252.474	63.12
6 Naphthalene	128	6.615	6.615	(0.675)	115090	290.722	72.68(R)
8 Benzo(b)thiophene	134	6.706	6.706	(0.684)	90770	280.097	70.02
9 Quinoline	129	7.214	7.214	(0.736)	42163	172.280	43.07
11 1H-Indole	117	7.759	7.759	(0.792)	49081	208.373	52.09
12 2-Methylnaphthalene	142	7.873	7.879	(0.803)	74608	262.879	65.72
13 1-Methylnaphthalene	142	8.064	8.064	(0.823)	75594	300.504	75.12
14 Biphenyl	154	8.735	8.745	(0.891)	94901	266.716	66.68
16 Acenaphthylene	152	9.543	9.543	(0.974)	103478	254.827	63.71
18 Acenaphthene	154	9.855	9.855	(1.005)	71179	277.550	69.39
19 Dibenzofuran	168	10.179	10.179	(1.038)	93042	253.020	63.25
22 Fluorene	166	10.776	10.784	(0.868)	82903	281.040	70.26(Q)
23 Dibenzothiophene	184	12.240	12.249	(0.985)	113854	273.171	68.29
25 Phenanthrene	178	12.456	12.456	(1.003)	116784	273.786	68.45

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	CONCENTRATIONS FINAL (ng/L)
26 Anthracene	178	12.542	12.542	(1.010)	122373	292.717	73.18
27 Acridine	179	12.612	12.611	(1.015)	35497	129.839	32.46(QH)
28 Carbazole	167	12.836	12.836	(1.033)	81921	247.335	61.83
30 Fluoranthene	202	14.480	14.480	(1.166)	124097	284.480	71.12
31 Pyrene	202	14.865	14.865	(1.197)	132612	272.926	68.23
34 Benzo(a)anthracene	228	16.842	16.851	(0.882)	80122	273.896	68.47
35 Chrysene	228	16.902	16.911	(0.885)	151246	331.979	82.99
32 7,12-Dimethylbenz(a)anthracen	256	18.496	18.496	(0.969)	15113	82.0515	20.51(R)
38 Benzo(b)fluoranthene	252	18.519	18.519	(0.970)	96905	258.921	64.73
40 Benzo(k)fluoranthene	252	18.556	18.556	(0.972)	155834	306.224	76.56
41 Benzo(e)pyrene	252	18.928	18.928	(0.991)	112922	269.239	67.31
43 Benzo(a)pyrene	252	19.004	19.003	(0.995)	106169	264.248	66.06
44 Perylene	252	19.132	19.132	(1.002)	130607	269.406	67.35
45 3-Methylcholanthrene	268	19.525	19.524	(1.023)	35025	141.273	35.32
48 Indeno(1,2,3-cd)pyrene	276	20.953	20.953	(1.097)	125887	233.146	58.29
49 Dibenz(a,h)anthracene	278	20.966	20.966	(1.098)	99126	232.804	58.20
51 Benzo(g,h,i)perylene	276	21.519	21.525	(1.127)	117376	245.293	61.32

QC Flag Legend

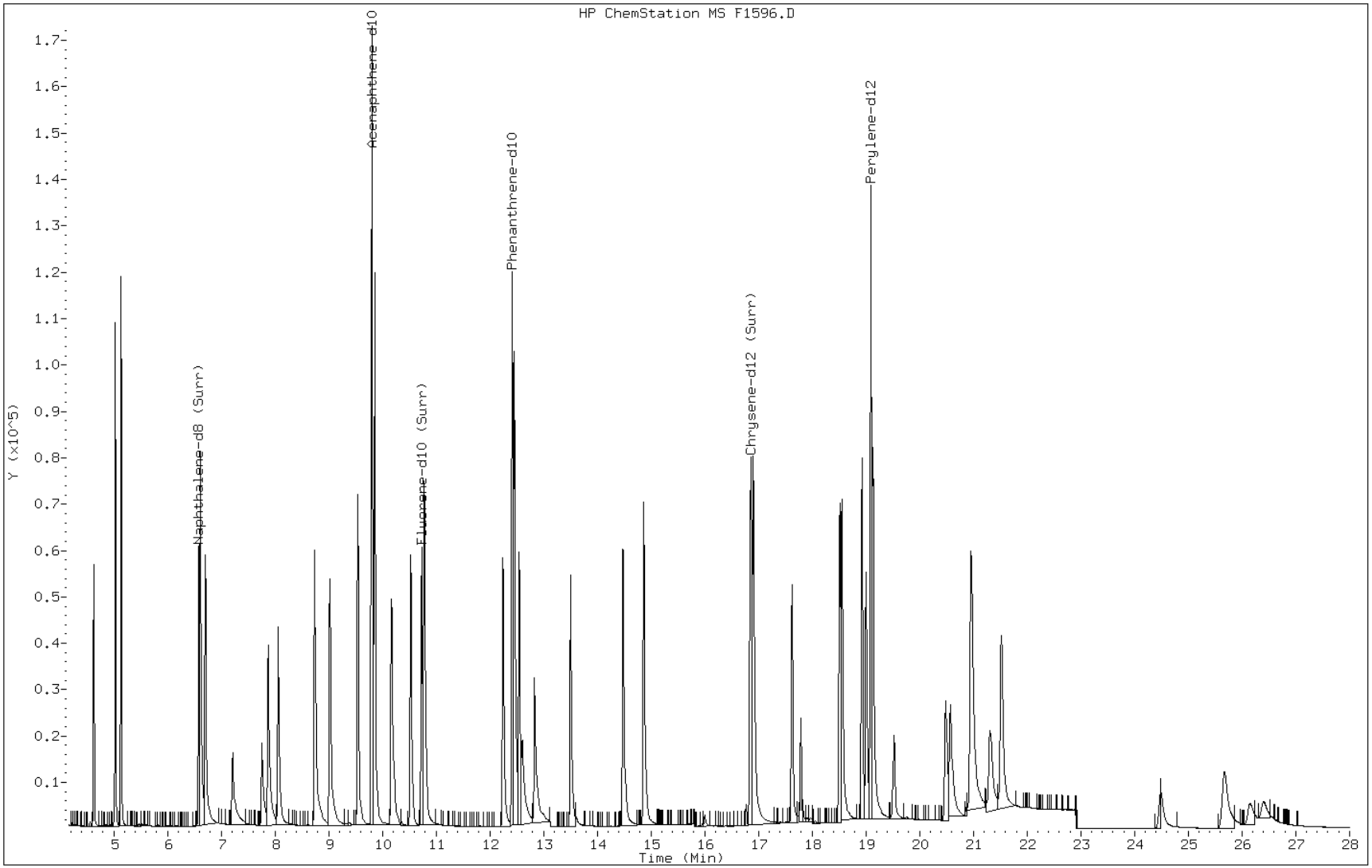
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: F1596.D

Date: 05-OCT-2011 20:35

Client ID: Instrument: F.i

Sample Info: LCS280-87039_2-A Operator: ILCZYSZD



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-20371-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-87039/3-A

Matrix: Water | Lab File ID: F1597.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 09/20/2011 18:38

Sample wt/vol: 4000(mL) | Date Analyzed: 10/05/2011 21:11

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 89849 | Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
271-89-6	2,3-Benzofuran	58.6		5.4	0.68
496-11-7	2,3-Dihydroindene	59.3		5.0	0.70
90-12-0	1-Methylnaphthalene	62.7		5.6	0.89
91-57-6	2-Methylnaphthalene	57.9		5.9	0.98
83-32-9	Acenaphthene	62.0		5.7	0.50
208-96-8	Acenaphthylene	56.0		4.8	0.77
260-94-6	Acridine	20.5		6.5	6.5
120-12-7	Anthracene	62.6		4.2	0.80
56-55-3	Benzo[a]anthracene	54.4		4.3	0.92
50-32-8	Benzo[a]pyrene	61.4		2.5	1.2
192-97-2	Benzo[e]pyrene	61.8		4.3	1.1
205-99-2	Benzo[b]fluoranthene	57.9		4.7	1.4
95-15-8	Benzo(b)thiophene	63.3		5.2	0.75
207-08-9	Benzo[k]fluoranthene	70.7		4.1	1.2
191-24-2	Benzo[g,h,i]perylene	59.8		6.2	1.2
86-74-8	Carbazole	47.3		3.8	0.72
218-01-9	Chrysene	77.5		5.6	1.2
53-70-3	Dibenz(a,h)anthracene	56.7		5.9	1.0
132-64-9	Dibenzofuran	55.1		5.7	0.99
132-65-0	Dibenzothiophene	59.6		4.1	0.98
206-44-0	Fluoranthene	61.2		4.6	1.7
86-73-7	Fluorene	61.0		4.1	0.85
95-13-6	Indene	57.4		4.7	3.3
120-72-9	Indole	48.5		4.7	1.7
193-39-5	Indeno[1,2,3-cd]pyrene	55.9		5.4	1.3
91-20-3	Naphthalene	66.3		8.6	1.1
198-55-0	Perylene	65.5		3.8	3.8
85-01-8	Phenanthrene	58.4		6.3	3.2
129-00-0	Pyrene	58.4		4.2	0.99
91-22-5	Quinoline	39.8		9.0	5.7
92-52-4	Biphenyl	57.9		5.6	1.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-20371-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-87039/3-A

Matrix: Water | Lab File ID: F1597.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 09/20/2011 18:38

Sample wt/vol: 4000(mL) | Date Analyzed: 10/05/2011 21:11

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 89849 | Units: ng/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
81103-79-9	Fluorene-d10 (Surr)	76		23-84
1719-03-5	Chrysene-d12 (Surr)	88		28-101
1146-65-2	Naphthalene-d8 (Surr)	81		22-97

TestAmerica

PAH SIM ANALYSIS QUANTITATION REPORT

Data file : \\DenSvr03\Public\chem\MSS\F.i\100511.B\F1597.D
Lab Smp Id: LCSD 280-87039/3-A
Inj Date : 05-OCT-2011 21:11
Operator : ILCZYSZD Inst ID: F.i
Smp Info : LCSD280-87039_3-A
Misc Info : F1596.D
Comment : SOP: DEN-MS-0005
Method : \\DenSvr03\Public\chem\MSS\F.i\100511.B\CSLPSIM.m
Meth Date : 07-Oct-2011 07:20 ilczyszynd Quant Type: ISTD
Cal Date : 30-SEP-2011 08:31 Cal File: F1463.D
Als bottle: 13 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 3E-CSLP4L.sub
Target Version: 4.14
Processing Host: DENPC277

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1000.000	final volume at end of extraction (uL)
Vs	4000.000	volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
* 17 Acenaphthene-d10	164	9.801	9.801	(1.000)	147060	600.000	
* 24 Phenanthrene-d10	188	12.421	12.421	(1.000)	235524	600.000	
* 42 Perylene-d12	264	19.094	19.094	(1.000)	249786	600.000	
$ 5 Naphthalene-d8 (Surr)	136	6.582	6.582	(0.672)	86928	241.826	60.46
$ 21 Fluorene-d10 (Surr)	176	10.731	10.731	(0.864)	59587	226.742	56.68(M)
$ 33 Chrysene-d12 (Surr)	240	16.868	16.868	(0.883)	92699	263.754	65.94
1 2,3-Benzofuran	118	4.630	4.630	(0.472)	46313	234.361	58.59
2 2,3-Dihydroindene	117	5.033	5.033	(0.513)	58692	237.242	59.31
3 1H-Indene	116	5.136	5.136	(0.524)	56365	229.678	57.42
6 Naphthalene	128	6.615	6.615	(0.675)	105241	265.304	66.33
8 Benzo(b)thiophene	134	6.706	6.706	(0.684)	82267	253.344	63.34
9 Quinoline	129	7.214	7.214	(0.736)	39023	159.127	39.78
11 1H-Indole	117	7.759	7.759	(0.792)	45783	193.978	48.49
12 2-Methylnaphthalene	142	7.873	7.879	(0.803)	65820	231.445	57.86
13 1-Methylnaphthalene	142	8.064	8.064	(0.823)	63235	250.865	62.72
14 Biphenyl	154	8.745	8.745	(0.892)	82597	231.665	57.92
16 Acenaphthylene	152	9.543	9.543	(0.974)	91174	224.072	56.02
18 Acenaphthene	154	9.855	9.855	(1.005)	63682	247.814	61.95
19 Dibenzofuran	168	10.179	10.179	(1.038)	81152	220.239	55.06
22 Fluorene	166	10.776	10.784	(0.868)	70926	244.030	61.01(M)
23 Dibenzothiophene	184	12.240	12.249	(0.985)	97852	238.284	59.57
25 Phenanthrene	178	12.456	12.456	(1.003)	98227	233.721	58.43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng/ml)	FINAL (ng/L)
26 Anthracene	178	12.542	12.542	(1.010)	103213	250.574	62.64
27 Acridine	179	12.611	12.611	(1.015)	22044	81.8358	20.46(QRH)
28 Carbazole	167	12.836	12.836	(1.033)	61737	189.180	47.29
30 Fluoranthene	202	14.480	14.480	(1.166)	105186	244.730	61.18
31 Pyrene	202	14.865	14.865	(1.197)	111792	233.513	58.38
34 Benzo(a)anthracene	228	16.842	16.851	(0.882)	58379	217.709	54.43
35 Chrysene	228	16.911	16.911	(0.886)	129436	309.933	77.48
32 7,12-Dimethylbenz(a)anthracen	256	18.496	18.496	(0.969)	16879	99.9696	24.99
38 Benzo(b)fluoranthene	252	18.518	18.519	(0.970)	79502	231.731	57.93
40 Benzo(k)fluoranthene	252	18.556	18.556	(0.972)	131859	282.665	70.67
41 Benzo(e)pyrene	252	18.928	18.928	(0.991)	94992	247.077	61.77
43 Benzo(a)pyrene	252	19.003	19.003	(0.995)	90509	245.749	61.44
44 Perylene	252	19.132	19.132	(1.002)	116457	262.054	65.51
45 3-Methylcholanthrene	268	19.524	19.524	(1.023)	36300	159.725	39.93
48 Indeno(1,2,3-cd)pyrene	276	20.953	20.953	(1.097)	110752	223.761	55.94
49 Dibenz(a,h)anthracene	278	20.966	20.966	(1.098)	88459	226.637	56.66
51 Benzo(g,h,i)perylene	276	21.525	21.525	(1.127)	104941	239.242	59.81

QC Flag Legend

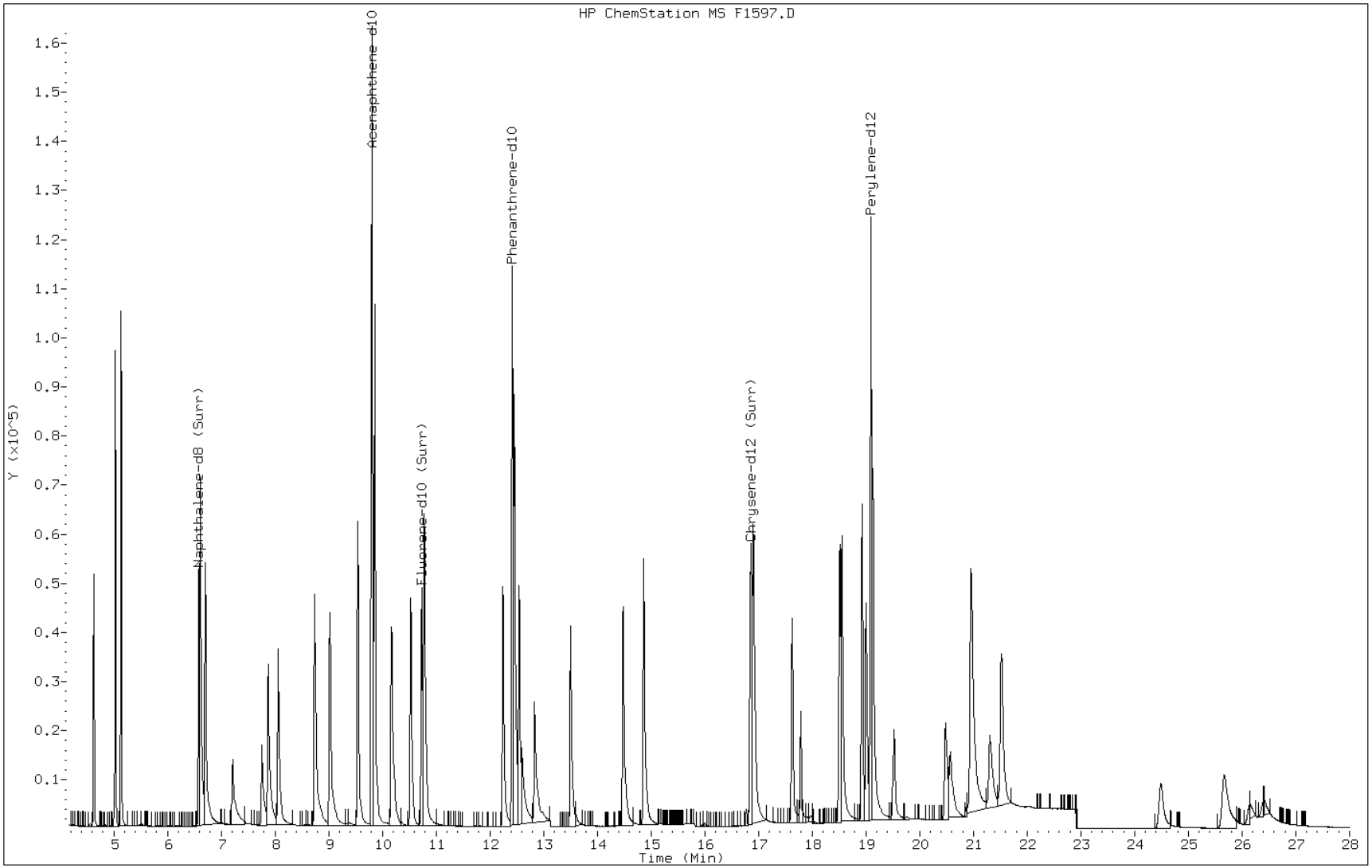
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: F1597.D

Date: 05-OCT-2011 21:11

Client ID: Instrument: F.i

Sample Info: LCSD280-87039_3-A Operator: ILCZYSZD



Manual Integration Report

Data File: F1597.D
Inj. Date and Time: 05-OCT-2011 21:11
Instrument ID: F.i
Client ID:
Compound: 22 Fluorene
CAS #: 86-73-7
Report Date: 10/07/2011

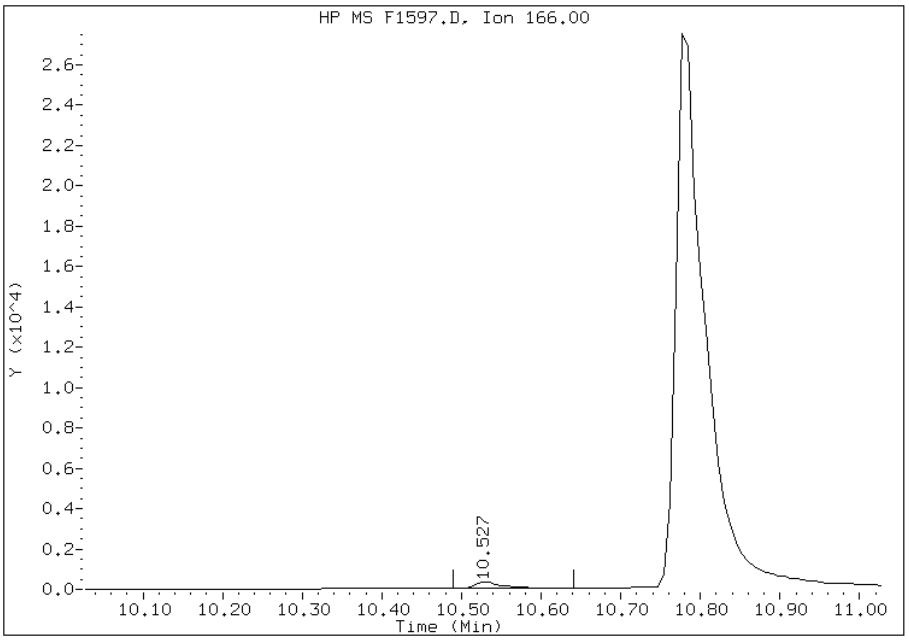
Processing Integration Results

RT: 10.53

Response: 698

Amount: 2

Conc: 1



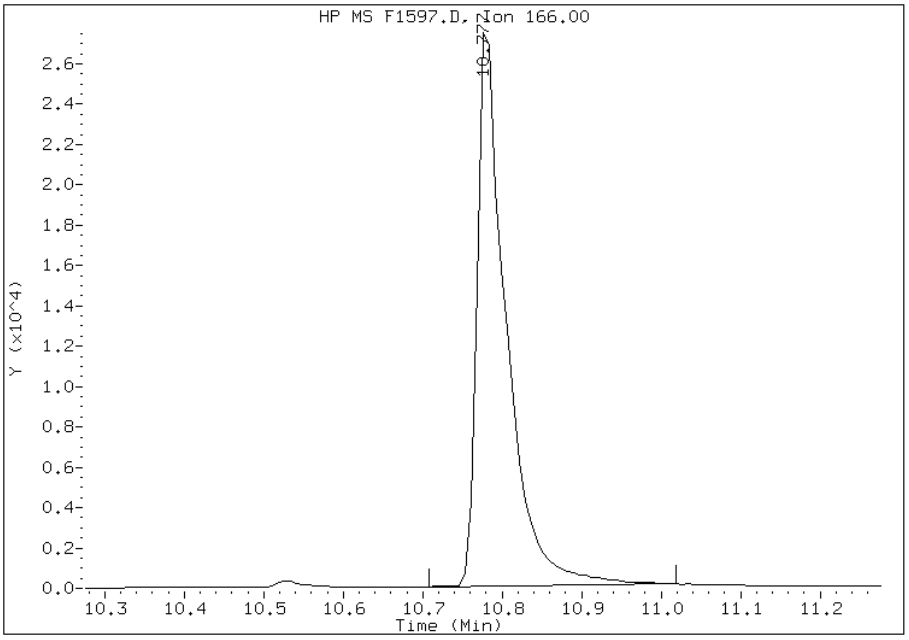
Manual Integration Results

RT: 10.78

Response: 70926

Amount: 244

Conc: 61



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte Misidentified by the Data System

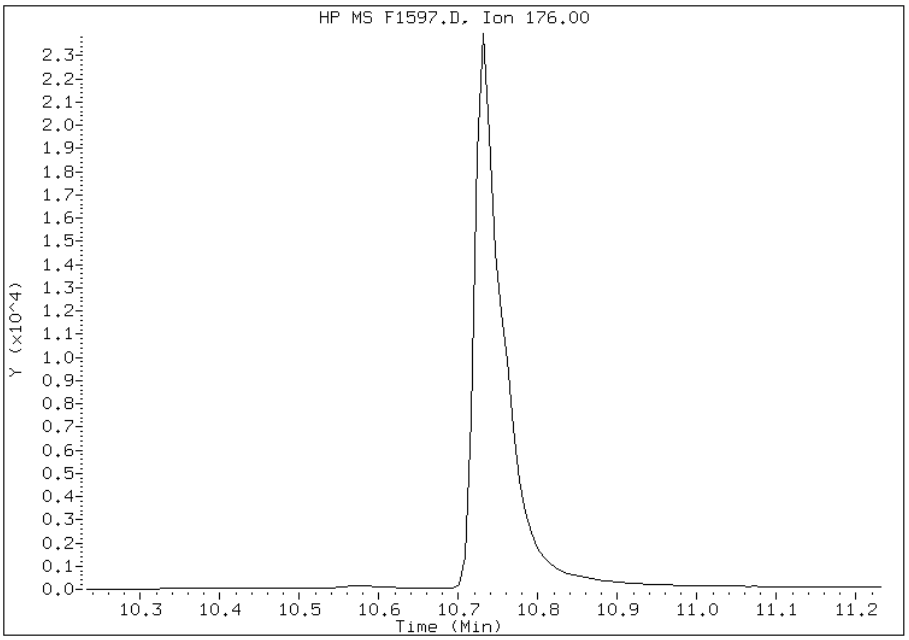
Manual Integration Report

Data File: F1597.D
Inj. Date and Time: 05-OCT-2011 21:11
Instrument ID: F.i
Client ID:
Compound: 21 Fluorene-d10 (Surr)
CAS #:
Report Date: 10/07/2011

Processing Integration Results

Not Detected

Expected RT: 10.73



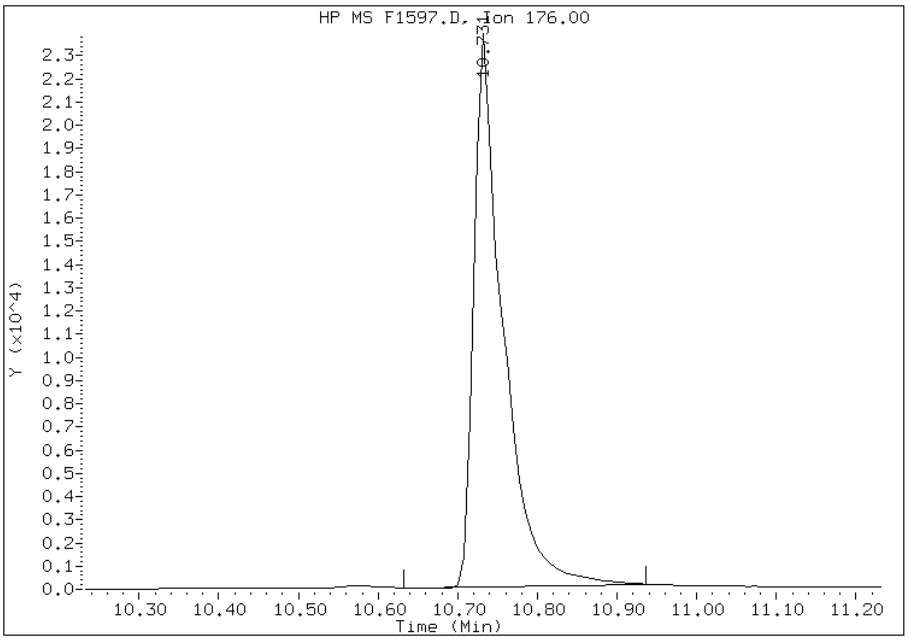
Manual Integration Results

RT: 10.73

Response: 59587

Amount: 227

Conc: 57



Manually Integrated By: ilczyszynd
Manual Integration Reason: Analyte not Identified by the Data System

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Instrument ID: MSS_F Start Date: 09/30/2011 08:31

Analysis Batch Number: 89821 End Date: 09/30/2011 12:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICIS 280-89821/1		09/30/2011 08:31	1	F1463.D	Vf-5MS (30.25) 0.25(mm)
STD10 280-89821/2 IC		09/30/2011 09:08	1	F1464.D	Vf-5MS (30.25) 0.25(mm)
STD20 280-89821/3 IC		09/30/2011 09:45	1	F1465.D	Vf-5MS (30.25) 0.25(mm)
STD150 280-89821/4 IC		09/30/2011 10:23	1	F1466.D	Vf-5MS (30.25) 0.25(mm)
STD600 280-89821/5 IC		09/30/2011 11:00	1	F1467.D	Vf-5MS (30.25) 0.25(mm)
STD800 280-89821/6 IC		09/30/2011 11:37	1	F1468.D	Vf-5MS (30.25) 0.25(mm)
STD1200 280-89821/7 IC		09/30/2011 12:14	1	F1469.D	Vf-5MS (30.25) 0.25(mm)
ICV 280-89821/8		09/30/2011 12:50	1	F1470.D	Vf-5MS (30.25) 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Instrument ID: MSS_F Start Date: 10/05/2011 12:59

Analysis Batch Number: 89849 End Date: 10/05/2011 21:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-89849/1		10/05/2011 12:59	1	F1585.D	Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/05/2011 14:31	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/05/2011 15:08	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/05/2011 15:44	1		Vf-5MS (30.25) 0.25(mm)
280-20281-A-1-B MDLV		10/05/2011 16:21	1		Vf-5MS (30.25) 0.25(mm)
280-20281-A-2-B MDLV		10/05/2011 16:57	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/05/2011 17:34	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/05/2011 18:10	1		Vf-5MS (30.25) 0.25(mm)
MB 280-87039/1-A		10/05/2011 19:59	1	F1595.D	Vf-5MS (30.25) 0.25(mm)
LCS 280-87039/2-A		10/05/2011 20:35	1	F1596.D	Vf-5MS (30.25) 0.25(mm)
LCSD 280-87039/3-A		10/05/2011 21:11	1	F1597.D	Vf-5MS (30.25) 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Instrument ID: MSS_F Start Date: 10/06/2011 13:24

Analysis Batch Number: 89868 End Date: 10/07/2011 00:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-89868/1		10/06/2011 13:24	1	F1625.D	Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 14:36	1		Vf-5MS (30.25) 0.25(mm)
280-20371-1	E13-091511	10/06/2011 15:13	1	F1628.D	Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 15:49	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 16:25	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 17:01	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 17:37	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 18:13	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 18:49	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 19:24	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 20:00	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 20:36	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 21:12	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 21:48	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 22:24	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 23:00	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/06/2011 23:37	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/07/2011 00:14	1		Vf-5MS (30.25) 0.25(mm)
ZZZZZ		10/07/2011 00:51	1		Vf-5MS (30.25) 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-20371-1

SDG No.:

Batch Number: 87039 Batch Start Date: 09/20/11 19:30 Batch Analyst: Pottruff, Erma J

Batch Method: 3520C Batch End Date: 09/26/11 11:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	FirstAdjustpH	CSLP_SIM_LCS 00003	CSLP_SIM_SURR 00010
MB 280-87039/1		3520C, 8270C		7 SU	4000 mL	1000 uL	14 SU		1 mL
LCS 280-87039/2		3520C, 8270C		7 SU	4000 mL	1000 uL	14 SU	1 mL	1 mL
LCSD 280-87039/3		3520C, 8270C		7 SU	4000 mL	1000 uL	14 SU	1 mL	1 mL
280-20371-E-1	E13-091511	3520C, 8270C	T	7 SU	3887.7 mL	1000 uL	14 SU		1 mL

Batch Notes	
Base used for pH adjust Lot #	4105417
Batch Comment	DV OP 0005/0007 pip: C
Person's name who did the concentration	SMILEY.K / BROHL.R BATH A @ 84 C
Na2SO4 Lot Number	K10624E
Prep Solvent Lot #	K32J01
Prep Solvent Name	mecl2
Prep Solvent Volume Used	150 mL
Person's name who did the prep	Erma P
Person's name who witnessed reagent drop	reviewer Cheyana C
Time the second extractino ended 24 hr	9/21/11 20:00
Time the second extration started 24 hr	9/20/11 @ 1945
Sufficient volume for MS/MSD?	no

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-20371-1

Login Number: 20371

List Source: TestAmerica Denver

List Number: 1

Creator: Philipp, Nicholas A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Data Quality Assessment Memorandum

Date: February 17, 2012

To: Scott Anderson

From: Bill Gregg

Subject: Data Quality Assessment
Ultra Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 280-23788-1
Appendix K

Distribution: File 0987-0009 File

SUMMARY

A Data Quality Assessment (DQA) was performed on the data for the analysis of an aqueous samples for Ultra Low Level aromatic hydrocarbons (PAHs) by SW-846 method 8270C, selected ion monitoring (SIM) method. The sample was collected on September 15, 2011 at the Reilly Site in St. Louis Park, MN. The samples were submitted to TestAmerica in Arvada, CO for analysis. TestAmerica processed and reported the results under lot number 280-20371-1.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes. All samples were analyzed undiluted for this data set.

SAMPLES

The sample included in this review are listed below.

Sample IDs	Sample IDs
E13-91511	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results

- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The sample was extracted and analyzed within the method specified holding times.

The cooler temperature was measured upon sample receipt was within the acceptance criteria of 4± 2°C.

Laboratory Blanks

Target analytes were detected at low concentrations in the laboratory method. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (AL) were established at 5x the concentration detected in the blank. The following table summarizes the level of blank contamination detected in the laboratory method blank; the action level; and the associated samples.

Compound	Concentration (ng/L)	AL (ng/L)	Associated Samples
Acenaphthene	1.07	5.35	All samples in data set
Benzo(a)anthracene	2.94	14.7	All samples in data set
Benzo (a)pyrene	1.82	9.1	All samples in data set
Benzo(e)pyrene	1.70	8.5	All samples in data set
Benzo(b)fluoranthene	2.51	12.55	All samples in data set
Benzo(k)fluoranthene	4.91	24.55	All samples in data set
Benzo(g,h,i)perylene	1.78	8.9	All samples in data set
Dibenz(a,h)anthracene	1.26	6.3	All samples in data set
Dibenzothiophene	19.5	97.5	All samples in data set
Indeno(1,2,3-cd)pyrene	1.30	6.5	All samples in data set

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses except that fluorene-d10 was recovered at 87% in the LCS and chrysene-d12 was recovered at 24% in sample

E13-091511. The acceptable limits for fluorene-d10 are 23% to 84% and the limits for chrysene-d12 are 28% to 101%. The data were not qualified based on these results.

LCS/LCSD Results

All target analytes were spiked. The %Rs were within the QC acceptance criteria for the LCS analysis for all compounds except as summarized below.

Compound	MS %R	Laboratory QC limits %R	Action (Detects/Nondetects)
Acridine	27	30-150	J/U
Naphthalene	97	27-95	J/U
7,12-dimethylbenz(a)anthracene	27	30-150	J/UJ

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-21871-1
Client Project/Site: CSLP - Reilly Tar & Chemical

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, Minnesota 55426

Attn: Scott Anderson

Authorized for release by:
11/11/2011 4:33:20 PM

Lisa Uriell
Project Manager I
lisa.uriell@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 280-21871-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-21871-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
Four samples were received under chain of custody on October 21, 2011. The samples were received at temperatures of 4.2°C, 4.4°C, 3.2°C, 2.9°C and 3.8°C.

No anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to limited sample volume, the following samples had an initial aliquot volume below the nominal aliquot volume of 4000 mL. Therefore, the analysis of these samples had to be performed with elevated detection limits. The reporting limits have been adjusted relative to the dilutions required.

SLP10T-102011 (280-21871-1) had an initial volume of 3595.4 mL
SLP10TDUP-102011 (280-21871-2) had an initial volume of 3566.3 mL
SLP10TFB-102011 (280-21871-3) had an initial volume of 3755 mL
SLP10TFBD-102011 (280-21871-4) had an initial volume of 3600.8 mL

Low levels of Acenaphthylene are present in the method blank associated with prep batch 280-92993. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”.

Additionally, levels of 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Benzo(b)thiophene, Dibenzofuran and Naphthalene are present in the method blank associated with prep batch 280-92993 at levels above the RL. The associated positive results in the analytical report have been flagged with “B”. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is.

The LCS associated with prep batch 280-92993 exhibited percent recoveries below the QC control limits for Acridine at 21% (limits 30-150%) and 7,12-Dimethylbenz(a)anthracene at 29% (limits 30-150%). This 7,12-Dimethylbenz(a)anthracene is not a compound of interest for this project. The LCS was re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

Job ID: 280-21871-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

The MS/MSD associated with prep batch 280-92993 was performed using sample SLP10T-102011 (280-21871-1), as requested. MS/MSD exhibited 11 of the 33 Matrix Spike compound recoveries and 1 of the 3 surrogate recoveries outside the control limits. MS/MSD exhibited 11 of the 33 Matrix Spike Duplicate compound recoveries outside the control limits. The MS/MSD exhibited 1 of the 33 Relative Percent Difference (RPD) data outside the control limits. The MS/MSD exhibited percent recoveries and/or RPD data outside the control limits for the compounds listed below. Details of the specific analyte recoveries can found in the Matrix Spike Sample Recovery and Data Reports.

3-Methylnaphthalene	Acridine	Benzo[a]anthracene
Benzo[a]pyrene	Benzo[e]pyrene	Benzo[b]fluoranthene
Benzo[k]fluoranthene	Benzo[ghi]perylene	Dibenzo(a,h)pyrene
Indeno[1,2,3-cd]pyrene	Perylene	Chrysene-d12

No other anomalies were noted.

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION
JOB: 280-21871-1
ANALYSIS: SW846-8270C SIM

QC Parameter	Data Planned	Valid Data Obtained
Method Blank	31	25
MB Surrogates	3	3
LCS	7	7
LCS Surrogates	3	3
FB/FBD	62	58
MS	7	6
MS Surrogates	3	2
MSD	7	6
MSD Surrogates	3	3
MS/MSD RPD	7	7
Sample/Dup. RPD	31	29
Sample Surrogates	12	12
Samples and QC Internal Standard Area	24	24
TOTAL	**200**	**185**
% Completeness	**92.5%**	

Sample Duplicate Calculation for Method 8270C SIM

Sample Duplicate RPD					
JOB 280-21871-1					
Sample: SLP10T-102011		**DUP: SLP10TDUP-102011**			
Compound	**Result**	**Compound**	**Result**	**RPD**	**RPD>50%**
Acenaphthene	16	Acenaphthene	16	0.0	
Acenaphthylene	1.0	Acenaphthylene	0.99	1.0	
Acridine	ND	Acridine	ND	0.0	
Anthracene	ND	Anthracene	ND	0.0	
Benzo(a)anthracene	ND	Benzo(a)anthracene	ND	0.0	
Benzo(b)fluoranthene	ND	Benzo(b)fluoranthene	ND	0.0	
Benzo(k)fluoranthene	ND	Benzo(k)fluoranthene	ND	0.0	
2,3-Benzofuran	0.92	2,3-Benzofuran	ND	NC	
Benzo(ghi)perylene	ND	Benzo(ghi)perylene	ND	0.0	
Benzo(a)pyrene	ND	Benzo(a)pyrene	ND	0.0	
Benzo(e)pyrene	ND	Benzo(e)pyrene	ND	0.0	
Benzo(b)thiophene	2.4	Benzo(b)thiophene	2.4	0.0	
Biphenyl	ND	Biphenyl	ND	0.0	
Carbazole	ND	Carbazole	ND	0.0	
Chrysene	ND	Chrysene	ND	0.0	
Dibenz(a,h)anthracene	ND	Dibenz(a,h)anthracene	ND	0.0	
Dibenzofuran	ND	Dibenzofuran	ND	0.0	
Dibenzothiophene	ND	Dibenzothiophene	ND	0.0	
2,3-Dihydroindene	28	2,3-Dihydroindene	25	11.3	
Fluoranthene	ND	Fluoranthene	ND	0.0	
Fluorene	1.6	Fluorene	1.4	13.3	
Indene	ND	Indene	ND	0.0	
Indeno(1,2,3-cd)pyrene	ND	Indeno(1,2,3-cd)pyrene	ND	0.0	
Indole	2.7	Indole	2.8	3.6	
2-Methylnaphthalene	3.3	2-Methylnaphthalene	1.5	75.0	p
1-Methylnaphthalene	4.9	1-Methylnaphthalene	3.8	25.3	
Naphthalene	9.4	Naphthalene	3.1	100.8	p
Perylene	ND	Perylene	ND	0.0	
Phenanthrene	ND	Phenanthrene	ND	0.0	
Pyrene	ND	Pyrene	2.8	NC	
Quinoline	ND	Quinoline	ND	0.0	

RPD = Relative Percent Difference
ND = Compound not detected in the sample
p = RPD is outside of control limits
*NC = RPD not calculated, one positive result and one ND.
Considered acceptable if the positive result is less than 4x the RL.

Definitions/Glossary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Client Sample ID: SLP10T-102011 — Lab Sample ID: 280-21871-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	0.92	J	6.0	0.76	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	28		5.6	0.78	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	4.9	J B	6.2	0.99	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	3.3	J B	6.6	1.1	ng/L	1		8270C	Total/NA
Acenaphthene	16	B	6.3	0.56	ng/L	1		8270C	Total/NA
Acenaphthylene	1.0	J B	5.3	0.86	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	2.4	J B	5.8	0.83	ng/L	1		8270C	Total/NA
Fluorene	1.6	J	4.6	0.95	ng/L	1		8270C	Total/NA
Indole	2.7	J	5.2	1.9	ng/L	1		8270C	Total/NA
Naphthalene	9.4	J B	9.6	1.3	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TDUP-102011 — Lab Sample ID: 280-21871-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	25		5.6	0.79	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	3.8	J B	6.3	1.0	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.5	J B	6.6	1.1	ng/L	1		8270C	Total/NA
Acenaphthene	16	B	6.4	0.56	ng/L	1		8270C	Total/NA
Acenaphthylene	0.99	J B	5.4	0.86	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	2.4	J B	5.8	0.84	ng/L	1		8270C	Total/NA
Fluorene	1.4	J	4.6	0.95	ng/L	1		8270C	Total/NA
Indole	2.8	J	5.3	1.9	ng/L	1		8270C	Total/NA
Naphthalene	3.1	J B	9.6	1.3	ng/L	1		8270C	Total/NA
Pyrene	2.8	J	4.7	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFB-102011 — Lab Sample ID: 280-21871-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	3.6	J	5.3	0.75	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	7.0	B	5.5	0.80	ng/L	1		8270C	Total/NA
Naphthalene	3.2	J B	9.2	1.2	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFBD-102011 — Lab Sample ID: 280-21871-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	1.6	J	5.6	0.78	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	13	B	6.2	0.99	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	14	B	6.6	1.1	ng/L	1		8270C	Total/NA
Acenaphthene	1.8	J B	6.3	0.56	ng/L	1		8270C	Total/NA
Acenaphthylene	1.7	J B	5.3	0.86	ng/L	1		8270C	Total/NA
Dibenzofuran	1.8	J B	6.3	1.1	ng/L	1		8270C	Total/NA
Naphthalene	32	B	9.6	1.3	ng/L	1		8270C	Total/NA

Method Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compound (GC/MS SIM LL)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-21871-1	SLP10T-102011	Water	10/20/11 13:40	10/21/11 09:30
280-21871-2	SLP10TDUP-102011	Water	10/20/11 13:45	10/21/11 09:30
280-21871-3	SLP10TFB-102011	Water	10/20/11 14:00	10/21/11 09:30
280-21871-4	SLP10TFBD-102011	Water	10/20/11 14:05	10/21/11 09:30

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Client Sample ID: SLP10T-102011
Date Collected: 10/20/11 13:40
Date Received: 10/21/11 09:30

Lab Sample ID: 280-21871-1
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**0.92**	**J**	6.0	0.76	ng/L		10/25/11 16:35	11/10/11 15:21	1
2,3-Dihydroindene	**28**		5.6	0.78	ng/L		10/25/11 16:35	11/10/11 15:21	1
1-Methylnaphthalene	**4.9**	**J B**	6.2	0.99	ng/L		10/25/11 16:35	11/10/11 15:21	1
2-Methylnaphthalene	**3.3**	**J B**	6.6	1.1	ng/L		10/25/11 16:35	11/10/11 15:21	1
Acenaphthene	**16**	**B**	6.3	0.56	ng/L		10/25/11 16:35	11/10/11 15:21	1
Acenaphthylene	**1.0**	**J B**	5.3	0.86	ng/L		10/25/11 16:35	11/10/11 15:21	1
Acridine	ND	*	7.2	7.2	ng/L		10/25/11 16:35	11/10/11 15:21	1
Anthracene	ND		4.7	0.89	ng/L		10/25/11 16:35	11/10/11 15:21	1
Benzo[a]anthracene	ND		4.8	1.0	ng/L		10/25/11 16:35	11/10/11 15:21	1
Benzo[a]pyrene	ND		2.8	1.4	ng/L		10/25/11 16:35	11/10/11 15:21	1
Benzo[e]pyrene	ND		4.8	1.3	ng/L		10/25/11 16:35	11/10/11 15:21	1
Benzo[b]fluoranthene	ND		5.2	1.5	ng/L		10/25/11 16:35	11/10/11 15:21	1
Benzo(b)thiophene	**2.4**	**J B**	5.8	0.83	ng/L		10/25/11 16:35	11/10/11 15:21	1
Benzo[k]fluoranthene	ND		4.6	1.4	ng/L		10/25/11 16:35	11/10/11 15:21	1
Benzo[g,h,i]perylene	ND		6.9	1.3	ng/L		10/25/11 16:35	11/10/11 15:21	1
Carbazole	ND		4.2	0.80	ng/L		10/25/11 16:35	11/10/11 15:21	1
Chrysene	ND		6.2	1.4	ng/L		10/25/11 16:35	11/10/11 15:21	1
Dibenz(a,h)anthracene	ND		6.6	1.2	ng/L		10/25/11 16:35	11/10/11 15:21	1
Dibenzofuran	ND		6.3	1.1	ng/L		10/25/11 16:35	11/10/11 15:21	1
Dibenzothiophene	ND		4.6	1.1	ng/L		10/25/11 16:35	11/10/11 15:21	1
Fluoranthene	ND		5.1	1.9	ng/L		10/25/11 16:35	11/10/11 15:21	1
Fluorene	**1.6**	**J**	4.6	0.95	ng/L		10/25/11 16:35	11/10/11 15:21	1
Indene	ND		5.2	3.6	ng/L		10/25/11 16:35	11/10/11 15:21	1
Indole	**2.7**	**J**	5.2	1.9	ng/L		10/25/11 16:35	11/10/11 15:21	1
Indeno[1,2,3-cd]pyrene	ND		6.0	1.4	ng/L		10/25/11 16:35	11/10/11 15:21	1
Naphthalene	**9.4**	**J B**	9.6	1.3	ng/L		10/25/11 16:35	11/10/11 15:21	1
Perylene	ND		4.2	4.2	ng/L		10/25/11 16:35	11/10/11 15:21	1
Phenanthrene	ND		7.0	3.6	ng/L		10/25/11 16:35	11/10/11 15:21	1
Pyrene	ND		4.7	1.1	ng/L		10/25/11 16:35	11/10/11 15:21	1
Quinoline	ND		10	6.3	ng/L		10/25/11 16:35	11/10/11 15:21	1
Biphenyl	ND		6.2	1.2	ng/L		10/25/11 16:35	11/10/11 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*74*		*23 - 84*	*10/25/11 16:35*	*11/10/11 15:21*	*1*
Chrysene-d12 (Surr)	*28*		*28 - 101*	*10/25/11 16:35*	*11/10/11 15:21*	*1*
Naphthalene-d8 (Surr)	*82*		*22 - 97*	*10/25/11 16:35*	*11/10/11 15:21*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Client Sample ID: SLP10TDUP-102011
Date Collected: 10/20/11 13:45
Date Received: 10/21/11 09:30

Lab Sample ID: 280-21871-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		6.1	0.76	ng/L		10/25/11 16:35	11/10/11 17:10	1
2,3-Dihydroindene	**25**		5.6	0.79	ng/L		10/25/11 16:35	11/10/11 17:10	1
1-Methylnaphthalene	**3.8**	**J B**	6.3	1.0	ng/L		10/25/11 16:35	11/10/11 17:10	1
2-Methylnaphthalene	**1.5**	**J B**	6.6	1.1	ng/L		10/25/11 16:35	11/10/11 17:10	1
Acenaphthene	**16**	**B**	6.4	0.56	ng/L		10/25/11 16:35	11/10/11 17:10	1
Acenaphthylene	**0.99**	**J B**	5.4	0.86	ng/L		10/25/11 16:35	11/10/11 17:10	1
Acridine	ND	*	7.3	7.3	ng/L		10/25/11 16:35	11/10/11 17:10	1
Anthracene	ND		4.7	0.90	ng/L		10/25/11 16:35	11/10/11 17:10	1
Benzo[a]anthracene	ND		4.8	1.0	ng/L		10/25/11 16:35	11/10/11 17:10	1
Benzo[a]pyrene	ND		2.8	1.4	ng/L		10/25/11 16:35	11/10/11 17:10	1
Benzo[e]pyrene	ND		4.8	1.3	ng/L		10/25/11 16:35	11/10/11 17:10	1
Benzo[b]fluoranthene	ND		5.3	1.6	ng/L		10/25/11 16:35	11/10/11 17:10	1
Benzo(b)thiophene	**2.4**	**J B**	5.8	0.84	ng/L		10/25/11 16:35	11/10/11 17:10	1
Benzo[k]fluoranthene	ND		4.6	1.4	ng/L		10/25/11 16:35	11/10/11 17:10	1
Benzo[g,h,i]perylene	ND		7.0	1.3	ng/L		10/25/11 16:35	11/10/11 17:10	1
Carbazole	ND		4.3	0.81	ng/L		10/25/11 16:35	11/10/11 17:10	1
Chrysene	ND		6.3	1.4	ng/L		10/25/11 16:35	11/10/11 17:10	1
Dibenz(a,h)anthracene	ND		6.6	1.2	ng/L		10/25/11 16:35	11/10/11 17:10	1
Dibenzofuran	ND		6.4	1.1	ng/L		10/25/11 16:35	11/10/11 17:10	1
Dibenzothiophene	ND		4.6	1.1	ng/L		10/25/11 16:35	11/10/11 17:10	1
Fluoranthene	ND		5.2	1.9	ng/L		10/25/11 16:35	11/10/11 17:10	1
Fluorene	**1.4**	**J**	4.6	0.95	ng/L		10/25/11 16:35	11/10/11 17:10	1
Indene	ND		5.3	3.7	ng/L		10/25/11 16:35	11/10/11 17:10	1
Indole	**2.8**	**J**	5.3	1.9	ng/L		10/25/11 16:35	11/10/11 17:10	1
Indeno[1,2,3-cd]pyrene	ND		6.1	1.4	ng/L		10/25/11 16:35	11/10/11 17:10	1
Naphthalene	**3.1**	**J B**	9.6	1.3	ng/L		10/25/11 16:35	11/10/11 17:10	1
Perylene	ND		4.3	4.3	ng/L		10/25/11 16:35	11/10/11 17:10	1
Phenanthrene	ND		7.1	3.6	ng/L		10/25/11 16:35	11/10/11 17:10	1
Pyrene	**2.8**	**J**	4.7	1.1	ng/L		10/25/11 16:35	11/10/11 17:10	1
Quinoline	ND		10	6.3	ng/L		10/25/11 16:35	11/10/11 17:10	1
Biphenyl	ND		6.3	1.2	ng/L		10/25/11 16:35	11/10/11 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*77*		*23 - 84*	*10/25/11 16:35*	*11/10/11 17:10*	*1*
Chrysene-d12 (Surr)	*36*		*28 - 101*	*10/25/11 16:35*	*11/10/11 17:10*	*1*
Naphthalene-d8 (Surr)	*82*		*22 - 97*	*10/25/11 16:35*	*11/10/11 17:10*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Client Sample ID: SLP10TFB-102011
Date Collected: 10/20/11 14:00
Date Received: 10/21/11 09:30

Lab Sample ID: 280-21871-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.8	0.72	ng/L		10/25/11 16:35	11/10/11 17:47	1
2,3-Dihydroindene	**3.6**	**J**	5.3	0.75	ng/L		10/25/11 16:35	11/10/11 17:47	1
1-Methylnaphthalene	ND		6.0	0.95	ng/L		10/25/11 16:35	11/10/11 17:47	1
2-Methylnaphthalene	ND		6.3	1.0	ng/L		10/25/11 16:35	11/10/11 17:47	1
Acenaphthene	ND		6.1	0.53	ng/L		10/25/11 16:35	11/10/11 17:47	1
Acenaphthylene	ND		5.1	0.82	ng/L		10/25/11 16:35	11/10/11 17:47	1
Acridine	ND	*	6.9	6.9	ng/L		10/25/11 16:35	11/10/11 17:47	1
Anthracene	ND		4.5	0.85	ng/L		10/25/11 16:35	11/10/11 17:47	1
Benzo[a]anthracene	ND		4.6	0.98	ng/L		10/25/11 16:35	11/10/11 17:47	1
Benzo[a]pyrene	ND		2.7	1.3	ng/L		10/25/11 16:35	11/10/11 17:47	1
Benzo[e]pyrene	ND		4.6	1.2	ng/L		10/25/11 16:35	11/10/11 17:47	1
Benzo[b]fluoranthene	ND		5.0	1.5	ng/L		10/25/11 16:35	11/10/11 17:47	1
Benzo(b)thiophene	**7.0**	**B**	5.5	0.80	ng/L		10/25/11 16:35	11/10/11 17:47	1
Benzo[k]fluoranthene	ND		4.4	1.3	ng/L		10/25/11 16:35	11/10/11 17:47	1
Benzo[g,h,i]perylene	ND		6.6	1.2	ng/L		10/25/11 16:35	11/10/11 17:47	1
Carbazole	ND		4.0	0.77	ng/L		10/25/11 16:35	11/10/11 17:47	1
Chrysene	ND		6.0	1.3	ng/L		10/25/11 16:35	11/10/11 17:47	1
Dibenz(a,h)anthracene	ND		6.3	1.1	ng/L		10/25/11 16:35	11/10/11 17:47	1
Dibenzofuran	ND		6.1	1.1	ng/L		10/25/11 16:35	11/10/11 17:47	1
Dibenzothiophene	ND		4.4	1.0	ng/L		10/25/11 16:35	11/10/11 17:47	1
Fluoranthene	ND		4.9	1.8	ng/L		10/25/11 16:35	11/10/11 17:47	1
Fluorene	ND		4.4	0.91	ng/L		10/25/11 16:35	11/10/11 17:47	1
Indene	ND		5.0	3.5	ng/L		10/25/11 16:35	11/10/11 17:47	1
Indole	ND		5.0	1.8	ng/L		10/25/11 16:35	11/10/11 17:47	1
Indeno[1,2,3-cd]pyrene	ND		5.8	1.3	ng/L		10/25/11 16:35	11/10/11 17:47	1
Naphthalene	**3.2**	**J B**	9.2	1.2	ng/L		10/25/11 16:35	11/10/11 17:47	1
Perylene	ND		4.1	4.1	ng/L		10/25/11 16:35	11/10/11 17:47	1
Phenanthrene	ND		6.7	3.4	ng/L		10/25/11 16:35	11/10/11 17:47	1
Pyrene	ND		4.5	1.1	ng/L		10/25/11 16:35	11/10/11 17:47	1
Quinoline	ND		9.6	6.0	ng/L		10/25/11 16:35	11/10/11 17:47	1
Biphenyl	ND		6.0	1.1	ng/L		10/25/11 16:35	11/10/11 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*79*		*23 - 84*	*10/25/11 16:35*	*11/10/11 17:47*	*1*
Chrysene-d12 (Surr)	*84*		*28 - 101*	*10/25/11 16:35*	*11/10/11 17:47*	*1*
Naphthalene-d8 (Surr)	*84*		*22 - 97*	*10/25/11 16:35*	*11/10/11 17:47*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Client Sample ID: SLP10TFBD-102011
Date Collected: 10/20/11 14:05
Date Received: 10/21/11 09:30

Lab Sample ID: 280-21871-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		6.0	0.76	ng/L		10/25/11 16:35	11/10/11 18:24	1
2,3-Dihydroindene	**1.6**	**J**	5.6	0.78	ng/L		10/25/11 16:35	11/10/11 18:24	1
1-Methylnaphthalene	**13**	**B**	6.2	0.99	ng/L		10/25/11 16:35	11/10/11 18:24	1
2-Methylnaphthalene	**14**	**B**	6.6	1.1	ng/L		10/25/11 16:35	11/10/11 18:24	1
Acenaphthene	**1.8**	**J B**	6.3	0.56	ng/L		10/25/11 16:35	11/10/11 18:24	1
Acenaphthylene	**1.7**	**J B**	5.3	0.86	ng/L		10/25/11 16:35	11/10/11 18:24	1
Acridine	ND	*	7.2	7.2	ng/L		10/25/11 16:35	11/10/11 18:24	1
Anthracene	ND		4.7	0.89	ng/L		10/25/11 16:35	11/10/11 18:24	1
Benzo[a]anthracene	ND		4.8	1.0	ng/L		10/25/11 16:35	11/10/11 18:24	1
Benzo[a]pyrene	ND		2.8	1.4	ng/L		10/25/11 16:35	11/10/11 18:24	1
Benzo[e]pyrene	ND		4.8	1.3	ng/L		10/25/11 16:35	11/10/11 18:24	1
Benzo[b]fluoranthene	ND		5.2	1.5	ng/L		10/25/11 16:35	11/10/11 18:24	1
Benzo(b)thiophene	ND		5.8	0.83	ng/L		10/25/11 16:35	11/10/11 18:24	1
Benzo[k]fluoranthene	ND		4.6	1.4	ng/L		10/25/11 16:35	11/10/11 18:24	1
Benzo[g,h,i]perylene	ND		6.9	1.3	ng/L		10/25/11 16:35	11/10/11 18:24	1
Carbazole	ND		4.2	0.80	ng/L		10/25/11 16:35	11/10/11 18:24	1
Chrysene	ND		6.2	1.4	ng/L		10/25/11 16:35	11/10/11 18:24	1
Dibenz(a,h)anthracene	ND		6.6	1.2	ng/L		10/25/11 16:35	11/10/11 18:24	1
Dibenzofuran	**1.8**	**J B**	6.3	1.1	ng/L		10/25/11 16:35	11/10/11 18:24	1
Dibenzothiophene	ND		4.6	1.1	ng/L		10/25/11 16:35	11/10/11 18:24	1
Fluoranthene	ND		5.1	1.9	ng/L		10/25/11 16:35	11/10/11 18:24	1
Fluorene	ND		4.6	0.94	ng/L		10/25/11 16:35	11/10/11 18:24	1
Indene	ND		5.2	3.6	ng/L		10/25/11 16:35	11/10/11 18:24	1
Indole	ND		5.2	1.9	ng/L		10/25/11 16:35	11/10/11 18:24	1
Indeno[1,2,3-cd]pyrene	ND		6.0	1.4	ng/L		10/25/11 16:35	11/10/11 18:24	1
Naphthalene	**32**	**B**	9.6	1.3	ng/L		10/25/11 16:35	11/10/11 18:24	1
Perylene	ND		4.2	4.2	ng/L		10/25/11 16:35	11/10/11 18:24	1
Phenanthrene	ND		7.0	3.6	ng/L		10/25/11 16:35	11/10/11 18:24	1
Pyrene	ND		4.7	1.1	ng/L		10/25/11 16:35	11/10/11 18:24	1
Quinoline	ND		10	6.3	ng/L		10/25/11 16:35	11/10/11 18:24	1
Biphenyl	ND		6.2	1.2	ng/L		10/25/11 16:35	11/10/11 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*78*		*23 - 84*	*10/25/11 16:35*	*11/10/11 18:24*	*1*
Chrysene-d12 (Surr)	*86*		*28 - 101*	*10/25/11 16:35*	*11/10/11 18:24*	*1*
Naphthalene-d8 (Surr)	*84*		*22 - 97*	*10/25/11 16:35*	*11/10/11 18:24*	*1*

Surrogate Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		FD10	sene-d12 (S	thalene-d8						
Lab Sample ID	Client Sample ID	(23-84)	(28-101)	(22-97)						
280-21871-1	SLP10T-102011	74	28	82						
280-21871-1 MS	SLP10T-102011	74	22 X	80						
280-21871-1 MSD	SLP10T-102011	73	30	78						
280-21871-2	SLP10TDUP-102011	77	36	82						
280-21871-3	SLP10TFB-102011	79	84	84						
280-21871-4	SLP10TFBD-102011	78	86	84						
LCS 280-92993/2-A	Lab Control Sample	71	83	81						
MB 280-92993/1-A	Method Blank	71	52	78						

Surrogate Legend

FD10 = Fluorene-d10 (Surr)

Chrysene-d12 (Surr) = Chrysene-d12 (Surr)

Naphthalene-d8 (Surr) = Naphthalene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Lab Sample ID: MB 280-92993/1-A
Matrix: Water
Analysis Batch: 95981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 92993

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		10/25/11 16:35	11/11/11 14:29	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		10/25/11 16:35	11/11/11 14:29	1
1-Methylnaphthalene	18.7		5.6	0.89	ng/L		10/25/11 16:35	11/11/11 14:29	1
2-Methylnaphthalene	20.0		5.9	0.98	ng/L		10/25/11 16:35	11/11/11 14:29	1
Acenaphthene	5.89		5.7	0.50	ng/L		10/25/11 16:35	11/11/11 14:29	1
Acenaphthylene	4.21	J	4.8	0.77	ng/L		10/25/11 16:35	11/11/11 14:29	1
Acridine	ND		6.5	6.5	ng/L		10/25/11 16:35	11/11/11 14:29	1
Anthracene	ND		4.2	0.80	ng/L		10/25/11 16:35	11/11/11 14:29	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		10/25/11 16:35	11/11/11 14:29	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		10/25/11 16:35	11/11/11 14:29	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		10/25/11 16:35	11/11/11 14:29	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		10/25/11 16:35	11/11/11 14:29	1
Benzo(b)thiophene	6.19		5.2	0.75	ng/L		10/25/11 16:35	11/11/11 14:29	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		10/25/11 16:35	11/11/11 14:29	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		10/25/11 16:35	11/11/11 14:29	1
Carbazole	ND		3.8	0.72	ng/L		10/25/11 16:35	11/11/11 14:29	1
Chrysene	ND		5.6	1.2	ng/L		10/25/11 16:35	11/11/11 14:29	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		10/25/11 16:35	11/11/11 14:29	1
Dibenzofuran	7.17		5.7	0.99	ng/L		10/25/11 16:35	11/11/11 14:29	1
Dibenzothiophene	ND		4.1	0.98	ng/L		10/25/11 16:35	11/11/11 14:29	1
Fluoranthene	ND		4.6	1.7	ng/L		10/25/11 16:35	11/11/11 14:29	1
Fluorene	ND		4.1	0.85	ng/L		10/25/11 16:35	11/11/11 14:29	1
Indene	ND		4.7	3.3	ng/L		10/25/11 16:35	11/11/11 14:29	1
Indole	ND		4.7	1.7	ng/L		10/25/11 16:35	11/11/11 14:29	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		10/25/11 16:35	11/11/11 14:29	1
Naphthalene	13.2		8.6	1.1	ng/L		10/25/11 16:35	11/11/11 14:29	1
Perylene	ND		3.8	3.8	ng/L		10/25/11 16:35	11/11/11 14:29	1
Phenanthrene	ND		6.3	3.2	ng/L		10/25/11 16:35	11/11/11 14:29	1
Pyrene	ND		4.2	0.99	ng/L		10/25/11 16:35	11/11/11 14:29	1
Quinoline	ND		9.0	5.7	ng/L		10/25/11 16:35	11/11/11 14:29	1
Biphenyl	ND		5.6	1.1	ng/L		10/25/11 16:35	11/11/11 14:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*71*		*23 - 84*	*10/25/11 16:35*	*11/11/11 14:29*	*1*
Chrysene-d12 (Surr)	*52*		*28 - 101*	*10/25/11 16:35*	*11/11/11 14:29*	*1*
Naphthalene-d8 (Surr)	*78*		*22 - 97*	*10/25/11 16:35*	*11/11/11 14:29*	*1*

Lab Sample ID: LCS 280-92993/2-A
Matrix: Water
Analysis Batch: 95856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	75.0	60.8		ng/L		81	30 - 150
2,3-Dihydroindene	75.0	60.9		ng/L		81	30 - 150
1-Methylnaphthalene	75.0	60.7		ng/L		81	30 - 150
2-Methylnaphthalene	75.0	60.9		ng/L		81	25 - 95
3-Methylcholanthrene	75.0	40.9		ng/L		55	30 - 150
Acenaphthene	75.0	60.6		ng/L		81	30 - 150
Acenaphthylene	75.0	54.0		ng/L		72	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-92993/2-A
Matrix: Water
Analysis Batch: 95856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acridine	75.0	16.0	*	ng/L		21	30 - 150
Anthracene	75.0	53.6		ng/L		71	30 - 150
Benzo[a]anthracene	75.0	57.1		ng/L		76	30 - 150
Benzo[a]pyrene	75.0	59.6		ng/L		79	30 - 150
Benzo[e]pyrene	75.0	60.7		ng/L		81	37 - 105
Benzo[b]fluoranthene	75.0	58.9		ng/L		79	30 - 150
Benzo(b)thiophene	75.0	61.0		ng/L		81	30 - 150
Benzo[k]fluoranthene	75.0	61.0		ng/L		81	30 - 150
Benzo[g,h,i]perylene	75.0	56.5		ng/L		75	30 - 150
Carbazole	75.0	58.3		ng/L		78	30 - 150
Chrysene	75.0	64.2		ng/L		86	20 - 136
Dibenz(a,h)anthracene	75.0	53.4		ng/L		71	30 - 150
Dibenzofuran	75.0	61.7		ng/L		82	30 - 150
Dibenzothiophene	75.0	60.0		ng/L		80	30 - 150
Fluoranthene	75.0	64.5		ng/L		86	30 - 150
Fluorene	75.0	58.3		ng/L		78	34 - 96
Indene	75.0	59.2		ng/L		79	22 - 86
Indole	75.0	52.9		ng/L		70	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	56.3		ng/L		75	30 - 150
Naphthalene	75.0	65.2		ng/L		87	27 - 95
Perylene	75.0	56.8		ng/L		76	30 - 150
Phenanthrene	75.0	62.5		ng/L		83	30 - 150
Pyrene	75.0	64.1		ng/L		85	30 - 150
Quinoline	75.0	48.4		ng/L		65	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	21.9	*	ng/L		29	30 - 150
Biphenyl	75.0	59.1		ng/L		79	30 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*71*		*23 - 84*
Chrysene-d12 (Surr)	*83*		*28 - 101*
Naphthalene-d8 (Surr)	*81*		*22 - 97*

Lab Sample ID: 280-21871-1 MS
Matrix: Water
Analysis Batch: 95856

Client Sample ID: SLP10T-102011
Prep Type: Total/NA
Prep Batch: 92993

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	0.92	J	81.2	62.0		ng/L		75	30 - 150
2,3-Dihydroindene	28		81.2	82.5		ng/L		67	30 - 150
1-Methylnaphthalene	4.9	J B	81.2	71.7		ng/L		82	30 - 150
2-Methylnaphthalene	3.3	J B	81.2	69.6		ng/L		82	25 - 95
3-Methylcholanthrene	ND		81.2	ND	F	ng/L		0	30 - 150
Acenaphthene	16	B	81.2	82.7		ng/L		82	30 - 150
Acenaphthylene	1.0	J B	81.2	67.6		ng/L		82	30 - 150
Acridine	ND	*	81.2	16.3	F	ng/L		20	30 - 150
Anthracene	ND		81.2	59.8		ng/L		74	30 - 150
Benzo[a]anthracene	ND		81.2	16.0	F	ng/L		20	30 - 150
Benzo[a]pyrene	ND		81.2	4.64	F	ng/L		6	30 - 150
Benzo[e]pyrene	ND		81.2	4.92	F	ng/L		6	37 - 105

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-21871-1 MS
Matrix: Water
Analysis Batch: 95856

Client Sample ID: SLP10T-102011
Prep Type: Total/NA
Prep Batch: 92993

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	ND		81.2	6.38	F	ng/L		8	30 - 150
Benzo(b)thiophene	2.4	J B	81.2	66.3		ng/L		79	30 - 150
Benzo[k]fluoranthene	ND		81.2	5.06	F	ng/L		6	30 - 150
Benzo[g,h,i]perylene	ND		81.2	2.71	J F	ng/L		3	30 - 150
Carbazole	ND		81.2	65.7		ng/L		81	30 - 150
Chrysene	ND		81.2	17.9		ng/L		22	20 - 136
Dibenz(a,h)anthracene	ND		81.2	2.61	J F	ng/L		3	30 - 150
Dibenzofuran	ND		81.2	65.5		ng/L		81	30 - 150
Dibenzothiophene	ND		81.2	63.6		ng/L		78	30 - 150
Fluoranthene	ND		81.2	51.4		ng/L		63	30 - 150
Fluorene	1.6	J	81.2	64.5		ng/L		77	34 - 96
Indene	ND		81.2	62.6		ng/L		77	22 - 86
Indole	2.7	J	81.2	60.8		ng/L		71	30 - 150
Indeno[1,2,3-cd]pyrene	ND		81.2	2.84	J F	ng/L		3	30 - 150
Naphthalene	9.4	J B	81.2	73.2		ng/L		79	27 - 95
Perylene	ND		81.2	4.53	F	ng/L		6	30 - 150
Phenanthrene	ND		81.2	65.0		ng/L		80	30 - 150
Pyrene	ND		81.2	50.4		ng/L		62	30 - 150
Quinoline	ND		81.2	55.1		ng/L		68	20 - 112
7,12-Dimethylbenz(a)anthracene	ND		81.2	33.6		ng/L		41	30 - 150
Biphenyl	ND		81.2	62.5		ng/L		77	30 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*74*		*23 - 84*
Chrysene-d12 (Surr)	*22*	*X*	*28 - 101*
Naphthalene-d8 (Surr)	*80*		*22 - 97*

Lab Sample ID: 280-21871-1 MSD
Matrix: Water
Analysis Batch: 95856

Client Sample ID: SLP10T-102011
Prep Type: Total/NA
Prep Batch: 92993

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	0.92	J	77.3	59.2		ng/L		75	30 - 150	4	50
2,3-Dihydroindene	28		77.3	81.2		ng/L		69	30 - 150	2	50
1-Methylnaphthalene	4.9	J B	77.3	63.3		ng/L		76	30 - 150	12	50
2-Methylnaphthalene	3.3	J B	77.3	60.9		ng/L		74	25 - 95	13	50
3-Methylcholanthrene	ND		77.3	5.20	F	ng/L		7	30 - 150	NC	50
Acenaphthene	16	B	77.3	77.2		ng/L		79	30 - 150	7	50
Acenaphthylene	1.0	J B	77.3	62.2		ng/L		79	30 - 150	8	50
Acridine	ND	*	77.3	13.7	F	ng/L		18	30 - 150	17	50
Anthracene	ND		77.3	59.1		ng/L		76	30 - 150	1	50
Benzo[a]anthracene	ND		77.3	20.5	F	ng/L		26	30 - 150	25	50
Benzo[a]pyrene	ND		77.3	5.84	F	ng/L		8	30 - 150	23	50
Benzo[e]pyrene	ND		77.3	5.97	F	ng/L		8	37 - 105	19	50
Benzo[b]fluoranthene	ND		77.3	7.97	F	ng/L		10	30 - 150	22	50
Benzo(b)thiophene	2.4	J B	77.3	62.7		ng/L		78	30 - 150	6	50
Benzo[k]fluoranthene	ND		77.3	6.35	F	ng/L		8	30 - 150	23	50
Benzo[g,h,i]perylene	ND		77.3	3.55	J F	ng/L		5	30 - 150	27	50
Carbazole	ND		77.3	68.8		ng/L		89	30 - 150	5	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-21871-1 MSD
Matrix: Water
Analysis Batch: 95856

Client Sample ID: SLP10T-102011
Prep Type: Total/NA
Prep Batch: 92993

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	ND		77.3	22.8		ng/L		29	20 - 136	24	50
Dibenz(a,h)anthracene	ND		77.3	3.56	J F	ng/L		5	30 - 150	31	50
Dibenzofuran	ND		77.3	63.5		ng/L		82	30 - 150	3	50
Dibenzothiophene	ND		77.3	62.8		ng/L		81	30 - 150	1	50
Fluoranthene	ND		77.3	57.3		ng/L		74	30 - 150	11	50
Fluorene	1.6	J	77.3	62.6		ng/L		79	34 - 96	3	50
Indene	ND		77.3	60.0		ng/L		78	22 - 86	4	50
Indole	2.7	J	77.3	59.0		ng/L		73	30 - 150	3	50
Indeno[1,2,3-cd]pyrene	ND		77.3	3.83	J F	ng/L		5	30 - 150	30	50
Naphthalene	9.4	J B	77.3	65.8		ng/L		73	27 - 95	11	50
Perylene	ND		77.3	5.71	F	ng/L		7	30 - 150	23	50
Phenanthrene	ND		77.3	64.1		ng/L		83	30 - 150	1	50
Pyrene	ND		77.3	56.6		ng/L		73	30 - 150	12	50
Quinoline	ND		77.3	50.1		ng/L		65	20 - 112	10	50
7,12-Dimethylbenz(a)anthracene	ND		77.3	39.0		ng/L		50	30 - 150	15	50
Biphenyl	ND		77.3	59.9		ng/L		77	30 - 150	4	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*73*		*23 - 84*
Chrysene-d12 (Surr)	*30*		*28 - 101*
Naphthalene-d8 (Surr)	*78*		*22 - 97*

QC Association Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

GC/MS Semi VOA

Prep Batch: 92993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-21871-1	SLP10T-102011	Total/NA	Water	3520C	
280-21871-1 MS	SLP10T-102011	Total/NA	Water	3520C	
280-21871-1 MSD	SLP10T-102011	Total/NA	Water	3520C	
280-21871-2	SLP10TDUP-102011	Total/NA	Water	3520C	
280-21871-3	SLP10TFB-102011	Total/NA	Water	3520C	
280-21871-4	SLP10TFBD-102011	Total/NA	Water	3520C	
LCS 280-92993/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-92993/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 95856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-21871-1	SLP10T-102011	Total/NA	Water	8270C	92993
280-21871-1 MS	SLP10T-102011	Total/NA	Water	8270C	92993
280-21871-1 MSD	SLP10T-102011	Total/NA	Water	8270C	92993
280-21871-2	SLP10TDUP-102011	Total/NA	Water	8270C	92993
280-21871-3	SLP10TFB-102011	Total/NA	Water	8270C	92993
280-21871-4	SLP10TFBD-102011	Total/NA	Water	8270C	92993
LCS 280-92993/2-A	Lab Control Sample	Total/NA	Water	8270C	92993

Analysis Batch: 95981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-92993/1-A	Method Blank	Total/NA	Water	8270C	92993

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Client Sample ID: SLP10T-102011

Lab Sample ID: 280-21871-1

Date Collected: 10/20/11 13:40

Matrix: Water

Date Received: 10/21/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3595.4 mL	1000 uL	92993	10/25/11 16:35	DFB	TAL DEN
Total/NA	Analysis	8270C		1			95856	11/10/11 15:21	DPI	TAL DEN

Client Sample ID: SLP10TDUP-102011

Lab Sample ID: 280-21871-2

Date Collected: 10/20/11 13:45

Matrix: Water

Date Received: 10/21/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3566.3 mL	1000 uL	92993	10/25/11 16:35	DFB	TAL DEN
Total/NA	Analysis	8270C		1			95856	11/10/11 17:10	DPI	TAL DEN

Client Sample ID: SLP10TFB-102011

Lab Sample ID: 280-21871-3

Date Collected: 10/20/11 14:00

Matrix: Water

Date Received: 10/21/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3755 mL	1000 uL	92993	10/25/11 16:35	DFB	TAL DEN
Total/NA	Analysis	8270C		1			95856	11/10/11 17:47	DPI	TAL DEN

Client Sample ID: SLP10TFBD-102011

Lab Sample ID: 280-21871-4

Date Collected: 10/20/11 14:05

Matrix: Water

Date Received: 10/21/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3600.8 mL	1000 uL	92993	10/25/11 16:35	DFB	TAL DEN
Total/NA	Analysis	8270C		1			95856	11/10/11 18:24	DPI	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	40730
TestAmerica Denver	Alaska	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAC	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAC	7	E-10166
TestAmerica Denver	Louisiana	NELAC	6	30785
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAC	1	205310
TestAmerica Denver	New Jersey	NELAC	2	CO004
TestAmerica Denver	New Mexico	State Program	6	N/A
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina	North Carolina DENR	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Tennessee	State Program	4	TN02944
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Sampler ID: _____
Temperature on Receipt: 4.2, 4.4, 3.2, 2.9, 3.8 IR GC 10/21
Drinking Water? Yes ☐ No ☐

TestAmerica THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client: AECOM - City of St. Louis Park	Project Manager: Drew Tarara	Date: 10/20/11	Chain of Custody Number: 147849
Address: 7305 Oxford	Telephone Number (Area Code)/Fax Number: 651 367 2335	Lab Number:	Page 1 of 1
City: St. Louis Park / State: MN / Zip Code: 55416	Site Contact: Scott Anderson	Lab Contact:	
Project Name and Location (State): City of SLP - Reilly	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PAH PPTS	Special Instructions/ Conditions of Receipt
SLP10T-102011	10/20/11	1340		X			6						X	Low level PAH (PPT)
SLP10TDup-102011		1345												*21-Day TAT*
SLP10TMS-102011		1350												
SLP10TMSD-102011		1355												
SLP10TFB-102011		1400												
SLP10TFBD-102011		1405												

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

1. Relinquished By: AJ	Date: 10/20/11	Time: 1530	1. Received By:	Date: 10/21/11	Time: 0930
2. Relinquished By:	Date:	Time:	2. Received By:	Date:	Time:
3. Relinquished By:	Date:	Time:	3. Received By:	Date:	Time:

Comments: * 21 DAY TAT *

DISTRIBUTION: ~~WHITE - Returned to Client with Report;~~ CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-21871-1

Login Number: 21871

List Source: TestAmerica Denver

List Number: 1

Creator: Philipp, Nicholas A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Detection Limit Exceptions Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-21871-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8270C	Water	2,3-Benzofuran	ng/L	5.4	20
8270C	Water	2,3-Dihydroindene	ng/L	5.0	20
8270C	Water	1-Methylnaphthalene	ng/L	5.6	20
8270C	Water	2-Methylnaphthalene	ng/L	5.9	20
8270C	Water	Acenaphthene	ng/L	5.7	20
8270C	Water	Acenaphthylene	ng/L	4.8	20
8270C	Water	Acridine	ng/L	6.5	20
8270C	Water	Anthracene	ng/L	4.2	20
8270C	Water	Benzo[a]anthracene	ng/L	4.3	20
8270C	Water	Benzo[a]pyrene	ng/L	2.5	20
8270C	Water	Benzo[e]pyrene	ng/L	4.3	20
8270C	Water	Benzo[b]fluoranthene	ng/L	4.7	20
8270C	Water	Benzo(b)thiophene	ng/L	5.2	20
8270C	Water	Benzo[k]fluoranthene	ng/L	4.1	20
8270C	Water	Benzo[g,h,i]perylene	ng/L	6.2	20
8270C	Water	Carbazole	ng/L	3.8	20
8270C	Water	Chrysene	ng/L	5.6	20
8270C	Water	Dibenz(a,h)anthracene	ng/L	5.9	20
8270C	Water	Dibenzofuran	ng/L	5.7	20
8270C	Water	Dibenzothiophene	ng/L	4.1	20
8270C	Water	Fluoranthene	ng/L	4.6	20
8270C	Water	Fluorene	ng/L	4.1	20
8270C	Water	Indene	ng/L	4.7	20
8270C	Water	Indole	ng/L	4.7	20
8270C	Water	Indeno[1,2,3-cd]pyrene	ng/L	5.4	20
8270C	Water	Naphthalene	ng/L	8.6	20
8270C	Water	Perylene	ng/L	3.8	20
8270C	Water	Phenanthrene	ng/L	6.3	20
8270C	Water	Pyrene	ng/L	4.2	20
8270C	Water	Quinoline	ng/L	9.0	20
8270C	Water	Biphenyl	ng/L	5.6	20

Data Quality Assessment Memorandum

Date: February 9, 2012

To: Scott Anderson

From: Bill Gregg

Subject: Data Quality Assessment
Ultra Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 280-21871-1
Appendix L

Distribution: File 0987-0009 File

SUMMARY

A Data Quality Assessment (DQA) was performed on the data for the analysis of two aqueous samples and two field blanks for Ultra Low Level aromatic hydrocarbons (PAHs) by SW-846 method 8270C, selected ion monitoring (SIM) method. The samples were collected on October 20, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to TestAmerica in Arvada, CO for analysis. TestAmerica processed and reported the results under lot number 280-21871-1.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes.

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
SLP10T-102011	SLP10TFB-102011
SLP10TDUP-102011	SLP10TFBDUP-102011

SLP10T was sampled on October 20 and 25, 2011 to allow reanalysis of the water based on an elevated reading for CPAH in the original sample (SLP10TEXTENDED-091311) collected on September 13, 2011. Since none of the extended list PAH compounds were detected in the September 13,2011 analysis, the reanalysis was performed for the standard project list of 31 PAH compounds.

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times. The laboratory also met the 21-day re-analysis turnaround time requirement.

The cooler temperature was measured upon sample receipt was within the acceptance criteria of 4± 2°C.

Laboratory Blanks/Field Blanks

Target analytes were detected in the laboratory method blank and in the field blanks SLP10TFB-102011and SLP10TFBDUP-102011. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (AL) were established at 5x the concentration detected in the blank. The following table summarizes the level of blank contamination detected in the laboratory method blank; the action level; and the associated samples.

Compound	Concentration (ng/L)	AL (ng/L)	Associated Samples
1-Methynaphthalene	18.7	93.5	All samples in data set
2-Methylnaphthalene	20.0	100.0	All samples in data set
Acenaphthylene	4.21	21.05	All samples in data set
Acenaphthene	5.89	29.45	All samples in data set
Benzo(b)thiophene	6.19	30.95	All samples in data set
Dibenzofuran	7.17	35.85	All samples in data set
Naphthalene	13.2	66.0	All samples in data set

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.

- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses except that chrysene-d12 was recovered at 22% in the matrix spike, whereas the acceptable limits for this compound are 28% to 101%. The data were not qualified based on this result.

MS/MSD Results

MS/MSD analyses were performed on sample SLP10T-102011 from this data set. All target analytes were spiked. The percent recoveries (%Rs) of 11 of the 33 spiked target analytes in the MS and the %Rs of 11 of the 33 spiked target analytes in the MSD fell outside the QC acceptance criteria in the MS/MSD analyses. The following table summarizes the %Rs which fell below 10%. These results were qualified as indicated below.

Compound	MS %R	MSD %R	RPD	Laboratory QC limits %R (RPD)	Action (Detects/Nondetects)
3-Methylcholanthrene	0	7	Ok	30-150 (50)	J/UJ
Benzo(a)pyrene	6	8	Ok	30-150 (50)	J/UJ
Benzo(e)pyrene	6	8	Ok	30-150 (50)	J/UJ
Benzo(b)fluoranthene	8	10	Ok	30-150 (50)	J/UJ
Benzo(k)fluoranthene	6	8	Ok	30-150 (50)	J/UJ
Benzo(ghi)perylene	3	5	Ok	30-150 (50)	J/UJ
Dibenzo(ah)anthracene	3	5	Ok	30-132 (50)	J/UJ
Indeno(123,cd)pyrene	3	5	Ok	30-150 (50)	J/UJ
Perylene	6	7	Ok	30-150 (50)	J/UJ
Associated sample: SLP10T-102011					

LCS Results

All target analytes were spiked. The %Rs were within the QC acceptance criteria for the LCS analysis for all compounds except as summarized below.

Compound	MS %R	Laboratory QC limits %R	Action (Detects/Nondetects)
Acridine	21	30-150	J/UJ
7,12-dimethylbenz(a)anthracene	29	30-150	J/UJ

Field Duplicate Results

Samples SLP10T-102011 and SLP10TDUP-102011 were the field duplicate pair analyzed with this data set. 2,3-dihydroindene was the only compound detected in the samples that was not qualified as estimated or found in the blank. Its RPD was 11% which is below the control limit of 50%.

Sample Quantitation/Detection Limit Results

All samples were analyzed undiluted for this data set.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-22046-1
Client Project/Site: CSLP - Reilly Tar & Chemical

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, Minnesota 55426

Attn: Scott Anderson

Authorized for release by:
11/14/2011 2:03:39 PM

Lisa Uriell
Project Manager I
lisa.uriell@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 280-22046-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-22046-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
Four samples were received under chain of custody on October 26, 2011. The samples were received at temperatures of 3.6°C, 3.9°C, 4.1°C, 4.5°C, 3.5°C and 2.7°C.

No anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Surrogate Chrysene-d12 was recovered below the QC control limits (28-101%) in sample SLP10TFBD-102511 (280-22046-4) at 0.5%. Upon re-aliquoting and reanalyzing, the surrogate recovery outlier was still present. Re-extraction was not possible due to insufficient remaining sample volume; therefore, the data is reported as is.

Low levels of 2,3-Dihydroindene, 1-Methylnaphthalene, 2-Methylnaphthalene and Naphthalene are present in the method blank associated with prep batch 280-93581. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”.

The LCS associated with prep batch 280-93581 exhibited percent recoveries below the QC control limits for Acridine at 4% (limits 30-150%), 3-Methylcholanthrene at 29% (limits 30-150%) and 7,12-Dimethylbenz(a)anthracene at 25% (limits 30-150%). 3-Methylcholanthrene and 7,12-Dimethylbenz(a)anthracene are not compounds of interest for this project. The LCS was re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

The MS/MSD associated with prep batch 280-93581 was performed using sample SLP10T-102511 (280-22046-1), as requested. MS/MSD exhibited 9 of the 33 Matrix Spike compound recoveries outside the control limits. MS/MSD exhibited 10 of the 33 Matrix Spike Duplicate compound recoveries outside the control limits. The MS/MSD exhibited 2 of the 33 Relative Percent Difference (RPD) data outside the control limits. The MS/MSD exhibited percent recoveries and/or RPD data outside the control limits for the compounds listed below. Details of the specific analyte recoveries can found in the Matrix Spike Sample Recovery and Data Reports.

3-Methylnaphthalene	Acridine	Benzo[a]pyrene
Benzo[e]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene

Job ID: 280-22046-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

Benzo[ghi]perylene
Dibenzo(a,h)pyrene
Indeno[1,2,3-cd]pyrene
Perylene

No other anomalies were noted.

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION
JOB: 280-22046-1
ANALYSIS: SW846-8270C SIM

QC Parameter	Data Planned	Valid Data Obtained
Method Blank	31	31
MB Surrogates	3	3
LCS	7	7
LCS Surrogates	3	3
FB/FBD	62	51
MS	7	6
MS Surrogates	3	3
MSD	7	6
MSD Surrogates	3	3
MS/MSD RPD	7	7
Sample/Dup. RPD	31	28
Sample Surrogates	12	11
Samples and QC Internal Standard Area	24	24
TOTAL	**200**	**183**
% Completeness	**91.5%**	

Sample Duplicate Calculation for Method 8270C SIM

Sample Duplicate RPD					
JOB 280-22046-1					
Sample: SLP10T-102511		**DUP: SLP10TDUP-102511**			
Compound	**Result**	**Compound**	**Result**	**RPD**	**RPD>50%**
Acenaphthene	24	Acenaphthene	21	13.3	
Acenaphthylene	2.4	Acenaphthylene	1.5	46.2	
Acridine	ND	Acridine	ND	0.0	
Anthracene	ND	Anthracene	ND	0.0	
Benzo(a)anthracene	ND	Benzo(a)anthracene	ND	0.0	
Benzo(b)fluoranthene	ND	Benzo(b)fluoranthene	ND	0.0	
Benzo(k)fluoranthene	ND	Benzo(k)fluoranthene	ND	0.0	
2,3-Benzofuran	ND	2,3-Benzofuran	1.2	NC	
Benzo(ghi)perylene	ND	Benzo(ghi)perylene	ND	0.0	
Benzo(a)pyrene	ND	Benzo(a)pyrene	ND	0.0	
Benzo(e)pyrene	ND	Benzo(e)pyrene	ND	0.0	
Benzo(b)thiophene	3.9	Benzo(b)thiophene	3.6	8.0	
Biphenyl	ND	Biphenyl	ND	0.0	
Carbazole	ND	Carbazole	ND	0.0	
Chrysene	ND	Chrysene	ND	0.0	
Dibenz(a,h)anthracene	ND	Dibenz(a,h)anthracene	ND	0.0	
Dibenzofuran	1.8	Dibenzofuran	1.1	48.3	
Dibenzothiophene	ND	Dibenzothiophene	ND	0.0	
2,3-Dihydroindene	34	2,3-Dihydroindene	34	0.0	
Fluoranthene	ND	Fluoranthene	ND	0.0	
Fluorene	3.1	Fluorene	2.3	29.6	
Indene	3.7	Indene	3.5	5.6	
Indeno(1,2,3-cd)pyrene	ND	Indeno(1,2,3-cd)pyrene	ND	0.0	
Indole	ND	Indole	ND	0.0	
2-Methylnaphthalene	9.3	2-Methylnaphthalene	2.2	123.5	p
1-Methylnaphthalene	13	1-Methylnaphthalene	5.5	81.1	p
Naphthalene	24	Naphthalene	6.3	116.8	p
Perylene	ND	Perylene	ND	0.0	
Phenanthrene	ND	Phenanthrene	ND	0.0	
Pyrene	ND	Pyrene	ND	0.0	
Quinoline	ND	Quinoline	ND	0.0	

RPD = Relative Percent Difference
ND = Compound not detected in the sample
p = RPD is outside of control limits
*NC = RPD not calculated, one positive result and one ND.
Considered acceptable if the positive result is less than 4x the RL.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Client Sample ID: SLP10T-102511 — Lab Sample ID: 280-22046-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	34	B	4.8	0.67	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	13	B	5.3	0.85	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	9.3	B	5.6	0.93	ng/L	1		8270C	Total/NA
Acenaphthene	24		5.4	0.48	ng/L	1		8270C	Total/NA
Acenaphthylene	2.4	J	4.6	0.73	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	3.9	J	4.9	0.71	ng/L	1		8270C	Total/NA
Dibenzofuran	1.8	J	5.4	0.94	ng/L	1		8270C	Total/NA
Fluorene	3.1	J	3.9	0.81	ng/L	1		8270C	Total/NA
Indene	3.7	J	4.5	3.1	ng/L	1		8270C	Total/NA
Naphthalene	24	B	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TDUP-102511 — Lab Sample ID: 280-22046-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	1.2	J	5.2	0.65	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	34	B	4.8	0.67	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	5.5	B	5.3	0.85	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	2.2	J B	5.6	0.94	ng/L	1		8270C	Total/NA
Acenaphthene	21		5.4	0.48	ng/L	1		8270C	Total/NA
Acenaphthylene	1.5	J	4.6	0.74	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	3.6	J	5.0	0.72	ng/L	1		8270C	Total/NA
Dibenzofuran	1.1	J	5.4	0.95	ng/L	1		8270C	Total/NA
Fluorene	2.3	J	3.9	0.81	ng/L	1		8270C	Total/NA
Indene	3.5	J	4.5	3.1	ng/L	1		8270C	Total/NA
Naphthalene	6.3	J B	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFB-102511 — Lab Sample ID: 280-22046-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Benzofuran	1.0	J	5.1	0.65	ng/L	1		8270C	Total/NA
2,3-Dihydroindene	3.8	J B	4.7	0.66	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	5.2	J B	5.3	0.84	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	6.5	B	5.6	0.93	ng/L	1		8270C	Total/NA
Acenaphthene	1.1	J	5.4	0.47	ng/L	1		8270C	Total/NA
Acenaphthylene	1.0	J	4.6	0.73	ng/L	1		8270C	Total/NA
Anthracene	1.1	J	4.0	0.76	ng/L	1		8270C	Total/NA
Benzo[a]anthracene	3.2	J	4.1	0.87	ng/L	1		8270C	Total/NA
Benzo[a]pyrene	2.7		2.4	1.2	ng/L	1		8270C	Total/NA
Benzo[b]fluoranthene	2.2	J	4.5	1.3	ng/L	1		8270C	Total/NA
Benzo[k]fluoranthene	4.7		3.9	1.2	ng/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	4.2	J	5.9	1.1	ng/L	1		8270C	Total/NA
Chrysene	5.6		5.3	1.2	ng/L	1		8270C	Total/NA
Dibenz(a,h)anthracene	5.3	J	5.6	0.99	ng/L	1		8270C	Total/NA
Dibenzofuran	1.5	J	5.4	0.94	ng/L	1		8270C	Total/NA
Fluorene	1.3	J	3.9	0.81	ng/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	3.1	J	5.1	1.2	ng/L	1		8270C	Total/NA
Naphthalene	11	B	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFBD-102511 — Lab Sample ID: 280-22046-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	1.1	J B	4.8	0.67	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	65	B	5.3	0.85	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	66	B	5.6	0.93	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFBD-102511 (Continued)

Lab Sample ID: 280-22046-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	19		5.4	0.48	ng/L	1		8270C	Total/NA
Acenaphthylene	9.6		4.6	0.73	ng/L	1		8270C	Total/NA
Dibenzofuran	17		5.4	0.94	ng/L	1		8270C	Total/NA
Naphthalene	41	B	8.2	1.1	ng/L	1		8270C	Total/NA

Method Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compound (GC/MS SIM LL)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-22046-1	SLP10T-102511	Water	10/25/11 12:00	10/26/11 09:00
280-22046-2	SLP10TDUP-102511	Water	10/25/11 12:05	10/26/11 09:00
280-22046-3	SLP10TFB-102511	Water	10/25/11 12:20	10/26/11 09:00
280-22046-4	SLP10TFBD-102511	Water	10/25/11 12:25	10/26/11 09:00

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Client Sample ID: SLP10T-102511
Date Collected: 10/25/11 12:00
Date Received: 10/26/11 09:00

Lab Sample ID: 280-22046-1
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		10/28/11 10:05	11/10/11 19:00	1
2,3-Dihydroindene	**34**	**B**	4.8	0.67	ng/L		10/28/11 10:05	11/10/11 19:00	1
1-Methylnaphthalene	**13**	**B**	5.3	0.85	ng/L		10/28/11 10:05	11/10/11 19:00	1
2-Methylnaphthalene	**9.3**	**B**	5.6	0.93	ng/L		10/28/11 10:05	11/10/11 19:00	1
Acenaphthene	**24**		5.4	0.48	ng/L		10/28/11 10:05	11/10/11 19:00	1
Acenaphthylene	**2.4**	**J**	4.6	0.73	ng/L		10/28/11 10:05	11/10/11 19:00	1
Acridine	ND	*	6.2	6.2	ng/L		10/28/11 10:05	11/10/11 19:00	1
Anthracene	ND		4.0	0.76	ng/L		10/28/11 10:05	11/10/11 19:00	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		10/28/11 10:05	11/10/11 19:00	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		10/28/11 10:05	11/10/11 19:00	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		10/28/11 10:05	11/10/11 19:00	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		10/28/11 10:05	11/10/11 19:00	1
Benzo(b)thiophene	**3.9**	**J**	4.9	0.71	ng/L		10/28/11 10:05	11/10/11 19:00	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		10/28/11 10:05	11/10/11 19:00	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		10/28/11 10:05	11/10/11 19:00	1
Carbazole	ND		3.6	0.69	ng/L		10/28/11 10:05	11/10/11 19:00	1
Chrysene	ND		5.3	1.2	ng/L		10/28/11 10:05	11/10/11 19:00	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		10/28/11 10:05	11/10/11 19:00	1
Dibenzofuran	**1.8**	**J**	5.4	0.94	ng/L		10/28/11 10:05	11/10/11 19:00	1
Dibenzothiophene	ND		3.9	0.93	ng/L		10/28/11 10:05	11/10/11 19:00	1
Fluoranthene	ND		4.4	1.6	ng/L		10/28/11 10:05	11/10/11 19:00	1
Fluorene	**3.1**	**J**	3.9	0.81	ng/L		10/28/11 10:05	11/10/11 19:00	1
Indene	**3.7**	**J**	4.5	3.1	ng/L		10/28/11 10:05	11/10/11 19:00	1
Indole	ND		4.5	1.6	ng/L		10/28/11 10:05	11/10/11 19:00	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		10/28/11 10:05	11/10/11 19:00	1
Naphthalene	**24**	**B**	8.2	1.1	ng/L		10/28/11 10:05	11/10/11 19:00	1
Perylene	ND		3.6	3.6	ng/L		10/28/11 10:05	11/10/11 19:00	1
Phenanthrene	ND		6.0	3.1	ng/L		10/28/11 10:05	11/10/11 19:00	1
Pyrene	ND		4.0	0.94	ng/L		10/28/11 10:05	11/10/11 19:00	1
Quinoline	ND		8.6	5.4	ng/L		10/28/11 10:05	11/10/11 19:00	1
Biphenyl	ND		5.3	1.0	ng/L		10/28/11 10:05	11/10/11 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*76*		*23 - 84*	*10/28/11 10:05*	*11/10/11 19:00*	*1*
Chrysene-d12 (Surr)	*38*		*28 - 101*	*10/28/11 10:05*	*11/10/11 19:00*	*1*
Naphthalene-d8 (Surr)	*82*		*22 - 97*	*10/28/11 10:05*	*11/10/11 19:00*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Client Sample ID: SLP10TDUP-102511
Date Collected: 10/25/11 12:05
Date Received: 10/26/11 09:00

Lab Sample ID: 280-22046-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	**1.2**	**J**	5.2	0.65	ng/L		10/28/11 10:05	11/11/11 16:19	1
2,3-Dihydroindene	**34**	**B**	4.8	0.67	ng/L		10/28/11 10:05	11/11/11 16:19	1
1-Methylnaphthalene	**5.5**	**B**	5.3	0.85	ng/L		10/28/11 10:05	11/11/11 16:19	1
2-Methylnaphthalene	**2.2**	**J B**	5.6	0.94	ng/L		10/28/11 10:05	11/11/11 16:19	1
Acenaphthene	**21**		5.4	0.48	ng/L		10/28/11 10:05	11/11/11 16:19	1
Acenaphthylene	**1.5**	**J**	4.6	0.74	ng/L		10/28/11 10:05	11/11/11 16:19	1
Acridine	ND	*	6.2	6.2	ng/L		10/28/11 10:05	11/11/11 16:19	1
Anthracene	ND		4.0	0.76	ng/L		10/28/11 10:05	11/11/11 16:19	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		10/28/11 10:05	11/11/11 16:19	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		10/28/11 10:05	11/11/11 16:19	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		10/28/11 10:05	11/11/11 16:19	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		10/28/11 10:05	11/11/11 16:19	1
Benzo(b)thiophene	**3.6**	**J**	5.0	0.72	ng/L		10/28/11 10:05	11/11/11 16:19	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		10/28/11 10:05	11/11/11 16:19	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		10/28/11 10:05	11/11/11 16:19	1
Carbazole	ND		3.6	0.69	ng/L		10/28/11 10:05	11/11/11 16:19	1
Chrysene	ND		5.3	1.2	ng/L		10/28/11 10:05	11/11/11 16:19	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		10/28/11 10:05	11/11/11 16:19	1
Dibenzofuran	**1.1**	**J**	5.4	0.95	ng/L		10/28/11 10:05	11/11/11 16:19	1
Dibenzothiophene	ND		3.9	0.94	ng/L		10/28/11 10:05	11/11/11 16:19	1
Fluoranthene	ND		4.4	1.6	ng/L		10/28/11 10:05	11/11/11 16:19	1
Fluorene	**2.3**	**J**	3.9	0.81	ng/L		10/28/11 10:05	11/11/11 16:19	1
Indene	**3.5**	**J**	4.5	3.1	ng/L		10/28/11 10:05	11/11/11 16:19	1
Indole	ND		4.5	1.7	ng/L		10/28/11 10:05	11/11/11 16:19	1
Indeno[1,2,3-cd]pyrene	ND		5.2	1.2	ng/L		10/28/11 10:05	11/11/11 16:19	1
Naphthalene	**6.3**	**J B**	8.2	1.1	ng/L		10/28/11 10:05	11/11/11 16:19	1
Perylene	ND		3.6	3.6	ng/L		10/28/11 10:05	11/11/11 16:19	1
Phenanthrene	ND		6.0	3.1	ng/L		10/28/11 10:05	11/11/11 16:19	1
Pyrene	ND		4.0	0.95	ng/L		10/28/11 10:05	11/11/11 16:19	1
Quinoline	ND		8.6	5.4	ng/L		10/28/11 10:05	11/11/11 16:19	1
Biphenyl	ND		5.3	1.0	ng/L		10/28/11 10:05	11/11/11 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*59*		*23 - 84*	*10/28/11 10:05*	*11/11/11 16:19*	*1*
Chrysene-d12 (Surr)	*30*		*28 - 101*	*10/28/11 10:05*	*11/11/11 16:19*	*1*
Naphthalene-d8 (Surr)	*77*		*22 - 97*	*10/28/11 10:05*	*11/11/11 16:19*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Client Sample ID: SLP10TFB-102511
Date Collected: 10/25/11 12:20
Date Received: 10/26/11 09:00

Lab Sample ID: 280-22046-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	1.0	J	5.1	0.65	ng/L		10/28/11 10:05	11/12/11 09:02	1
2,3-Dihydroindene	3.8	J B	4.7	0.66	ng/L		10/28/11 10:05	11/12/11 09:02	1
1-Methylnaphthalene	5.2	J B	5.3	0.84	ng/L		10/28/11 10:05	11/12/11 09:02	1
2-Methylnaphthalene	6.5	B	5.6	0.93	ng/L		10/28/11 10:05	11/12/11 09:02	1
Acenaphthene	1.1	J	5.4	0.47	ng/L		10/28/11 10:05	11/12/11 09:02	1
Acenaphthylene	1.0	J	4.6	0.73	ng/L		10/28/11 10:05	11/12/11 09:02	1
Acridine	ND	*	6.2	6.2	ng/L		10/28/11 10:05	11/12/11 09:02	1
Anthracene	1.1	J	4.0	0.76	ng/L		10/28/11 10:05	11/12/11 09:02	1
Benzo[a]anthracene	3.2	J	4.1	0.87	ng/L		10/28/11 10:05	11/12/11 09:02	1
Benzo[a]pyrene	2.7		2.4	1.2	ng/L		10/28/11 10:05	11/12/11 09:02	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		10/28/11 10:05	11/12/11 09:02	1
Benzo[b]fluoranthene	2.2	J	4.5	1.3	ng/L		10/28/11 10:05	11/12/11 09:02	1
Benzo(b)thiophene	ND		4.9	0.71	ng/L		10/28/11 10:05	11/12/11 09:02	1
Benzo[k]fluoranthene	4.7		3.9	1.2	ng/L		10/28/11 10:05	11/12/11 09:02	1
Benzo[g,h,i]perylene	4.2	J	5.9	1.1	ng/L		10/28/11 10:05	11/12/11 09:02	1
Carbazole	ND		3.6	0.68	ng/L		10/28/11 10:05	11/12/11 09:02	1
Chrysene	5.6		5.3	1.2	ng/L		10/28/11 10:05	11/12/11 09:02	1
Dibenz(a,h)anthracene	5.3	J	5.6	0.99	ng/L		10/28/11 10:05	11/12/11 09:02	1
Dibenzofuran	1.5	J	5.4	0.94	ng/L		10/28/11 10:05	11/12/11 09:02	1
Dibenzothiophene	ND		3.9	0.93	ng/L		10/28/11 10:05	11/12/11 09:02	1
Fluoranthene	ND		4.4	1.6	ng/L		10/28/11 10:05	11/12/11 09:02	1
Fluorene	1.3	J	3.9	0.81	ng/L		10/28/11 10:05	11/12/11 09:02	1
Indene	ND		4.5	3.1	ng/L		10/28/11 10:05	11/12/11 09:02	1
Indole	ND		4.5	1.6	ng/L		10/28/11 10:05	11/12/11 09:02	1
Indeno[1,2,3-cd]pyrene	3.1	J	5.1	1.2	ng/L		10/28/11 10:05	11/12/11 09:02	1
Naphthalene	11	B	8.2	1.1	ng/L		10/28/11 10:05	11/12/11 09:02	1
Perylene	ND		3.6	3.6	ng/L		10/28/11 10:05	11/12/11 09:02	1
Phenanthrene	ND		6.0	3.0	ng/L		10/28/11 10:05	11/12/11 09:02	1
Pyrene	ND		4.0	0.94	ng/L		10/28/11 10:05	11/12/11 09:02	1
Quinoline	ND		8.5	5.4	ng/L		10/28/11 10:05	11/12/11 09:02	1
Biphenyl	ND		5.3	1.0	ng/L		10/28/11 10:05	11/12/11 09:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*61*		*23 - 84*	*10/28/11 10:05*	*11/12/11 09:02*	*1*
Chrysene-d12 (Surr)	*71*		*28 - 101*	*10/28/11 10:05*	*11/12/11 09:02*	*1*
Naphthalene-d8 (Surr)	*85*		*22 - 97*	*10/28/11 10:05*	*11/12/11 09:02*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Client Sample ID: SLP10TFBD-102511
Date Collected: 10/25/11 12:25
Date Received: 10/26/11 09:00

Lab Sample ID: 280-22046-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		10/28/11 10:05	11/11/11 17:33	1
2,3-Dihydroindene	**1.1**	**J B**	4.8	0.67	ng/L		10/28/11 10:05	11/11/11 17:33	1
1-Methylnaphthalene	**65**	**B**	5.3	0.85	ng/L		10/28/11 10:05	11/11/11 17:33	1
2-Methylnaphthalene	**66**	**B**	5.6	0.93	ng/L		10/28/11 10:05	11/11/11 17:33	1
Acenaphthene	**19**		5.4	0.48	ng/L		10/28/11 10:05	11/11/11 17:33	1
Acenaphthylene	**9.6**		4.6	0.73	ng/L		10/28/11 10:05	11/11/11 17:33	1
Acridine	ND	*	6.2	6.2	ng/L		10/28/11 10:05	11/11/11 17:33	1
Anthracene	ND		4.0	0.76	ng/L		10/28/11 10:05	11/11/11 17:33	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		10/28/11 10:05	11/11/11 17:33	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		10/28/11 10:05	11/11/11 17:33	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		10/28/11 10:05	11/11/11 17:33	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		10/28/11 10:05	11/11/11 17:33	1
Benzo(b)thiophene	ND		5.0	0.71	ng/L		10/28/11 10:05	11/11/11 17:33	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		10/28/11 10:05	11/11/11 17:33	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		10/28/11 10:05	11/11/11 17:33	1
Carbazole	ND		3.6	0.69	ng/L		10/28/11 10:05	11/11/11 17:33	1
Chrysene	ND		5.3	1.2	ng/L		10/28/11 10:05	11/11/11 17:33	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		10/28/11 10:05	11/11/11 17:33	1
Dibenzofuran	**17**		5.4	0.94	ng/L		10/28/11 10:05	11/11/11 17:33	1
Dibenzothiophene	ND		3.9	0.93	ng/L		10/28/11 10:05	11/11/11 17:33	1
Fluoranthene	ND		4.4	1.6	ng/L		10/28/11 10:05	11/11/11 17:33	1
Fluorene	ND		3.9	0.81	ng/L		10/28/11 10:05	11/11/11 17:33	1
Indene	ND		4.5	3.1	ng/L		10/28/11 10:05	11/11/11 17:33	1
Indole	ND		4.5	1.6	ng/L		10/28/11 10:05	11/11/11 17:33	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		10/28/11 10:05	11/11/11 17:33	1
Naphthalene	**41**	**B**	8.2	1.1	ng/L		10/28/11 10:05	11/11/11 17:33	1
Perylene	ND		3.6	3.6	ng/L		10/28/11 10:05	11/11/11 17:33	1
Phenanthrene	ND		6.0	3.1	ng/L		10/28/11 10:05	11/11/11 17:33	1
Pyrene	ND		4.0	0.94	ng/L		10/28/11 10:05	11/11/11 17:33	1
Quinoline	ND		8.6	5.4	ng/L		10/28/11 10:05	11/11/11 17:33	1
Biphenyl	ND		5.3	1.0	ng/L		10/28/11 10:05	11/11/11 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*46*		*23 - 84*	*10/28/11 10:05*	*11/11/11 17:33*	*1*
Chrysene-d12 (Surr)	*0.5*	*X*	*28 - 101*	*10/28/11 10:05*	*11/11/11 17:33*	*1*
Naphthalene-d8 (Surr)	*51*		*22 - 97*	*10/28/11 10:05*	*11/11/11 17:33*	*1*

Surrogate Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		FD10	sene-d12 (S	thalene-d8						
Lab Sample ID	Client Sample ID	(23-84)	(28-101)	(22-97)						
280-22046-1	SLP10T-102511	76	38	82						
280-22046-1 MS	SLP10T-102511	72	40	86						
280-22046-1 MSD	SLP10T-102511	76	41	89						
280-22046-2	SLP10TDUP-102511	59	30	77						
280-22046-3	SLP10TFB-102511	61	71	85						
280-22046-4	SLP10TFBD-102511	46	0.5 X	51						
LCS 280-93581/2-A	Lab Control Sample	71	83	83						
MB 280-93581/1-A	Method Blank	80	82	88						

Surrogate Legend

FD10 = Fluorene-d10 (Surr)
Chrysene-d12 (Surr) = Chrysene-d12 (Surr)
Naphthalene-d8 (Surr) = Naphthalene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Lab Sample ID: MB 280-93581/1-A
Matrix: Water
Analysis Batch: 95856

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 93581

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		10/28/11 10:05	11/10/11 14:08	1
2,3-Dihydroindene	3.81	J	5.0	0.70	ng/L		10/28/11 10:05	11/10/11 14:08	1
1-Methylnaphthalene	0.938	J	5.6	0.89	ng/L		10/28/11 10:05	11/10/11 14:08	1
2-Methylnaphthalene	1.72	J	5.9	0.98	ng/L		10/28/11 10:05	11/10/11 14:08	1
Acenaphthene	ND		5.7	0.50	ng/L		10/28/11 10:05	11/10/11 14:08	1
Acenaphthylene	ND		4.8	0.77	ng/L		10/28/11 10:05	11/10/11 14:08	1
Acridine	ND		6.5	6.5	ng/L		10/28/11 10:05	11/10/11 14:08	1
Anthracene	ND		4.2	0.80	ng/L		10/28/11 10:05	11/10/11 14:08	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		10/28/11 10:05	11/10/11 14:08	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		10/28/11 10:05	11/10/11 14:08	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		10/28/11 10:05	11/10/11 14:08	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		10/28/11 10:05	11/10/11 14:08	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		10/28/11 10:05	11/10/11 14:08	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		10/28/11 10:05	11/10/11 14:08	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		10/28/11 10:05	11/10/11 14:08	1
Carbazole	ND		3.8	0.72	ng/L		10/28/11 10:05	11/10/11 14:08	1
Chrysene	ND		5.6	1.2	ng/L		10/28/11 10:05	11/10/11 14:08	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		10/28/11 10:05	11/10/11 14:08	1
Dibenzofuran	ND		5.7	0.99	ng/L		10/28/11 10:05	11/10/11 14:08	1
Dibenzothiophene	ND		4.1	0.98	ng/L		10/28/11 10:05	11/10/11 14:08	1
Fluoranthene	ND		4.6	1.7	ng/L		10/28/11 10:05	11/10/11 14:08	1
Fluorene	ND		4.1	0.85	ng/L		10/28/11 10:05	11/10/11 14:08	1
Indene	ND		4.7	3.3	ng/L		10/28/11 10:05	11/10/11 14:08	1
Indole	ND		4.7	1.7	ng/L		10/28/11 10:05	11/10/11 14:08	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		10/28/11 10:05	11/10/11 14:08	1
Naphthalene	5.35	J	8.6	1.1	ng/L		10/28/11 10:05	11/10/11 14:08	1
Perylene	ND		3.8	3.8	ng/L		10/28/11 10:05	11/10/11 14:08	1
Phenanthrene	ND		6.3	3.2	ng/L		10/28/11 10:05	11/10/11 14:08	1
Pyrene	ND		4.2	0.99	ng/L		10/28/11 10:05	11/10/11 14:08	1
Quinoline	ND		9.0	5.7	ng/L		10/28/11 10:05	11/10/11 14:08	1
Biphenyl	ND		5.6	1.1	ng/L		10/28/11 10:05	11/10/11 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*80*		*23 - 84*	*10/28/11 10:05*	*11/10/11 14:08*	*1*
Chrysene-d12 (Surr)	*82*		*28 - 101*	*10/28/11 10:05*	*11/10/11 14:08*	*1*
Naphthalene-d8 (Surr)	*88*		*22 - 97*	*10/28/11 10:05*	*11/10/11 14:08*	*1*

Lab Sample ID: LCS 280-93581/2-A
Matrix: Water
Analysis Batch: 95856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 93581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	75.0	63.3		ng/L		84	30 - 150
2,3-Dihydroindene	75.0	61.3		ng/L		82	30 - 150
1-Methylnaphthalene	75.0	65.1		ng/L		87	30 - 150
2-Methylnaphthalene	75.0	65.5		ng/L		87	25 - 95
3-Methylcholanthrene	75.0	21.9	*	ng/L		29	30 - 150
Acenaphthene	75.0	65.9		ng/L		88	30 - 150
Acenaphthylene	75.0	60.8		ng/L		81	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-93581/2-A
Matrix: Water
Analysis Batch: 95856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 93581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acridine	75.0	ND	*	ng/L		4	30 - 150
Anthracene	75.0	56.3		ng/L		75	30 - 150
Benzo[a]anthracene	75.0	59.1		ng/L		79	30 - 150
Benzo[a]pyrene	75.0	57.6		ng/L		77	30 - 150
Benzo[e]pyrene	75.0	62.1		ng/L		83	37 - 105
Benzo[b]fluoranthene	75.0	59.3		ng/L		79	30 - 150
Benzo(b)thiophene	75.0	64.0		ng/L		85	30 - 150
Benzo[k]fluoranthene	75.0	63.5		ng/L		85	30 - 150
Benzo[g,h,i]perylene	75.0	59.4		ng/L		79	30 - 150
Carbazole	75.0	62.3		ng/L		83	30 - 150
Chrysene	75.0	67.0		ng/L		89	20 - 136
Dibenz(a,h)anthracene	75.0	60.5		ng/L		81	30 - 150
Dibenzofuran	75.0	62.7		ng/L		84	30 - 150
Dibenzothiophene	75.0	63.3		ng/L		84	30 - 150
Fluoranthene	75.0	67.5		ng/L		90	30 - 150
Fluorene	75.0	63.3		ng/L		84	34 - 96
Indene	75.0	61.6		ng/L		82	22 - 86
Indole	75.0	58.7		ng/L		78	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	57.7		ng/L		77	30 - 150
Naphthalene	75.0	71.0		ng/L		95	27 - 95
Perylene	75.0	58.6		ng/L		78	30 - 150
Phenanthrene	75.0	66.0		ng/L		88	30 - 150
Pyrene	75.0	67.1		ng/L		89	30 - 150
Quinoline	75.0	23.6		ng/L		31	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	18.7	*	ng/L		25	30 - 150
Biphenyl	75.0	62.9		ng/L		84	30 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*71*		*23 - 84*
Chrysene-d12 (Surr)	*83*		*28 - 101*
Naphthalene-d8 (Surr)	*83*		*22 - 97*

Lab Sample ID: 280-22046-1 MS
Matrix: Water
Analysis Batch: 95981

Client Sample ID: SLP10T-102511
Prep Type: Total/NA
Prep Batch: 93581

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	ND		71.5	62.6		ng/L		87	30 - 150
2,3-Dihydroindene	34	B	71.5	93.6		ng/L		83	30 - 150
1-Methylnaphthalene	13	B	71.5	66.2		ng/L		74	30 - 150
2-Methylnaphthalene	9.3	B	71.5	61.8		ng/L		73	25 - 95
3-Methylcholanthrene	ND		71.5	4.92	F	ng/L		7	30 - 150
Acenaphthene	24		71.5	84.2		ng/L		84	30 - 150
Acenaphthylene	2.4	J	71.5	59.4		ng/L		80	30 - 150
Acridine	ND	*	71.5	39.3		ng/L		55	30 - 150
Anthracene	ND		71.5	55.8		ng/L		78	30 - 150
Benzo[a]anthracene	ND		71.5	26.9		ng/L		38	30 - 150
Benzo[a]pyrene	ND		71.5	6.82	F	ng/L		10	30 - 150
Benzo[e]pyrene	ND		71.5	7.65	F	ng/L		11	37 - 105

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-22046-1 MS
Matrix: Water
Analysis Batch: 95981

Client Sample ID: SLP10T-102511
Prep Type: Total/NA
Prep Batch: 93581

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	ND		71.5	8.97	F	ng/L		13	30 - 150
Benzo(b)thiophene	3.9	J	71.5	66.8		ng/L		88	30 - 150
Benzo[k]fluoranthene	ND		71.5	7.94	F	ng/L		11	30 - 150
Benzo[g,h,i]perylene	ND		71.5	2.63	J F	ng/L		4	30 - 150
Carbazole	ND		71.5	65.3		ng/L		91	30 - 150
Chrysene	ND		71.5	30.5		ng/L		43	20 - 136
Dibenz(a,h)anthracene	ND		71.5	2.36	J F	ng/L		3	30 - 150
Dibenzofuran	1.8	J	71.5	64.2		ng/L		87	30 - 150
Dibenzothiophene	ND		71.5	61.7		ng/L		86	30 - 150
Fluoranthene	ND		71.5	60.4		ng/L		84	30 - 150
Fluorene	3.1	J	71.5	61.6		ng/L		82	34 - 96
Indene	3.7	J	71.5	63.4		ng/L		84	22 - 86
Indole	ND		71.5	58.2		ng/L		81	30 - 150
Indeno[1,2,3-cd]pyrene	ND		71.5	2.68	J F	ng/L		4	30 - 150
Naphthalene	24	B	71.5	67.7		ng/L		62	27 - 95
Perylene	ND		71.5	7.24	F	ng/L		10	30 - 150
Phenanthrene	ND		71.5	63.3		ng/L		88	30 - 150
Pyrene	ND		71.5	60.4		ng/L		84	30 - 150
Quinoline	ND		71.5	57.4		ng/L		80	20 - 112
7,12-Dimethylbenz(a)anthracene	ND		71.5	40.9		ng/L		57	30 - 150
Biphenyl	ND		71.5	60.4		ng/L		84	30 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*72*		*23 - 84*
Chrysene-d12 (Surr)	*40*		*28 - 101*
Naphthalene-d8 (Surr)	*86*		*22 - 97*

Lab Sample ID: 280-22046-1 MSD
Matrix: Water
Analysis Batch: 95981

Client Sample ID: SLP10T-102511
Prep Type: Total/NA
Prep Batch: 93581

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	ND		71.2	64.1		ng/L		90	30 - 150	2	50
2,3-Dihydroindene	34	B	71.2	93.4		ng/L		83	30 - 150	0	50
1-Methylnaphthalene	13	B	71.2	70.0		ng/L		80	30 - 150	6	50
2-Methylnaphthalene	9.3	B	71.2	65.4		ng/L		79	25 - 95	6	50
3-Methylcholanthrene	ND		71.2	ND	F	ng/L		0	30 - 150	NC	50
Acenaphthene	24		71.2	87.4		ng/L		89	30 - 150	4	50
Acenaphthylene	2.4	J	71.2	61.6		ng/L		83	30 - 150	4	50
Acridine	ND	*	71.2	14.2	F	ng/L		20	30 - 150	94	50
Anthracene	ND		71.2	54.7		ng/L		77	30 - 150	2	50
Benzo[a]anthracene	ND		71.2	27.3		ng/L		38	30 - 150	2	50
Benzo[a]pyrene	ND		71.2	6.47	F	ng/L		9	30 - 150	5	50
Benzo[e]pyrene	ND		71.2	7.84	F	ng/L		11	37 - 105	2	50
Benzo[b]fluoranthene	ND		71.2	8.97	F	ng/L		13	30 - 150	0	50
Benzo(b)thiophene	3.9	J	71.2	69.5		ng/L		92	30 - 150	4	50
Benzo[k]fluoranthene	ND		71.2	8.64	F	ng/L		12	30 - 150	8	50
Benzo[g,h,i]perylene	ND		71.2	3.34	J F	ng/L		5	30 - 150	24	50
Carbazole	ND		71.2	68.0		ng/L		95	30 - 150	4	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-22046-1 MSD
Matrix: Water
Analysis Batch: 95981

Client Sample ID: SLP10T-102511
Prep Type: Total/NA
Prep Batch: 93581

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	ND		71.2	31.6		ng/L		44	20 - 136	3	50
Dibenz(a,h)anthracene	ND		71.2	3.22	J F	ng/L		5	30 - 150	31	50
Dibenzofuran	1.8	J	71.2	67.3		ng/L		92	30 - 150	5	50
Dibenzothiophene	ND		71.2	64.7		ng/L		91	30 - 150	5	50
Fluoranthene	ND		71.2	62.5		ng/L		88	30 - 150	3	50
Fluorene	3.1	J	71.2	65.3		ng/L		87	34 - 96	6	50
Indene	3.7	J	71.2	65.8	F	ng/L		87	22 - 86	4	50
Indole	ND		71.2	57.8		ng/L		81	30 - 150	1	50
Indeno[1,2,3-cd]pyrene	ND		71.2	3.44	J F	ng/L		5	30 - 150	25	50
Naphthalene	24	B	71.2	72.1		ng/L		68	27 - 95	6	50
Perylene	ND		71.2	7.16	F	ng/L		10	30 - 150	1	50
Phenanthrene	ND		71.2	66.9		ng/L		94	30 - 150	6	50
Pyrene	ND		71.2	62.3		ng/L		87	30 - 150	3	50
Quinoline	ND		71.2	43.2		ng/L		61	20 - 112	28	50
7,12-Dimethylbenz(a)anthracene	ND		71.2	33.5		ng/L		47	30 - 150	20	50
Biphenyl	ND		71.2	63.9		ng/L		90	30 - 150	6	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*76*		*23 - 84*
Chrysene-d12 (Surr)	*41*		*28 - 101*
Naphthalene-d8 (Surr)	*89*		*22 - 97*

QC Association Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

GC/MS Semi VOA

Prep Batch: 93581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-22046-1	SLP10T-102511	Total/NA	Water	3520C	
280-22046-1 MS	SLP10T-102511	Total/NA	Water	3520C	
280-22046-1 MSD	SLP10T-102511	Total/NA	Water	3520C	
280-22046-2	SLP10TDUP-102511	Total/NA	Water	3520C	
280-22046-3	SLP10TFB-102511	Total/NA	Water	3520C	
280-22046-4	SLP10TFBD-102511	Total/NA	Water	3520C	
LCS 280-93581/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-93581/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 95856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-22046-1	SLP10T-102511	Total/NA	Water	8270C	93581
LCS 280-93581/2-A	Lab Control Sample	Total/NA	Water	8270C	93581
MB 280-93581/1-A	Method Blank	Total/NA	Water	8270C	93581

Analysis Batch: 95981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-22046-1 MS	SLP10T-102511	Total/NA	Water	8270C	93581
280-22046-1 MSD	SLP10T-102511	Total/NA	Water	8270C	93581
280-22046-2	SLP10TDUP-102511	Total/NA	Water	8270C	93581
280-22046-4	SLP10TFBD-102511	Total/NA	Water	8270C	93581

Analysis Batch: 96055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-22046-3	SLP10TFB-102511	Total/NA	Water	8270C	93581

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Client Sample ID: SLP10T-102511

Lab Sample ID: 280-22046-1

Date Collected: 10/25/11 12:00

Matrix: Water

Date Received: 10/26/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4203.6 mL	1000 uL	93581	10/28/11 10:05	JCV	TAL DEN
Total/NA	Analysis	8270C		1			95856	11/10/11 19:00	DPI	TAL DEN

Client Sample ID: SLP10TDUP-102511

Lab Sample ID: 280-22046-2

Date Collected: 10/25/11 12:05

Matrix: Water

Date Received: 10/26/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4187.1 mL	1000 uL	93581	10/28/11 10:05	JCV	TAL DEN
Total/NA	Analysis	8270C		1			95981	11/11/11 16:19	DPI	TAL DEN

Client Sample ID: SLP10TFB-102511

Lab Sample ID: 280-22046-3

Date Collected: 10/25/11 12:20

Matrix: Water

Date Received: 10/26/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4213.7 mL	1000 uL	93581	10/28/11 10:05	JCV	TAL DEN
Total/NA	Analysis	8270C		1			96055	11/12/11 09:02	DPI	TAL DEN

Client Sample ID: SLP10TFBD-102511

Lab Sample ID: 280-22046-4

Date Collected: 10/25/11 12:25

Matrix: Water

Date Received: 10/26/11 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4199.2 mL	1000 uL	93581	10/28/11 10:05	JCV	TAL DEN
Total/NA	Analysis	8270C		1			95981	11/11/11 17:33	DPI	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	40730
TestAmerica Denver	Alaska	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAC	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAC	7	E-10166
TestAmerica Denver	Louisiana	NELAC	6	30785
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAC	1	205310
TestAmerica Denver	New Jersey	NELAC	2	CO004
TestAmerica Denver	New Mexico	State Program	6	N/A
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina	North Carolina DENR	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Tennessee	State Program	4	TN02944
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Sampler ID _____ 3.9 4.1 4.5 3.5 2.7 (A) 1/2 10/26

Temperature on Receipt 3.6

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client: AECOM - City of SLP	Project Manager: Drew Tavara	Date: 10/25/11	Chain of Custody Number: 141423
Address: 7305 Oxford St.	Telephone Number (Area Code)/Fax Number: 651 367 2335	Lab Number:	Page 1 of 1
City: St. Louis Park / State: MN / Zip Code: 55416	Site Contact: Scott Anderson	Lab Contact:	
Project Name and Location (State): SLP - Reilly	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: PAH PPTS	Special Instructions/ Conditions of Receipt
SLP10T-102511	10/25/11	1200		X			6						X	*21 Day TAT*
SLP10TDup-102511		1205												
SLP10TMS-102511		1210												
SLP10TMSD-102511		1215												
SLP10TFB-102511		1220												
SLP10TFBD-102511		1225												

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	10/25/11	1400	1. Received By: [signature]	10/26/11	0900
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-22046-1

Login Number: 22046

List Source: TestAmerica Denver

List Number: 1

Creator: Philipp, Nicholas A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Detection Limit Exceptions Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-22046-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8270C	Water	2,3-Benzofuran	ng/L	5.4	20
8270C	Water	2,3-Dihydroindene	ng/L	5.0	20
8270C	Water	1-Methylnaphthalene	ng/L	5.6	20
8270C	Water	2-Methylnaphthalene	ng/L	5.9	20
8270C	Water	Acenaphthene	ng/L	5.7	20
8270C	Water	Acenaphthylene	ng/L	4.8	20
8270C	Water	Acridine	ng/L	6.5	20
8270C	Water	Anthracene	ng/L	4.2	20
8270C	Water	Benzo[a]anthracene	ng/L	4.3	20
8270C	Water	Benzo[a]pyrene	ng/L	2.5	20
8270C	Water	Benzo[e]pyrene	ng/L	4.3	20
8270C	Water	Benzo[b]fluoranthene	ng/L	4.7	20
8270C	Water	Benzo(b)thiophene	ng/L	5.2	20
8270C	Water	Benzo[k]fluoranthene	ng/L	4.1	20
8270C	Water	Benzo[g,h,i]perylene	ng/L	6.2	20
8270C	Water	Carbazole	ng/L	3.8	20
8270C	Water	Chrysene	ng/L	5.6	20
8270C	Water	Dibenz(a,h)anthracene	ng/L	5.9	20
8270C	Water	Dibenzofuran	ng/L	5.7	20
8270C	Water	Dibenzothiophene	ng/L	4.1	20
8270C	Water	Fluoranthene	ng/L	4.6	20
8270C	Water	Fluorene	ng/L	4.1	20
8270C	Water	Indene	ng/L	4.7	20
8270C	Water	Indole	ng/L	4.7	20
8270C	Water	Indeno[1,2,3-cd]pyrene	ng/L	5.4	20
8270C	Water	Naphthalene	ng/L	8.6	20
8270C	Water	Perylene	ng/L	3.8	20
8270C	Water	Phenanthrene	ng/L	6.3	20
8270C	Water	Pyrene	ng/L	4.2	20
8270C	Water	Quinoline	ng/L	9.0	20
8270C	Water	Biphenyl	ng/L	5.6	20

Data Quality Assessment Memorandum

Date: February 10, 2012

To: Scott Anderson

From: Bill Gregg

Subject: Data Quality Assessment
Ultra Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 280-22046-1
Appendix M

Distribution: File 0987-0009 File

SUMMARY

A Data Quality Assessment (DQA) was performed on the data for the analysis of two aqueous samples and two field blanks for Ultra Low Level aromatic hydrocarbons (PAHs) by SW-846 method 8270C, selected ion monitoring (SIM) method. The samples were collected on October 25, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to TestAmerica in Arvada, CO for analysis. TestAmerica processed and reported the results under lot number 280-22046-1.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes.

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
SLP10T-102511	SLP10TFB-102511
SLP10TDUP-102511	SLP10TFBDUP-102511

SLP10T was sampled on October 20 and 25, 2011 to allow reanalysis of the water based on an elevated reading for CPAH in the original sample (SLP10TEXTENDED-091311) collected on September 13, 2011. Since none of the extended list PAH compounds were detected in the September 13,2011 analysis, the reanalysis was performed for the standard project list of 31 PAH compounds.

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times. The laboratory also met the 21-day re-analysis turnaround time requirement.

The cooler temperature was measured upon sample receipt was within the acceptance criteria of 4± 2°C.

Laboratory Blanks/Field Blanks

Target analytes were detected in the laboratory method blank and in the field blanks SLP10T-102511 and SLP10TDUP-102511. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (AL) were established at 5x the concentration detected in the blank. The following table summarizes the level of blank contamination detected in the laboratory method blank; the action level; and the associated samples.

Compound	Concentration (ng/L)	AL (ng/L)	Associated Samples
2,3-Dihydroindene	3.81	19.05	All samples in data set
1-Methynaphthalene	0.938	4.69	All samples in data set
2-Methylnaphthalene	1.72	8.6	All samples in data set
Naphthalene	5.35	26.75	All samples in data set

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses except that chrysene-d12 was recovered at 0.5% in the field blank duplicate, whereas the acceptable limits for this compound are 28% to 101%. The data were not qualified based on this result.

MS/MSD Results

MS/MSD analyses were performed on sample SLP10T-102511 from this data set. All target analytes were spiked. The percent recoveries (%Rs) of 9 of the 33 spiked target analytes in the MS and the %Rs of 11 of the 33 spiked target analytes in the MSD fell outside the QC acceptance criteria in the MS/MSD analyses. The following table summarizes the %Rs which fell below 10%. These results were qualified as indicated below.

Compound	MS %R	MSD %R	RPD	Laboratory QC limits %R (RPD)	Action (Detects/Nondetects)
3-Methylcholanthrene	7	0	NA	30-150 (50)	J/UJ
Benzo(a)pyrene	10	9	Ok	30-150 (50)	J/UJ
Benzo(ghi)perylene	4	5	Ok	30-150 (50)	J/UJ
Dibenzo(ah)anthracene	3	5	Ok	30-132 (50)	J/UJ
Indeno(123,cd)pyrene	4	5	Ok	30-150 (50)	J/UJ
Associated sample: SLP10T-102511					

LCS Results

All target analytes were spiked. The %Rs were within the QC acceptance criteria for the LCS analysis for all compounds except as summarized below.

Compound	MS %R	Laboratory QC limits %R	Action (Detects/Nondetects)
3-Methylcholanthrene	29	30-150	J/UJ
Acridine	4	30-150	J/UJ
7,12-dimethylbenz(a)anthracene	25	30-150	J/UJ

Field Duplicate Results

Samples SLP10T-102511 and SLP10TDUP-102511 were the field duplicate pair analyzed with this data set. Acenaphthene was the only compound detected in the samples that was not qualified as estimated or found in the blank. Its RPD was 13% which is below the control limit of 50%.

Sample Quantitation/Detection Limit Results

All samples were analyzed undiluted for this data set.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-23788-1
Client Project/Site: CSLP - Reilly Tar & Chemical

For:
City of Saint Louis Park
7305 Oxford Street
Saint Louis Park, Minnesota 55426

Attn: Scott Anderson

Authorized for release by:
1/12/2012 3:10:12 PM

Lisa Uriell
Project Manager II
lisa.uriell@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Table of Contents

Job ID: 280-23788-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: City of St. Louis Park

Project: Reilly Tar & Chemical

Report Number: 280-23788-1

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

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving
Five samples were received under chain of custody on December 14, 2011. The samples were received at temperatures of 4.1°C, 4.0°C, 5.7°C, 3.9°C and 4.6°C.

No anomalies were encountered during sample receipt.

GC/MS Semivolatiles, Method SW846 8270C SIM
All sample holding times were met.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to limited sample volume, sample SLP10TFBD-121311 (280-23788-5) had an initial aliquot volume of 3940 mL. This is below the nominal aliquot volume of 4000 mL. Therefore, the analysis of this sample had to be performed with elevated detection limits. The reporting limits have been adjusted relative to the initial volume available.

Surrogate Fluorene-d10 was recovered slightly above the QC control limits (23-84%) in sample SLP10T-121311 (280-23788-2) at 85%. This is an indicator that data may be biased high. As no detectable concentrations of analytes associated with this surrogate are present above the reporting limits in the sample, corrective action is deemed unnecessary.

Low levels of Naphthalene and Pyrene are present in the method blank associated with prep batch 280-100047. Because the concentrations in the method blank are not present at levels greater than one half the reporting limits, corrective action is deemed unnecessary. The associated positive results in the analytical report have been flagged with “B”.

The LCS associated with prep batch 280-100047 exhibited percent recoveries above the QC control limits for 1-Methylnaphthalene at 265% (limits 30-150%), 2-Methylnaphthalene at 387% (limits 25-95%), Fluorene at 118% (limits 34-96%) and Naphthalene at 781% (limits 27-95%). This is an indicator that data may be biased high. As no detectable concentrations of these compounds are present above the reporting limits in the associated samples, corrective action is deemed unnecessary. Associated data in the analytical report have been flagged “*”.

Additionally, the LCS associated with prep batch 280-100047 exhibited the percent recovery slightly above the QC control limits for Indene at 87% (limits 22-86%). The LCS was re-aliquoted and re-analyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume. Therefore, the data is reported as is. The associated results in the analytical report have been flagged with “*”.

Job ID: 280-23788-1 (Continued)

Laboratory: TestAmerica Denver (Continued)

Furthermore, the LCS associated with prep batch 280-100047 exhibited the percent recovery below the QC control limits for 7,12-Dimethylbenz(a)anthracene at 14% (limits 30-150%). This analyte is not a compound of interest for this project; therefore, corrective action was deemed unnecessary. The LCS was reanalyzed with similar results. Re-extraction was not possible due to insufficient remaining sample volume.

The MS/MSD associated with prep batch 280-100047 was performed using sample SLP10T-121311 (280-23788-2), as requested. MS/MSD exhibited 11 of the 33 Matrix Spike compound recoveries outside the control limits. MS/MSD exhibited 11 of the 33 Matrix Spike Duplicate compound recoveries outside the control limits. The MS/MSD exhibited 1 of the 33 Relative Percent Difference (RPD) data outside the control limits. The MS/MSD exhibited percent recoveries and/or RPD data outside the control limits for the compounds listed below. Details of the specific analyte recoveries can found in the Matrix Spike Sample Recovery and Data Reports.

3-Methylnaphthalene	Acridine	Benzo[a]pyrene
Benzo[e]pyrene	Benzo[b]fluoranthene	Benzo[k]fluoranthene
Benzo[ghi]perylene	Dibenzo(a,h)pyrene	Indeno[1,2,3-cd]pyrene
Perylene	Quinoline	

No other anomalies were noted.

Data Completeness for Method 8270C SIM

The results contained in the report were reviewed relative to data acceptance criteria as specified in the 2008 QAPP, and the percent completeness was determined below. Note that the LCS and MS/MSD data were controlled based on the seven main spike compounds, including Indene, Naphthalene, Quinoline, 2-Methylnaphthalene, Fluorene, Chrysene and Benzo(e)pyrene.

DATA COMPLETENESS CALCULATION JOB: 280-23788-1 ANALYSIS: SW846-8270C SIM		
QC Parameter	**Data Planned**	**Valid Data Obtained**
Method Blank	31	31
MB Surrogates	3	3
LCS	7	3
LCS Surrogates	3	3
FB/FBD	62	62
MS	7	5
MS Surrogates	3	3
MSD	7	5
MSD Surrogates	3	3
MS/MSD RPD	7	7
Sample/Dup. RPD	31	31
Sample Surrogates	15	14
Samples and QC Internal Standard Area	27	27
TOTAL	**206**	**197**
% Completeness	**95.6%**	

Sample Duplicate Calculation for Method 8270C SIM

Sample Duplicate RPD					
JOB 280-23788-1					
Sample: SLP10T-121311		**DUP: SLP10TD-121311**			
Compound	**Result**	**Compound**	**Result**	**RPD**	**RPD>50%**
Acenaphthene	10	Acenaphthene	9.6	4.1	
Acenaphthylene	ND	Acenaphthylene	ND	0.0	
Acridine	ND	Acridine	ND	0.0	
Anthracene	ND	Anthracene	ND	0.0	
Benzo(a)anthracene	ND	Benzo(a)anthracene	ND	0.0	
Benzo(b)fluoranthene	ND	Benzo(b)fluoranthene	ND	0.0	
Benzo(k)fluoranthene	ND	Benzo(k)fluoranthene	ND	0.0	
2,3-Benzofuran	ND	2,3-Benzofuran	ND	0.0	
Benzo(ghi)perylene	ND	Benzo(ghi)perylene	ND	0.0	
Benzo(a)pyrene	ND	Benzo(a)pyrene	ND	0.0	
Benzo(e)pyrene	ND	Benzo(e)pyrene	ND	0.0	
Benzo(b)thiophene	2.2	Benzo(b)thiophene	1.8	20.0	
Biphenyl	ND	Biphenyl	ND	0.0	
Carbazole	ND	Carbazole	ND	0.0	
Chrysene	ND	Chrysene	ND	0.0	
Dibenz(a,h)anthracene	ND	Dibenz(a,h)anthracene	ND	0.0	
Dibenzofuran	ND	Dibenzofuran	ND	0.0	
Dibenzothiophene	ND	Dibenzothiophene	ND	0.0	
2,3-Dihydroindene	17	2,3-Dihydroindene	15	12.5	
Fluoranthene	ND	Fluoranthene	ND	0.0	
Fluorene	1.1	Fluorene	1.1	0.0	
Indene	ND	Indene	ND	0.0	
Indeno(1,2,3-cd)pyrene	ND	Indeno(1,2,3-cd)pyrene	ND	0.0	
Indole	1.9	Indole	1.6	17.1	
2-Methylnaphthalene	ND	2-Methylnaphthalene	ND	0.0	
1-Methylnaphthalene	2.8	1-Methylnaphthalene	2.8	0.0	
Naphthalene	1.9	Naphthalene	2.2	14.6	
Perylene	ND	Perylene	ND	0.0	
Phenanthrene	ND	Phenanthrene	ND	0.0	
Pyrene	ND	Pyrene	ND	0.0	
Quinoline	ND	Quinoline	ND	0.0	

RPD = Relative Percent Difference
ND = Compound not detected in the sample
p = RPD is outside of control limits
*NC = RPD not calculated, one positive result and one ND.
Considered acceptable if the positive result is less than 4x the RL.

Definitions/Glossary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
X	Surrogate is outside control limits
F	MS or MSD exceeds the control limits
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Client Sample ID: W48-121311 — Lab Sample ID: 280-23788-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	3.8	J	4.8	0.67	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	1.5	J *	5.3	0.85	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.8	J *	5.6	0.93	ng/L	1		8270C	Total/NA
Acenaphthene	86		5.4	0.48	ng/L	1		8270C	Total/NA
Acenaphthylene	2.9	J	4.6	0.73	ng/L	1		8270C	Total/NA
Anthracene	5.2		4.0	0.76	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	7.0		5.0	0.71	ng/L	1		8270C	Total/NA
Carbazole	1.7	J	3.6	0.69	ng/L	1		8270C	Total/NA
Indene	23	*	4.5	3.1	ng/L	1		8270C	Total/NA
Indole	3.5	J	4.5	1.6	ng/L	1		8270C	Total/NA
Naphthalene	4.9	J B *	8.2	1.1	ng/L	1		8270C	Total/NA
Pyrene	3.3	J B	4.0	0.94	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10T-121311 — Lab Sample ID: 280-23788-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	17		4.7	0.66	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	2.8	J *	5.3	0.84	ng/L	1		8270C	Total/NA
Acenaphthene	10		5.4	0.47	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	2.2	J	4.9	0.71	ng/L	1		8270C	Total/NA
Fluorene	1.1	J *	3.9	0.81	ng/L	1		8270C	Total/NA
Indole	1.9	J	4.5	1.6	ng/L	1		8270C	Total/NA
Naphthalene	1.9	J B *	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TD-121311 — Lab Sample ID: 280-23788-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,3-Dihydroindene	15		4.7	0.66	ng/L	1		8270C	Total/NA
1-Methylnaphthalene	2.8	J *	5.3	0.84	ng/L	1		8270C	Total/NA
Acenaphthene	9.6		5.4	0.47	ng/L	1		8270C	Total/NA
Benzo(b)thiophene	1.8	J	4.9	0.71	ng/L	1		8270C	Total/NA
Fluorene	1.1	J *	3.9	0.80	ng/L	1		8270C	Total/NA
Indole	1.6	J	4.4	1.6	ng/L	1		8270C	Total/NA
Naphthalene	2.2	J B *	8.1	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFB-121311 — Lab Sample ID: 280-23788-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	1.1	J *	5.3	0.85	ng/L	1		8270C	Total/NA
2-Methylnaphthalene	1.8	J *	5.6	0.93	ng/L	1		8270C	Total/NA
Naphthalene	2.6	J B *	8.2	1.1	ng/L	1		8270C	Total/NA

Client Sample ID: SLP10TFBD-121311 — Lab Sample ID: 280-23788-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.4	J B *	8.7	1.2	ng/L	1		8270C	Total/NA

Method Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compound (GC/MS SIM LL)	SW846	TAL DEN

Protocol References:

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

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-23788-1	W48-121311	Water	12/13/11 12:00	12/14/11 09:30
280-23788-2	SLP10T-121311	Water	12/13/11 13:30	12/14/11 09:30
280-23788-3	SLP10TD-121311	Water	12/13/11 13:35	12/14/11 09:30
280-23788-4	SLP10TFB-121311	Water	12/13/11 13:50	12/14/11 09:30
280-23788-5	SLP10TFBD-121311	Water	12/13/11 13:55	12/14/11 09:30

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Client Sample ID: W48-121311
Date Collected: 12/13/11 12:00
Date Received: 12/14/11 09:30

Lab Sample ID: 280-23788-1
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		12/15/11 10:20	12/29/11 10:22	1
2,3-Dihydroindene	**3.8**	**J**	4.8	0.67	ng/L		12/15/11 10:20	12/29/11 10:22	1
1-Methylnaphthalene	**1.5**	**J ***	5.3	0.85	ng/L		12/15/11 10:20	12/29/11 10:22	1
2-Methylnaphthalene	**1.8**	**J ***	5.6	0.93	ng/L		12/15/11 10:20	12/29/11 10:22	1
Acenaphthene	**86**		5.4	0.48	ng/L		12/15/11 10:20	12/29/11 10:22	1
Acenaphthylene	**2.9**	**J**	4.6	0.73	ng/L		12/15/11 10:20	12/29/11 10:22	1
Acridine	ND		6.2	6.2	ng/L		12/15/11 10:20	12/29/11 10:22	1
Anthracene	**5.2**		4.0	0.76	ng/L		12/15/11 10:20	12/29/11 10:22	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		12/15/11 10:20	12/29/11 10:22	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		12/15/11 10:20	12/29/11 10:22	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		12/15/11 10:20	12/29/11 10:22	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		12/15/11 10:20	12/29/11 10:22	1
Benzo(b)thiophene	**7.0**		5.0	0.71	ng/L		12/15/11 10:20	12/29/11 10:22	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		12/15/11 10:20	12/29/11 10:22	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		12/15/11 10:20	12/29/11 10:22	1
Carbazole	**1.7**	**J**	3.6	0.69	ng/L		12/15/11 10:20	12/29/11 10:22	1
Chrysene	ND		5.3	1.2	ng/L		12/15/11 10:20	12/29/11 10:22	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		12/15/11 10:20	12/29/11 10:22	1
Dibenzofuran	ND		5.4	0.94	ng/L		12/15/11 10:20	12/29/11 10:22	1
Dibenzothiophene	ND		3.9	0.93	ng/L		12/15/11 10:20	12/29/11 10:22	1
Fluoranthene	ND		4.4	1.6	ng/L		12/15/11 10:20	12/29/11 10:22	1
Fluorene	ND	*	3.9	0.81	ng/L		12/15/11 10:20	12/29/11 10:22	1
Indene	**23**	****	4.5	3.1	ng/L		12/15/11 10:20	12/29/11 10:22	1
Indole	**3.5**	**J**	4.5	1.6	ng/L		12/15/11 10:20	12/29/11 10:22	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		12/15/11 10:20	12/29/11 10:22	1
Naphthalene	**4.9**	**J B ***	8.2	1.1	ng/L		12/15/11 10:20	12/29/11 10:22	1
Perylene	ND		3.6	3.6	ng/L		12/15/11 10:20	12/29/11 10:22	1
Phenanthrene	ND		6.0	3.1	ng/L		12/15/11 10:20	12/29/11 10:22	1
Pyrene	**3.3**	**J B**	4.0	0.94	ng/L		12/15/11 10:20	12/29/11 10:22	1
Quinoline	ND		8.6	5.4	ng/L		12/15/11 10:20	12/29/11 10:22	1
Biphenyl	ND		5.3	1.0	ng/L		12/15/11 10:20	12/29/11 10:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*81*		*23 - 84*	*12/15/11 10:20*	*12/29/11 10:22*	*1*
Chrysene-d12 (Surr)	*36*		*28 - 101*	*12/15/11 10:20*	*12/29/11 10:22*	*1*
Naphthalene-d8 (Surr)	*76*		*22 - 97*	*12/15/11 10:20*	*12/29/11 10:22*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Client Sample ID: SLP10T-121311
Date Collected: 12/13/11 13:30
Date Received: 12/14/11 09:30

Lab Sample ID: 280-23788-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.64	ng/L		12/15/11 10:20	12/29/11 10:58	1
2,3-Dihydroindene	**17**		4.7	0.66	ng/L		12/15/11 10:20	12/29/11 10:58	1
1-Methylnaphthalene	**2.8**	**J ***	5.3	0.84	ng/L		12/15/11 10:20	12/29/11 10:58	1
2-Methylnaphthalene	ND	*	5.6	0.93	ng/L		12/15/11 10:20	12/29/11 10:58	1
Acenaphthene	**10**		5.4	0.47	ng/L		12/15/11 10:20	12/29/11 10:58	1
Acenaphthylene	ND		4.6	0.73	ng/L		12/15/11 10:20	12/29/11 10:58	1
Acridine	ND		6.2	6.2	ng/L		12/15/11 10:20	12/29/11 10:58	1
Anthracene	ND		4.0	0.76	ng/L		12/15/11 10:20	12/29/11 10:58	1
Benzo[a]anthracene	ND		4.1	0.87	ng/L		12/15/11 10:20	12/29/11 10:58	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		12/15/11 10:20	12/29/11 10:58	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		12/15/11 10:20	12/29/11 10:58	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		12/15/11 10:20	12/29/11 10:58	1
Benzo(b)thiophene	**2.2**	**J**	4.9	0.71	ng/L		12/15/11 10:20	12/29/11 10:58	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		12/15/11 10:20	12/29/11 10:58	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		12/15/11 10:20	12/29/11 10:58	1
Carbazole	ND		3.6	0.68	ng/L		12/15/11 10:20	12/29/11 10:58	1
Chrysene	ND		5.3	1.2	ng/L		12/15/11 10:20	12/29/11 10:58	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		12/15/11 10:20	12/29/11 10:58	1
Dibenzofuran	ND		5.4	0.94	ng/L		12/15/11 10:20	12/29/11 10:58	1
Dibenzothiophene	ND		3.9	0.93	ng/L		12/15/11 10:20	12/29/11 10:58	1
Fluoranthene	ND		4.4	1.6	ng/L		12/15/11 10:20	12/29/11 10:58	1
Fluorene	**1.1**	**J ***	3.9	0.81	ng/L		12/15/11 10:20	12/29/11 10:58	1
Indene	ND	*	4.5	3.1	ng/L		12/15/11 10:20	12/29/11 10:58	1
Indole	**1.9**	**J**	4.5	1.6	ng/L		12/15/11 10:20	12/29/11 10:58	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		12/15/11 10:20	12/29/11 10:58	1
Naphthalene	**1.9**	**J B ***	8.2	1.1	ng/L		12/15/11 10:20	12/29/11 10:58	1
Perylene	ND		3.6	3.6	ng/L		12/15/11 10:20	12/29/11 10:58	1
Phenanthrene	ND		6.0	3.0	ng/L		12/15/11 10:20	12/29/11 10:58	1
Pyrene	ND		4.0	0.94	ng/L		12/15/11 10:20	12/29/11 10:58	1
Quinoline	ND		8.5	5.4	ng/L		12/15/11 10:20	12/29/11 10:58	1
Biphenyl	ND		5.3	1.0	ng/L		12/15/11 10:20	12/29/11 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*85*	*X*	*23 - 84*	*12/15/11 10:20*	*12/29/11 10:58*	*1*
Chrysene-d12 (Surr)	*60*		*28 - 101*	*12/15/11 10:20*	*12/29/11 10:58*	*1*
Naphthalene-d8 (Surr)	*89*		*22 - 97*	*12/15/11 10:20*	*12/29/11 10:58*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Client Sample ID: SLP10TD-121311
Date Collected: 12/13/11 13:35
Date Received: 12/14/11 09:30

Lab Sample ID: 280-23788-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.64	ng/L		12/15/11 10:20	12/29/11 12:46	1
2,3-Dihydroindene	**15**		4.7	0.66	ng/L		12/15/11 10:20	12/29/11 12:46	1
1-Methylnaphthalene	**2.8**	**J ***	5.3	0.84	ng/L		12/15/11 10:20	12/29/11 12:46	1
2-Methylnaphthalene	ND	*	5.6	0.93	ng/L		12/15/11 10:20	12/29/11 12:46	1
Acenaphthene	**9.6**		5.4	0.47	ng/L		12/15/11 10:20	12/29/11 12:46	1
Acenaphthylene	ND		4.5	0.73	ng/L		12/15/11 10:20	12/29/11 12:46	1
Acridine	ND		6.1	6.1	ng/L		12/15/11 10:20	12/29/11 12:46	1
Anthracene	ND		4.0	0.76	ng/L		12/15/11 10:20	12/29/11 12:46	1
Benzo[a]anthracene	ND		4.1	0.87	ng/L		12/15/11 10:20	12/29/11 12:46	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		12/15/11 10:20	12/29/11 12:46	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		12/15/11 10:20	12/29/11 12:46	1
Benzo[b]fluoranthene	ND		4.4	1.3	ng/L		12/15/11 10:20	12/29/11 12:46	1
Benzo(b)thiophene	**1.8**	**J**	4.9	0.71	ng/L		12/15/11 10:20	12/29/11 12:46	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		12/15/11 10:20	12/29/11 12:46	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		12/15/11 10:20	12/29/11 12:46	1
Carbazole	ND		3.6	0.68	ng/L		12/15/11 10:20	12/29/11 12:46	1
Chrysene	ND		5.3	1.2	ng/L		12/15/11 10:20	12/29/11 12:46	1
Dibenz(a,h)anthracene	ND		5.6	0.98	ng/L		12/15/11 10:20	12/29/11 12:46	1
Dibenzofuran	ND		5.4	0.94	ng/L		12/15/11 10:20	12/29/11 12:46	1
Dibenzothiophene	ND		3.9	0.93	ng/L		12/15/11 10:20	12/29/11 12:46	1
Fluoranthene	ND		4.3	1.6	ng/L		12/15/11 10:20	12/29/11 12:46	1
Fluorene	**1.1**	**J ***	3.9	0.80	ng/L		12/15/11 10:20	12/29/11 12:46	1
Indene	ND	*	4.4	3.1	ng/L		12/15/11 10:20	12/29/11 12:46	1
Indole	**1.6**	**J**	4.4	1.6	ng/L		12/15/11 10:20	12/29/11 12:46	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		12/15/11 10:20	12/29/11 12:46	1
Naphthalene	**2.2**	**J B ***	8.1	1.1	ng/L		12/15/11 10:20	12/29/11 12:46	1
Perylene	ND		3.6	3.6	ng/L		12/15/11 10:20	12/29/11 12:46	1
Phenanthrene	ND		6.0	3.0	ng/L		12/15/11 10:20	12/29/11 12:46	1
Pyrene	ND		4.0	0.94	ng/L		12/15/11 10:20	12/29/11 12:46	1
Quinoline	ND		8.5	5.3	ng/L		12/15/11 10:20	12/29/11 12:46	1
Biphenyl	ND		5.3	0.99	ng/L		12/15/11 10:20	12/29/11 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*77*		*23 - 84*	*12/15/11 10:20*	*12/29/11 12:46*	*1*
Chrysene-d12 (Surr)	*51*		*28 - 101*	*12/15/11 10:20*	*12/29/11 12:46*	*1*
Naphthalene-d8 (Surr)	*82*		*22 - 97*	*12/15/11 10:20*	*12/29/11 12:46*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Client Sample ID: SLP10TFB-121311
Date Collected: 12/13/11 13:50
Date Received: 12/14/11 09:30

Lab Sample ID: 280-23788-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.1	0.65	ng/L		12/15/11 10:20	12/29/11 13:22	1
2,3-Dihydroindene	ND		4.8	0.67	ng/L		12/15/11 10:20	12/29/11 13:22	1
1-Methylnaphthalene	**1.1**	**J ***	5.3	0.85	ng/L		12/15/11 10:20	12/29/11 13:22	1
2-Methylnaphthalene	**1.8**	**J ***	5.6	0.93	ng/L		12/15/11 10:20	12/29/11 13:22	1
Acenaphthene	ND		5.4	0.48	ng/L		12/15/11 10:20	12/29/11 13:22	1
Acenaphthylene	ND		4.6	0.73	ng/L		12/15/11 10:20	12/29/11 13:22	1
Acridine	ND		6.2	6.2	ng/L		12/15/11 10:20	12/29/11 13:22	1
Anthracene	ND		4.0	0.76	ng/L		12/15/11 10:20	12/29/11 13:22	1
Benzo[a]anthracene	ND		4.1	0.88	ng/L		12/15/11 10:20	12/29/11 13:22	1
Benzo[a]pyrene	ND		2.4	1.2	ng/L		12/15/11 10:20	12/29/11 13:22	1
Benzo[e]pyrene	ND		4.1	1.1	ng/L		12/15/11 10:20	12/29/11 13:22	1
Benzo[b]fluoranthene	ND		4.5	1.3	ng/L		12/15/11 10:20	12/29/11 13:22	1
Benzo(b)thiophene	ND		4.9	0.71	ng/L		12/15/11 10:20	12/29/11 13:22	1
Benzo[k]fluoranthene	ND		3.9	1.2	ng/L		12/15/11 10:20	12/29/11 13:22	1
Benzo[g,h,i]perylene	ND		5.9	1.1	ng/L		12/15/11 10:20	12/29/11 13:22	1
Carbazole	ND		3.6	0.68	ng/L		12/15/11 10:20	12/29/11 13:22	1
Chrysene	ND		5.3	1.2	ng/L		12/15/11 10:20	12/29/11 13:22	1
Dibenz(a,h)anthracene	ND		5.6	0.99	ng/L		12/15/11 10:20	12/29/11 13:22	1
Dibenzofuran	ND		5.4	0.94	ng/L		12/15/11 10:20	12/29/11 13:22	1
Dibenzothiophene	ND		3.9	0.93	ng/L		12/15/11 10:20	12/29/11 13:22	1
Fluoranthene	ND		4.4	1.6	ng/L		12/15/11 10:20	12/29/11 13:22	1
Fluorene	ND	*	3.9	0.81	ng/L		12/15/11 10:20	12/29/11 13:22	1
Indene	ND	*	4.5	3.1	ng/L		12/15/11 10:20	12/29/11 13:22	1
Indole	ND		4.5	1.6	ng/L		12/15/11 10:20	12/29/11 13:22	1
Indeno[1,2,3-cd]pyrene	ND		5.1	1.2	ng/L		12/15/11 10:20	12/29/11 13:22	1
Naphthalene	**2.6**	**J B ***	8.2	1.1	ng/L		12/15/11 10:20	12/29/11 13:22	1
Perylene	ND		3.6	3.6	ng/L		12/15/11 10:20	12/29/11 13:22	1
Phenanthrene	ND		6.0	3.1	ng/L		12/15/11 10:20	12/29/11 13:22	1
Pyrene	ND		4.0	0.94	ng/L		12/15/11 10:20	12/29/11 13:22	1
Quinoline	ND		8.6	5.4	ng/L		12/15/11 10:20	12/29/11 13:22	1
Biphenyl	ND		5.3	1.0	ng/L		12/15/11 10:20	12/29/11 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*82*		*23 - 84*	*12/15/11 10:20*	*12/29/11 13:22*	*1*
Chrysene-d12 (Surr)	*90*		*28 - 101*	*12/15/11 10:20*	*12/29/11 13:22*	*1*
Naphthalene-d8 (Surr)	*88*		*22 - 97*	*12/15/11 10:20*	*12/29/11 13:22*	*1*

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Client Sample ID: SLP10TFBD-121311
Date Collected: 12/13/11 13:55
Date Received: 12/14/11 09:30

Lab Sample ID: 280-23788-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.5	0.69	ng/L		12/15/11 10:20	12/29/11 13:58	1
2,3-Dihydroindene	ND		5.1	0.71	ng/L		12/15/11 10:20	12/29/11 13:58	1
1-Methylnaphthalene	ND	*	5.7	0.90	ng/L		12/15/11 10:20	12/29/11 13:58	1
2-Methylnaphthalene	ND	*	6.0	0.99	ng/L		12/15/11 10:20	12/29/11 13:58	1
Acenaphthene	ND		5.8	0.51	ng/L		12/15/11 10:20	12/29/11 13:58	1
Acenaphthylene	ND		4.9	0.78	ng/L		12/15/11 10:20	12/29/11 13:58	1
Acridine	ND		6.6	6.6	ng/L		12/15/11 10:20	12/29/11 13:58	1
Anthracene	ND		4.3	0.81	ng/L		12/15/11 10:20	12/29/11 13:58	1
Benzo[a]anthracene	ND		4.4	0.93	ng/L		12/15/11 10:20	12/29/11 13:58	1
Benzo[a]pyrene	ND		2.5	1.3	ng/L		12/15/11 10:20	12/29/11 13:58	1
Benzo[e]pyrene	ND		4.4	1.2	ng/L		12/15/11 10:20	12/29/11 13:58	1
Benzo[b]fluoranthene	ND		4.8	1.4	ng/L		12/15/11 10:20	12/29/11 13:58	1
Benzo(b)thiophene	ND		5.3	0.76	ng/L		12/15/11 10:20	12/29/11 13:58	1
Benzo[k]fluoranthene	ND		4.2	1.3	ng/L		12/15/11 10:20	12/29/11 13:58	1
Benzo[g,h,i]perylene	ND		6.3	1.2	ng/L		12/15/11 10:20	12/29/11 13:58	1
Carbazole	ND		3.9	0.73	ng/L		12/15/11 10:20	12/29/11 13:58	1
Chrysene	ND		5.7	1.3	ng/L		12/15/11 10:20	12/29/11 13:58	1
Dibenz(a,h)anthracene	ND		6.0	1.1	ng/L		12/15/11 10:20	12/29/11 13:58	1
Dibenzofuran	ND		5.8	1.0	ng/L		12/15/11 10:20	12/29/11 13:58	1
Dibenzothiophene	ND		4.2	0.99	ng/L		12/15/11 10:20	12/29/11 13:58	1
Fluoranthene	ND		4.7	1.7	ng/L		12/15/11 10:20	12/29/11 13:58	1
Fluorene	ND	*	4.2	0.86	ng/L		12/15/11 10:20	12/29/11 13:58	1
Indene	ND	*	4.8	3.3	ng/L		12/15/11 10:20	12/29/11 13:58	1
Indole	ND		4.8	1.8	ng/L		12/15/11 10:20	12/29/11 13:58	1
Indeno[1,2,3-cd]pyrene	ND		5.5	1.3	ng/L		12/15/11 10:20	12/29/11 13:58	1
Naphthalene	**1.4**	**J B ***	8.7	1.2	ng/L		12/15/11 10:20	12/29/11 13:58	1
Perylene	ND		3.9	3.9	ng/L		12/15/11 10:20	12/29/11 13:58	1
Phenanthrene	ND		6.4	3.3	ng/L		12/15/11 10:20	12/29/11 13:58	1
Pyrene	ND		4.3	1.0	ng/L		12/15/11 10:20	12/29/11 13:58	1
Quinoline	ND		9.1	5.7	ng/L		12/15/11 10:20	12/29/11 13:58	1
Biphenyl	ND		5.7	1.1	ng/L		12/15/11 10:20	12/29/11 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*76*		*23 - 84*	*12/15/11 10:20*	*12/29/11 13:58*	*1*
Chrysene-d12 (Surr)	*89*		*28 - 101*	*12/15/11 10:20*	*12/29/11 13:58*	*1*
Naphthalene-d8 (Surr)	*81*		*22 - 97*	*12/15/11 10:20*	*12/29/11 13:58*	*1*

Surrogate Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		FD10	sene-d12 (S	thalene-d8						
Lab Sample ID	Client Sample ID	(23-84)	(28-101)	(22-97)						
280-23788-1	W48-121311	81	36	76						
280-23788-2	SLP10T-121311	85 X	60	89						
280-23788-2 MS	SLP10T-121311	72	64	74						
280-23788-2 MSD	SLP10T-121311	74	45	79						
280-23788-3	SLP10TD-121311	77	51	82						
280-23788-4	SLP10TFB-121311	82	90	88						
280-23788-5	SLP10TFBD-121311	76	89	81						
LCS 280-100047/2-A	Lab Control Sample	82	81	87						
MB 280-100047/1-A	Method Blank	74	88	78						

Surrogate Legend

FD10 = Fluorene-d10 (Surr)
Chrysene-d12 (Surr) = Chrysene-d12 (Surr)
Naphthalene-d8 (Surr) = Naphthalene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL)

Lab Sample ID: MB 280-100047/1-A
Matrix: Water
Analysis Batch: 101746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 100047

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Benzofuran	ND		5.4	0.68	ng/L		12/15/11 10:20	12/29/11 09:10	1
2,3-Dihydroindene	ND		5.0	0.70	ng/L		12/15/11 10:20	12/29/11 09:10	1
1-Methylnaphthalene	ND		5.6	0.89	ng/L		12/15/11 10:20	12/29/11 09:10	1
2-Methylnaphthalene	ND		5.9	0.98	ng/L		12/15/11 10:20	12/29/11 09:10	1
Acenaphthene	ND		5.7	0.50	ng/L		12/15/11 10:20	12/29/11 09:10	1
Acenaphthylene	ND		4.8	0.77	ng/L		12/15/11 10:20	12/29/11 09:10	1
Acridine	ND		6.5	6.5	ng/L		12/15/11 10:20	12/29/11 09:10	1
Anthracene	ND		4.2	0.80	ng/L		12/15/11 10:20	12/29/11 09:10	1
Benzo[a]anthracene	ND		4.3	0.92	ng/L		12/15/11 10:20	12/29/11 09:10	1
Benzo[a]pyrene	ND		2.5	1.2	ng/L		12/15/11 10:20	12/29/11 09:10	1
Benzo[e]pyrene	ND		4.3	1.1	ng/L		12/15/11 10:20	12/29/11 09:10	1
Benzo[b]fluoranthene	ND		4.7	1.4	ng/L		12/15/11 10:20	12/29/11 09:10	1
Benzo(b)thiophene	ND		5.2	0.75	ng/L		12/15/11 10:20	12/29/11 09:10	1
Benzo[k]fluoranthene	ND		4.1	1.2	ng/L		12/15/11 10:20	12/29/11 09:10	1
Benzo[g,h,i]perylene	ND		6.2	1.2	ng/L		12/15/11 10:20	12/29/11 09:10	1
Carbazole	ND		3.8	0.72	ng/L		12/15/11 10:20	12/29/11 09:10	1
Chrysene	ND		5.6	1.2	ng/L		12/15/11 10:20	12/29/11 09:10	1
Dibenz(a,h)anthracene	ND		5.9	1.0	ng/L		12/15/11 10:20	12/29/11 09:10	1
Dibenzofuran	ND		5.7	0.99	ng/L		12/15/11 10:20	12/29/11 09:10	1
Dibenzothiophene	ND		4.1	0.98	ng/L		12/15/11 10:20	12/29/11 09:10	1
Fluoranthene	ND		4.6	1.7	ng/L		12/15/11 10:20	12/29/11 09:10	1
Fluorene	ND		4.1	0.85	ng/L		12/15/11 10:20	12/29/11 09:10	1
Indene	ND		4.7	3.3	ng/L		12/15/11 10:20	12/29/11 09:10	1
Indole	ND		4.7	1.7	ng/L		12/15/11 10:20	12/29/11 09:10	1
Indeno[1,2,3-cd]pyrene	ND		5.4	1.3	ng/L		12/15/11 10:20	12/29/11 09:10	1
Naphthalene	1.57	J	8.6	1.1	ng/L		12/15/11 10:20	12/29/11 09:10	1
Perylene	ND		3.8	3.8	ng/L		12/15/11 10:20	12/29/11 09:10	1
Phenanthrene	ND		6.3	3.2	ng/L		12/15/11 10:20	12/29/11 09:10	1
Pyrene	1.01	J	4.2	0.99	ng/L		12/15/11 10:20	12/29/11 09:10	1
Quinoline	ND		9.0	5.7	ng/L		12/15/11 10:20	12/29/11 09:10	1
Biphenyl	ND		5.6	1.1	ng/L		12/15/11 10:20	12/29/11 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorene-d10 (Surr)	*74*		*23 - 84*	*12/15/11 10:20*	*12/29/11 09:10*	*1*
Chrysene-d12 (Surr)	*88*		*28 - 101*	*12/15/11 10:20*	*12/29/11 09:10*	*1*
Naphthalene-d8 (Surr)	*78*		*22 - 97*	*12/15/11 10:20*	*12/29/11 09:10*	*1*

Lab Sample ID: LCS 280-100047/2-A
Matrix: Water
Analysis Batch: 101746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 100047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	75.0	73.4		ng/L		98	30 - 150
2,3-Dihydroindene	75.0	59.1		ng/L		79	30 - 150
1-Methylnaphthalene	75.0	199	*	ng/L		265	30 - 150
2-Methylnaphthalene	75.0	291	*	ng/L		387	25 - 95
3-Methylcholanthrene	75.0	28.0		ng/L		37	30 - 150
Acenaphthene	75.0	107		ng/L		142	30 - 150
Acenaphthylene	75.0	87.9		ng/L		117	30 - 150

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: LCS 280-100047/2-A
Matrix: Water
Analysis Batch: 101746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 100047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acridine	75.0	42.2		ng/L		56	30 - 150
Anthracene	75.0	68.2		ng/L		91	30 - 150
Benzo[a]anthracene	75.0	67.2		ng/L		90	30 - 150
Benzo[a]pyrene	75.0	56.8		ng/L		76	30 - 150
Benzo[e]pyrene	75.0	57.8		ng/L		77	37 - 105
Benzo[b]fluoranthene	75.0	58.9		ng/L		79	30 - 150
Benzo(b)thiophene	75.0	68.3		ng/L		91	30 - 150
Benzo[k]fluoranthene	75.0	58.6		ng/L		78	30 - 150
Benzo[g,h,i]perylene	75.0	52.1		ng/L		69	30 - 150
Carbazole	75.0	66.4		ng/L		89	30 - 150
Chrysene	75.0	64.9		ng/L		87	20 - 136
Dibenz(a,h)anthracene	75.0	47.4		ng/L		63	30 - 150
Dibenzofuran	75.0	94.2		ng/L		126	30 - 150
Dibenzothiophene	75.0	64.8		ng/L		86	30 - 150
Fluoranthene	75.0	73.3		ng/L		98	30 - 150
Fluorene	75.0	88.8	*	ng/L		118	34 - 96
Indene	75.0	65.3	*	ng/L		87	22 - 86
Indole	75.0	71.5		ng/L		95	30 - 150
Indeno[1,2,3-cd]pyrene	75.0	46.5		ng/L		62	30 - 150
Naphthalene	75.0	586	E *	ng/L		781	27 - 95
Perylene	75.0	53.7		ng/L		72	30 - 150
Phenanthrene	75.0	88.5		ng/L		118	30 - 150
Pyrene	75.0	70.1		ng/L		94	30 - 150
Quinoline	75.0	51.8		ng/L		69	20 - 112
7,12-Dimethylbenz(a)anthracene	75.0	10.3	*	ng/L		14	30 - 150
Biphenyl	75.0	82.3		ng/L		110	30 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*82*		*23 - 84*
Chrysene-d12 (Surr)	*81*		*28 - 101*
Naphthalene-d8 (Surr)	*87*		*22 - 97*

Lab Sample ID: 280-23788-2 MS
Matrix: Water
Analysis Batch: 101746

Client Sample ID: SLP10T-121311
Prep Type: Total/NA
Prep Batch: 100047

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3-Benzofuran	ND		71.4	51.7		ng/L		72	30 - 150
2,3-Dihydroindene	17		71.4	59.7		ng/L		60	30 - 150
1-Methylnaphthalene	2.8	J *	71.4	55.0		ng/L		73	30 - 150
2-Methylnaphthalene	ND	*	71.4	54.0		ng/L		76	25 - 95
3-Methylcholanthrene	ND		71.4	8.63	F	ng/L		12	30 - 150
Acenaphthene	10		71.4	61.7		ng/L		72	30 - 150
Acenaphthylene	ND		71.4	52.9		ng/L		74	30 - 150
Acridine	ND		71.4	12.3	F	ng/L		17	30 - 150
Anthracene	ND		71.4	57.3		ng/L		80	30 - 150
Benzo[a]anthracene	ND		71.4	45.1		ng/L		63	30 - 150
Benzo[a]pyrene	ND		71.4	10.9	F	ng/L		15	30 - 150
Benzo[e]pyrene	ND		71.4	11.8	F	ng/L		17	37 - 105

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-23788-2 MS
Matrix: Water
Analysis Batch: 101746

Client Sample ID: SLP10T-121311
Prep Type: Total/NA
Prep Batch: 100047

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	ND		71.4	13.5	F	ng/L		19	30 - 150
Benzo(b)thiophene	2.2	J	71.4	52.9		ng/L		71	30 - 150
Benzo[k]fluoranthene	ND		71.4	12.6	F	ng/L		18	30 - 150
Benzo[g,h,i]perylene	ND		71.4	5.89	J F	ng/L		8	30 - 150
Carbazole	ND		71.4	59.3		ng/L		83	30 - 150
Chrysene	ND		71.4	46.8		ng/L		66	20 - 136
Dibenz(a,h)anthracene	ND		71.4	5.81	F	ng/L		8	30 - 150
Dibenzofuran	ND		71.4	51.6		ng/L		72	30 - 150
Dibenzothiophene	ND		71.4	54.3		ng/L		76	30 - 150
Fluoranthene	ND		71.4	61.8		ng/L		87	30 - 150
Fluorene	1.1	J *	71.4	57.0		ng/L		78	34 - 96
Indene	ND	*	71.4	52.2		ng/L		73	22 - 86
Indole	1.9	J	71.4	49.9		ng/L		67	30 - 150
Indeno[1,2,3-cd]pyrene	ND		71.4	5.73	F	ng/L		8	30 - 150
Naphthalene	1.9	J B *	71.4	56.7		ng/L		77	27 - 95
Perylene	ND		71.4	13.0	F	ng/L		18	30 - 150
Phenanthrene	ND		71.4	58.4		ng/L		82	30 - 150
Pyrene	ND		71.4	60.9		ng/L		85	30 - 150
Quinoline	ND		71.4	7.02	J F	ng/L		10	20 - 112
7,12-Dimethylbenz(a)anthracene	ND		71.4	32.6		ng/L		46	30 - 150
Biphenyl	ND		71.4	51.2		ng/L		72	30 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Fluorene-d10 (Surr)	*72*		*23 - 84*
Chrysene-d12 (Surr)	*64*		*28 - 101*
Naphthalene-d8 (Surr)	*74*		*22 - 97*

Lab Sample ID: 280-23788-2 MSD
Matrix: Water
Analysis Batch: 101746

Client Sample ID: SLP10T-121311
Prep Type: Total/NA
Prep Batch: 100047

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3-Benzofuran	ND		71.3	54.8		ng/L		77	30 - 150	6	50
2,3-Dihydroindene	17		71.3	62.3		ng/L		64	30 - 150	4	50
1-Methylnaphthalene	2.8	J *	71.3	58.7		ng/L		78	30 - 150	6	50
2-Methylnaphthalene	ND	*	71.3	56.9		ng/L		80	25 - 95	5	50
3-Methylcholanthrene	ND		71.3	5.39	F	ng/L		8	30 - 150	46	50
Acenaphthene	10		71.3	65.7		ng/L		78	30 - 150	6	50
Acenaphthylene	ND		71.3	56.2		ng/L		79	30 - 150	6	50
Acridine	ND		71.3	ND	F	ng/L		0	30 - 150	NC	50
Anthracene	ND		71.3	59.7		ng/L		84	30 - 150	4	50
Benzo[a]anthracene	ND		71.3	31.2		ng/L		44	30 - 150	36	50
Benzo[a]pyrene	ND		71.3	7.25	F	ng/L		10	30 - 150	40	50
Benzo[e]pyrene	ND		71.3	7.30	F	ng/L		10	37 - 105	47	50
Benzo[b]fluoranthene	ND		71.3	9.66	F	ng/L		14	30 - 150	33	50
Benzo(b)thiophene	2.2	J	71.3	56.4		ng/L		76	30 - 150	6	50
Benzo[k]fluoranthene	ND		71.3	9.01	F	ng/L		13	30 - 150	34	50
Benzo[g,h,i]perylene	ND		71.3	4.87	J F	ng/L		7	30 - 150	19	50
Carbazole	ND		71.3	59.0		ng/L		83	30 - 150	1	50

Method: 8270C - Semivolatile Organic Compound (GC/MS SIM LL) (Continued)

Lab Sample ID: 280-23788-2 MSD
Matrix: Water
Analysis Batch: 101746

Client Sample ID: SLP10T-121311
Prep Type: Total/NA
Prep Batch: 100047

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	ND		71.3	32.8		ng/L		46	20 - 136	35	50
Dibenz(a,h)anthracene	ND		71.3	4.64	J F	ng/L		7	30 - 150	22	50
Dibenzofuran	ND		71.3	54.6		ng/L		77	30 - 150	6	50
Dibenzothiophene	ND		71.3	56.5		ng/L		79	30 - 150	4	50
Fluoranthene	ND		71.3	59.5		ng/L		83	30 - 150	4	50
Fluorene	1.1	J *	71.3	59.4		ng/L		82	34 - 96	4	50
Indene	ND	*	71.3	55.0		ng/L		77	22 - 86	5	50
Indole	1.9	J	71.3	53.8		ng/L		73	30 - 150	7	50
Indeno[1,2,3-cd]pyrene	ND		71.3	4.57	J F	ng/L		6	30 - 150	22	50
Naphthalene	1.9	J B *	71.3	59.5		ng/L		81	27 - 95	5	50
Perylene	ND		71.3	7.83	F	ng/L		11	30 - 150	49	50
Phenanthrene	ND		71.3	60.2		ng/L		84	30 - 150	3	50
Pyrene	ND		71.3	58.2		ng/L		82	30 - 150	5	50
Quinoline	ND		71.3	11.6	F	ng/L		16	20 - 112	49	50
7,12-Dimethylbenz(a)anthracene	ND		71.3	31.7		ng/L		44	30 - 150	3	50
Biphenyl	ND		71.3	54.6		ng/L		77	30 - 150	7	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Fluorene-d10 (Surr)	*74*		*23 - 84*
Chrysene-d12 (Surr)	*45*		*28 - 101*
Naphthalene-d8 (Surr)	*79*		*22 - 97*

QC Association Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

GC/MS Semi VOA

Prep Batch: 100047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-23788-1	W48-121311	Total/NA	Water	3520C	
280-23788-2	SLP10T-121311	Total/NA	Water	3520C	
280-23788-2 MS	SLP10T-121311	Total/NA	Water	3520C	
280-23788-2 MSD	SLP10T-121311	Total/NA	Water	3520C	
280-23788-3	SLP10TD-121311	Total/NA	Water	3520C	
280-23788-4	SLP10TFB-121311	Total/NA	Water	3520C	
280-23788-5	SLP10TFBD-121311	Total/NA	Water	3520C	
LCS 280-100047/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-100047/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 101746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-23788-1	W48-121311	Total/NA	Water	8270C	100047
280-23788-2	SLP10T-121311	Total/NA	Water	8270C	100047
280-23788-2 MS	SLP10T-121311	Total/NA	Water	8270C	100047
280-23788-2 MSD	SLP10T-121311	Total/NA	Water	8270C	100047
280-23788-3	SLP10TD-121311	Total/NA	Water	8270C	100047
280-23788-4	SLP10TFB-121311	Total/NA	Water	8270C	100047
280-23788-5	SLP10TFBD-121311	Total/NA	Water	8270C	100047
LCS 280-100047/2-A	Lab Control Sample	Total/NA	Water	8270C	100047
MB 280-100047/1-A	Method Blank	Total/NA	Water	8270C	100047

Lab Chronicle

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Client Sample ID: W48-121311
Lab Sample ID: 280-23788-1
Date Collected: 12/13/11 12:00
Matrix: Water
Date Received: 12/14/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4199.5 mL	1000 uL	100047	12/15/11 10:20	JCV	TAL DEN
Total/NA	Analysis	8270C		1			101746	12/29/11 10:22	DPI	TAL DEN

Client Sample ID: SLP10T-121311
Lab Sample ID: 280-23788-2
Date Collected: 12/13/11 13:30
Matrix: Water
Date Received: 12/14/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4219.1 mL	1000 uL	100047	12/15/11 10:20	JCV	TAL DEN
Total/NA	Analysis	8270C		1			101746	12/29/11 10:58	DPI	TAL DEN

Client Sample ID: SLP10TD-121311
Lab Sample ID: 280-23788-3
Date Collected: 12/13/11 13:35
Matrix: Water
Date Received: 12/14/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4232 mL	1000 uL	100047	12/15/11 10:20	JCV	TAL DEN
Total/NA	Analysis	8270C		1			101746	12/29/11 12:46	DPI	TAL DEN

Client Sample ID: SLP10TFB-121311
Lab Sample ID: 280-23788-4
Date Collected: 12/13/11 13:50
Matrix: Water
Date Received: 12/14/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			4205.5 mL	1000 uL	100047	12/15/11 10:20	JCV	TAL DEN
Total/NA	Analysis	8270C		1			101746	12/29/11 13:22	DPI	TAL DEN

Client Sample ID: SLP10TFBD-121311
Lab Sample ID: 280-23788-5
Date Collected: 12/13/11 13:55
Matrix: Water
Date Received: 12/14/11 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			3940 mL	1000 uL	100047	12/15/11 10:20	JCV	TAL DEN
Total/NA	Analysis	8270C		1			101746	12/29/11 13:58	DPI	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: City of Saint Louis Park
Project/Site: CSLP - Reilly Tar & Chemical

TestAmerica Job ID: 280-23788-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Denver	A2LA	DoD ELAP		2907.01
TestAmerica Denver	A2LA	ISO/IEC 17025		2907.01
TestAmerica Denver	Alabama	State Program	4	40730
TestAmerica Denver	Alaska	Alaska UST	10	UST-30
TestAmerica Denver	Arizona	State Program	9	AZ0713
TestAmerica Denver	Arkansas	State Program	6	88-0687
TestAmerica Denver	California	State Program	9	2513
TestAmerica Denver	Colorado	State Program	8	N/A
TestAmerica Denver	Connecticut	State Program	1	PH-0686
TestAmerica Denver	Florida	NELAC	4	E87667
TestAmerica Denver	Georgia	State Program	4	N/A
TestAmerica Denver	Idaho	State Program	10	CO00026
TestAmerica Denver	Illinois	NELAC	5	200017
TestAmerica Denver	Iowa	State Program	7	370
TestAmerica Denver	Kansas	NELAC	7	E-10166
TestAmerica Denver	Louisiana	NELAC	6	30785
TestAmerica Denver	Maine	State Program	1	CO0002
TestAmerica Denver	Maryland	State Program	3	268
TestAmerica Denver	Minnesota	NELAC	5	8-999-405
TestAmerica Denver	Nevada	State Program	9	CO0026
TestAmerica Denver	New Hampshire	NELAC	1	205310
TestAmerica Denver	New Jersey	NELAC	2	CO004
TestAmerica Denver	New Mexico	State Program	6	N/A
TestAmerica Denver	New York	NELAC	2	11964
TestAmerica Denver	North Carolina	North Carolina DENR	4	358
TestAmerica Denver	North Dakota	State Program	8	R-034
TestAmerica Denver	Oklahoma	State Program	6	8614
TestAmerica Denver	Oregon	NELAC	10	CO200001
TestAmerica Denver	Pennsylvania	NELAC	3	68-00664
TestAmerica Denver	South Carolina	State Program	4	72002
TestAmerica Denver	Tennessee	State Program	4	TN02944
TestAmerica Denver	Texas	NELAC	6	T104704183-08-TX
TestAmerica Denver	USDA	USDA		P330-08-00036
TestAmerica Denver	Utah	NELAC	8	QUAN5
TestAmerica Denver	Washington	State Program	10	C1284
TestAmerica Denver	West Virginia	West Virginia DEP	3	354
TestAmerica Denver	Wisconsin	State Program	5	999615430

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Sampler ID _____

Temperature on Receipt 4.1, 4.0, 3.1, 3.9, 4.6, 5.1, 3.9, 4.6, 3.1 (2nd 3.1)

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

Client: City of St. Louis Park / AECOM	Project Manager: Drew Tarara	Date: 12-13-11	Chain of Custody Number: 141425
Address: 7305 Oxford Street	Telephone Number (Area Code)/Fax Number: 651 367 2335	Lab Number:	Page 1 of 1
City: St. Louis Park / State: MN / Zip Code: 55426	Site Contact: Scott Anderson	Lab Contact: Lisa M.	
Project Name and Location (State): Reilly	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: 12 Alk PPTs	Special Instructions/ Conditions of Receipt
W48-121311	12/13/11	1200		X			6						X	
SLP10T-121311		1330												
SLP10TD-121311		1335												
SLP10TMS-121311		1340												
SLP10TMSD-121311		1345												
SLP10TFB-121311		1350					5							
SLP10TFBD-121311		1355												

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	12/13/11	1515	1. Received By: [signature]	12/14/11	0930
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: City of Saint Louis Park

Job Number: 280-23788-1

Login Number: 23788

List Source: TestAmerica Denver

List Number: 1

Creator: Paulsen, Lindsay T

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Data Quality Assessment Memorandum

Date: February 10, 2012

To: Scott Anderson

From: Bill Gregg

Subject: Data Quality Assessment
Ultra Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 280-23788-1
Appendix N

Distribution: File 0987-0009 File

SUMMARY

A Data Quality Assessment (DQA) was performed on the data for the analysis of three aqueous samples and two field blanks for Ultra Low Level aromatic hydrocarbons (PAHs) by SW-846 method 8270C, selected ion monitoring (SIM) method. The samples were collected on December 13, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to TestAmerica in Arvada, CO for analysis. TestAmerica processed and reported the results under lot number 280-23788-1.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes.

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
SLP10T-121311	SLP10TFB-121311
SLP10TDUP-121311	SLP10TFBDUP-121311
W48-121311	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries

- Matrix spike (MS)/matrix spike duplicate (MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

The cooler temperature was measured upon sample receipt was within the acceptance criteria of 4± 2°C.

Laboratory Blanks/Field Blanks

Target analytes were detected at low concentrations in the laboratory method blank and in the field blanks SLP10T-121311 and SLP10TD-121311. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (AL) were established at 5x the concentration detected in the blank. The following table summarizes the level of blank contamination detected in the laboratory method blank; the action level; and the associated samples.

Compound	Concentration (ng/L)	AL (ng/L)	Associated Samples
Naphthalene	1.57	7.85	All samples in data set
Perylene	1.01	5.05	All samples in data set

Sample results were qualified as follows:

- If the sample result was < the sample quantitation limit (SQL) and < the AL, the result was reported as not detected (U) at the SQL.
- If the sample result was > SQL but < AL, the result was reported as not detected (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria in all sample analyses except that fluorene-d10 was recovered at 85% in sample SLP10T-121311, whereas the acceptable limits for this compound are 23% to 84%. The data were not qualified based on this result.

MS/MSD Results

MS/MSD analyses were performed on sample SLP10T-102511 from this data set. All target analytes were spiked. The percent recoveries (%Rs) of 11 of the 33 spiked target analytes in the MS and the %Rs of 11 of the 33 spiked target analytes in the MSD fell outside the QC acceptance criteria in the MS/MSD

analyses. The following table summarizes the %Rs which fell below 10%. These results were qualified as indicated below.

Compound	MS %R	MSD %R	RPD	Laboratory QC limits %R (RPD)	Action (Detects/Nondetects)
3-Methylcholanthrene	12	8	Ok	30-150 (50)	J/UJ
Acridine	17	0	Ok	30-150 (50)	J/UJ
Dibenzo(ah)anthracene	8	7	Ok	30-132 (50)	J/UJ
Indeno(123,cd)pyrene	8	6	Ok	30-150 (50)	J/UJ
Associated sample: SLP10T-121311					

LCS Results

All target analytes were spiked. The %Rs were within the QC acceptance criteria for the LCS analysis for all compounds except as summarized below.

Compound	MS %R	Laboratory QC limits %R	Action (Detects/Nondetects)
1-Methylnaphthalene	199	30-150	J/U
2-Methylnaphthalene	291	25-95	J/U
Fluorene	118	34-96	J/U
Indene	87	22-86	J/U
Naphthalene	781	27-95	J/U
7,12-dimethylbenz(a)anthracene	14	30-150	J/UJ

Field Duplicate Results

Samples SLP10T-121311 and SLP10TD-121311 were the field duplicate pair analyzed with this data set. The RPDs for detected compounds were all below the control limit of 50%.

Sample Quantitation/Detection Limit Results

All samples were analyzed undiluted for this data set.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

December 20, 2011

Andrew Tarara
AECOM
First National Bank Building
332 Minnesota St, Suite E1000
Saint Paul, MN 55101

RE: Project: SLP Reilly
Pace Project No.: 10178327

Dear Andrew Tarara:
Enclosed are the analytical results for sample(s) received by the laboratory on December 14, 2011. 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,

Carol Davy

carol.davy@pacelabs.com
Project Manager

Enclosures

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: SLP Reilly
Pace Project No.: 10178327

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Idaho Certification #: MN00064
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New Mexico Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: D9921
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Washington Certification #: C754
Wisconsin Certification #: 999407970

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: SLP Reilly
Pace Project No.: 10178327

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10178327001	**W420-121311**	Water	12/13/11 14:30	12/14/11 11:20
10178327002	**W421-121311**	Water	12/13/11 14:50	12/14/11 11:20
10178327003	**W421D-121311**	Water	12/13/11 14:40	12/14/11 11:20
10178327004	**W421FB-121311**	Water	12/13/11 14:55	12/14/11 11:20
10178327005	**W421FBD-121311**	Water	12/13/11 14:50	12/14/11 11:20

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: SLP Reilly
Pace Project No.: 10178327

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10178327001	**W420-121311**	EPA 8270 by SIM	JRH	18
10178327002	**W421-121311**	EPA 8270 by SIM	JRH	18
10178327003	**W421D-121311**	EPA 8270 by SIM	JRH	18
10178327004	**W421FB-121311**	EPA 8270 by SIM	JRH	18
10178327005	**W421FBD-121311**	EPA 8270 by SIM	JRH	18

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: SLP Reilly
Pace Project No.: 10178327

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: December 20, 2011

General Information:
5 samples were analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/17473

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10178327002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1115401)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Chrysene
  - Dibenz(a,h)anthracene

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: SLP Reilly
Pace Project No.: 10178327

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: December 20, 2011

QC Batch: OEXT/17473

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10178327002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Fluoranthene
- Fluorene
- Indeno(1,2,3-cd)pyrene
- Naphthalene
- Phenanthrene
- Pyrene

- MSD (Lab ID: 1115402)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluoranthene
  - Fluorene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/17473

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 1115401)
  - Acenaphthene
  - Anthracene
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Fluorene

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: SLP Reilly
Pace Project No.: 10178327

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: AECOM
Date: December 20, 2011

Analyte Comments:

QC Batch: OEXT/17473

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 1115401)
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene
- MSD (Lab ID: 1115402)
  - Acenaphthene
  - Anthracene
  - Benzo(k)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(a)anthracene
  - Benzo(b)fluoranthene
  - Benzo(a)pyrene
  - Chrysene
  - Dibenz(a,h)anthracene
  - Fluorene
  - Fluoranthene
  - Indeno(1,2,3-cd)pyrene
  - Naphthalene
  - Phenanthrene
  - Pyrene

This data package has been reviewed for quality and completeness and is approved for release.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10178327

Sample: W420-121311 **Lab ID: 10178327001** Collected: 12/13/11 14:30 Received: 12/14/11 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**107**	ug/L	2.1	0.21	50	12/15/11 07:50	12/18/11 14:49	83-32-9	
Acenaphthylene	**0.47**	ug/L	0.041	0.0041	1	12/15/11 07:50	12/17/11 19:48	208-96-8	
Anthracene	**1.8**	ug/L	0.041	0.018	1	12/15/11 07:50	12/17/11 19:48	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.0062	1	12/15/11 07:50	12/17/11 19:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0052	1	12/15/11 07:50	12/17/11 19:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0062	1	12/15/11 07:50	12/17/11 19:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0062	1	12/15/11 07:50	12/17/11 19:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0072	1	12/15/11 07:50	12/17/11 19:48	207-08-9	
Chrysene	ND	ug/L	0.041	0.0062	1	12/15/11 07:50	12/17/11 19:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.021	1	12/15/11 07:50	12/17/11 19:48	53-70-3	
Fluoranthene	**1.1**	ug/L	0.041	0.0052	1	12/15/11 07:50	12/17/11 19:48	206-44-0	
Fluorene	**41.7**	ug/L	2.1	0.26	50	12/15/11 07:50	12/18/11 14:49	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0052	1	12/15/11 07:50	12/17/11 19:48	193-39-5	
Naphthalene	**1190**	ug/L	20.6	6.7	500	12/15/11 07:50	12/18/11 17:53	91-20-3	
Phenanthrene	**28.4**	ug/L	2.1	0.98	50	12/15/11 07:50	12/18/11 14:49	85-01-8	
Pyrene	**0.57**	ug/L	0.041	0.0052	1	12/15/11 07:50	12/17/11 19:48	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	101	%	56-125		1	12/15/11 07:50	12/17/11 19:48	321-60-8	
Terphenyl-d14 (S)	114	%	58-125		1	12/15/11 07:50	12/17/11 19:48	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10178327

Sample: W421-121311 **Lab ID: 10178327002** Collected: 12/13/11 14:50 Received: 12/14/11 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**299**	ug/L	2.1	0.21	50	12/15/11 07:50	12/18/11 15:10	83-32-9	M1
Acenaphthylene	**6.7**	ug/L	0.042	0.0042	1	12/15/11 07:50	12/17/11 20:41	208-96-8	M1
Anthracene	**123**	ug/L	2.1	0.89	50	12/15/11 07:50	12/18/11 15:10	120-12-7	M1
Benzo(a)anthracene	**80.3**	ug/L	2.1	0.32	50	12/15/11 07:50	12/18/11 15:10	56-55-3	M1
Benzo(a)pyrene	**58.5**	ug/L	2.1	0.26	50	12/15/11 07:50	12/18/11 15:10	50-32-8	M1
Benzo(b)fluoranthene	**71.8**	ug/L	2.1	0.32	50	12/15/11 07:50	12/18/11 15:10	205-99-2	M1
Benzo(g,h,i)perylene	**30.3**	ug/L	2.1	0.32	50	12/15/11 07:50	12/18/11 15:10	191-24-2	M1
Benzo(k)fluoranthene	**39.6**	ug/L	2.1	0.37	50	12/15/11 07:50	12/18/11 15:10	207-08-9	M1
Chrysene	**79.3**	ug/L	2.1	0.32	50	12/15/11 07:50	12/18/11 15:10	218-01-9	M1
Dibenz(a,h)anthracene	**9.1**	ug/L	0.042	0.021	1	12/15/11 07:50	12/17/11 20:41	53-70-3	M1
Fluoranthene	**331**	ug/L	2.1	0.26	50	12/15/11 07:50	12/18/11 15:10	206-44-0	M1
Fluorene	**219**	ug/L	2.1	0.26	50	12/15/11 07:50	12/18/11 15:10	86-73-7	M1
Indeno(1,2,3-cd)pyrene	**23.2**	ug/L	2.1	0.26	50	12/15/11 07:50	12/18/11 15:10	193-39-5	M1
Naphthalene	**1020**	ug/L	21.1	6.8	500	12/15/11 07:50	12/18/11 18:13	91-20-3	M1
Phenanthrene	**551**	ug/L	21.1	10	500	12/15/11 07:50	12/18/11 18:13	85-01-8	M1
Pyrene	**233**	ug/L	2.1	0.26	50	12/15/11 07:50	12/18/11 15:10	129-00-0	M1
Surrogates									
2-Fluorobiphenyl (S)	83	%	56-125		1	12/15/11 07:50	12/17/11 20:41	321-60-8	
Terphenyl-d14 (S)	93	%	58-125		1	12/15/11 07:50	12/17/11 20:41	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10178327

Sample: W421D-121311 **Lab ID: 10178327003** Collected: 12/13/11 14:40 Received: 12/14/11 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	**359**	ug/L	4.1	0.41	100	12/15/11 07:50	12/18/11 14:29	83-32-9	
Acenaphthylene	**8.1**	ug/L	0.041	0.0041	1	12/15/11 07:50	12/17/11 21:35	208-96-8	
Anthracene	**96.8**	ug/L	0.41	0.17	10	12/15/11 07:50	12/18/11 14:09	120-12-7	
Benzo(a)anthracene	**104**	ug/L	4.1	0.61	100	12/15/11 07:50	12/18/11 14:29	56-55-3	
Benzo(a)pyrene	**69.9**	ug/L	0.41	0.051	10	12/15/11 07:50	12/18/11 14:09	50-32-8	
Benzo(b)fluoranthene	**86.7**	ug/L	0.41	0.061	10	12/15/11 07:50	12/18/11 14:09	205-99-2	
Benzo(g,h,i)perylene	**36.0**	ug/L	0.41	0.061	10	12/15/11 07:50	12/18/11 14:09	191-24-2	
Benzo(k)fluoranthene	**46.1**	ug/L	0.41	0.071	10	12/15/11 07:50	12/18/11 14:09	207-08-9	
Chrysene	**82.3**	ug/L	0.41	0.061	10	12/15/11 07:50	12/18/11 14:09	218-01-9	
Dibenz(a,h)anthracene	**11.7**	ug/L	0.41	0.20	10	12/15/11 07:50	12/18/11 14:09	53-70-3	
Fluoranthene	**449**	ug/L	4.1	0.51	100	12/15/11 07:50	12/18/11 14:29	206-44-0	
Fluorene	**259**	ug/L	4.1	0.51	100	12/15/11 07:50	12/18/11 14:29	86-73-7	
Indeno(1,2,3-cd)pyrene	**30.6**	ug/L	0.41	0.051	10	12/15/11 07:50	12/18/11 14:09	193-39-5	
Naphthalene	**1000**	ug/L	4.1	1.3	100	12/15/11 07:50	12/18/11 14:29	91-20-3	
Phenanthrene	**728**	ug/L	4.1	1.9	100	12/15/11 07:50	12/18/11 14:29	85-01-8	
Pyrene	**323**	ug/L	4.1	0.51	100	12/15/11 07:50	12/18/11 14:29	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	88	%	56-125		1	12/15/11 07:50	12/17/11 21:35	321-60-8	
Terphenyl-d14 (S)	97	%	58-125		1	12/15/11 07:50	12/17/11 21:35	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10178327

Sample: W421FB-121311 **Lab ID: 10178327004** Collected: 12/13/11 14:55 Received: 12/14/11 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.041	0.0041	1	12/15/11 07:50	12/17/11 20:06	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.0041	1	12/15/11 07:50	12/17/11 20:06	208-96-8	
Anthracene	ND	ug/L	0.041	0.017	1	12/15/11 07:50	12/17/11 20:06	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.0062	1	12/15/11 07:50	12/17/11 20:06	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0062	1	12/15/11 07:50	12/17/11 20:06	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0062	1	12/15/11 07:50	12/17/11 20:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0072	1	12/15/11 07:50	12/17/11 20:06	207-08-9	
Chrysene	ND	ug/L	0.041	0.0062	1	12/15/11 07:50	12/17/11 20:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.021	1	12/15/11 07:50	12/17/11 20:06	53-70-3	
Fluoranthene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:06	206-44-0	
Fluorene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:06	193-39-5	
Naphthalene	ND	ug/L	0.041	0.013	1	12/15/11 07:50	12/17/11 20:06	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.019	1	12/15/11 07:50	12/17/11 20:06	85-01-8	
Pyrene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:06	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	73	%	56-125		1	12/15/11 07:50	12/17/11 20:06	321-60-8	
Terphenyl-d14 (S)	86	%	58-125		1	12/15/11 07:50	12/17/11 20:06	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: SLP Reilly
Pace Project No.: 10178327

Sample: W421FBD-121311 **Lab ID: 10178327005** Collected: 12/13/11 14:50 Received: 12/14/11 11:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Acenaphthene	ND	ug/L	0.041	0.0041	1	12/15/11 07:50	12/17/11 20:23	83-32-9	
Acenaphthylene	ND	ug/L	0.041	0.0041	1	12/15/11 07:50	12/17/11 20:23	208-96-8	
Anthracene	ND	ug/L	0.041	0.017	1	12/15/11 07:50	12/17/11 20:23	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.041	0.0061	1	12/15/11 07:50	12/17/11 20:23	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.041	0.0061	1	12/15/11 07:50	12/17/11 20:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.041	0.0061	1	12/15/11 07:50	12/17/11 20:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.041	0.0071	1	12/15/11 07:50	12/17/11 20:23	207-08-9	
Chrysene	ND	ug/L	0.041	0.0061	1	12/15/11 07:50	12/17/11 20:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.041	0.020	1	12/15/11 07:50	12/17/11 20:23	53-70-3	
Fluoranthene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:23	206-44-0	
Fluorene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:23	193-39-5	
Naphthalene	ND	ug/L	0.041	0.013	1	12/15/11 07:50	12/17/11 20:23	91-20-3	
Phenanthrene	ND	ug/L	0.041	0.019	1	12/15/11 07:50	12/17/11 20:23	85-01-8	
Pyrene	ND	ug/L	0.041	0.0051	1	12/15/11 07:50	12/17/11 20:23	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	80	%	56-125		1	12/15/11 07:50	12/17/11 20:23	321-60-8	
Terphenyl-d14 (S)	87	%	58-125		1	12/15/11 07:50	12/17/11 20:23	1718-51-0	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: SLP Reilly
Pace Project No.: 10178327

QC Batch: OEXT/17473 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by SIM MSSV
Associated Lab Samples: 10178327001, 10178327002, 10178327003, 10178327004, 10178327005

METHOD BLANK: 1115399 Matrix: Water
Associated Lab Samples: 10178327001, 10178327002, 10178327003, 10178327004, 10178327005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.040	12/17/11 18:37	
Acenaphthylene	ug/L	ND	0.040	12/17/11 18:37	
Anthracene	ug/L	ND	0.040	12/17/11 18:37	
Benzo(a)anthracene	ug/L	ND	0.040	12/17/11 18:37	
Benzo(a)pyrene	ug/L	ND	0.040	12/17/11 18:37	
Benzo(b)fluoranthene	ug/L	ND	0.040	12/17/11 18:37	
Benzo(g,h,i)perylene	ug/L	ND	0.040	12/17/11 18:37	
Benzo(k)fluoranthene	ug/L	ND	0.040	12/17/11 18:37	
Chrysene	ug/L	ND	0.040	12/17/11 18:37	
Dibenz(a,h)anthracene	ug/L	ND	0.040	12/17/11 18:37	
Fluoranthene	ug/L	ND	0.040	12/17/11 18:37	
Fluorene	ug/L	ND	0.040	12/17/11 18:37	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.040	12/17/11 18:37	
Naphthalene	ug/L	ND	0.040	12/17/11 18:37	
Phenanthrene	ug/L	ND	0.040	12/17/11 18:37	
Pyrene	ug/L	ND	0.040	12/17/11 18:37	
2-Fluorobiphenyl (S)	%	90	56-125	12/17/11 18:37	
Terphenyl-d14 (S)	%	112	58-125	12/17/11 18:37	

LABORATORY CONTROL SAMPLE: 1115400

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	1	0.70	70	56-125	
Acenaphthylene	ug/L	1	0.75	75	55-125	
Anthracene	ug/L	1	0.77	77	62-125	
Benzo(a)anthracene	ug/L	1	0.89	89	56-125	
Benzo(a)pyrene	ug/L	1	0.93	93	64-125	
Benzo(b)fluoranthene	ug/L	1	0.89	89	53-125	
Benzo(g,h,i)perylene	ug/L	1	0.80	80	38-125	
Benzo(k)fluoranthene	ug/L	1	0.73	73	59-125	
Chrysene	ug/L	1	0.79	79	64-125	
Dibenz(a,h)anthracene	ug/L	1	0.83	83	40-125	
Fluoranthene	ug/L	1	0.87	87	60-125	
Fluorene	ug/L	1	0.80	80	59-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.84	84	42-125	
Naphthalene	ug/L	1	0.62	62	52-125	
Phenanthrene	ug/L	1	0.75	75	54-125	
Pyrene	ug/L	1	0.89	89	66-125	
2-Fluorobiphenyl (S)	%			90	56-125	
Terphenyl-d14 (S)	%			116	58-125	

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: SLP Reilly
Pace Project No.: 10178327

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1115401 1115402

Parameter	Units	10178327002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/L	299	1	1	146	179	-14800	-11600	46-125	20	30	E,M1
Acenaphthylene	ug/L	6.7	1	1	6.9	8.8	20	198	46-125	24	30	M1
Anthracene	ug/L	123	1	1	46.3	61.2	-7410	-5970	48-125	28	30	E,M1
Benzo(a)anthracene	ug/L	80.3	1	1	58.4	76.1	-2110	-401	47-125	26	30	E,M1
Benzo(a)pyrene	ug/L	58.5	1	1	38.7	50.5	-1910	-773	59-125	26	30	E,M1
Benzo(b)fluoranthene	ug/L	71.8	1	1	54.3	69.6	-1690	-208	40-125	25	30	E,M1
Benzo(g,h,i)perylene	ug/L	30.3	1	1	18.1	24.6	-1180	-544	38-125	31	30	D6,E,M1
Benzo(k)fluoranthene	ug/L	39.6	1	1	17.5	21.9	-2130	-1710	46-125	22	30	E,M1
Chrysene	ug/L	79.3	1	1	40.3	51.9	-3770	-2650	56-125	25	30	E,M1
Dibenz(a,h)anthracene	ug/L	9.1	1	1	8.7	11.3	-33	215	30-125	26	30	E,M1
Fluoranthene	ug/L	331	1	1	88.0	122	-23400	-20100	46-125	33	30	D6,E,M1
Fluorene	ug/L	219	1	1	116	145	-9980	-7160	48-125	22	30	E,M1
Indeno(1,2,3-cd)pyrene	ug/L	23.2	1	1	16.7	22.6	-626	-61	32-125	30	30	E,M1
Naphthalene	ug/L	1020	1	1	280	327	-71100	-66500	44-125	16	30	E,M1
Phenanthrene	ug/L	551	1	1	114	168	-42100	-37000	47-125	38	30	D6,E,M1
Pyrene	ug/L	233	1	1	77.0	102	-15000	-12600	55-125	28	30	E,M1
2-Fluorobiphenyl (S)	%						82	85	56-125			
Terphenyl-d14 (S)	%						97	92	58-125			

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: SLP Reilly
Pace Project No.: 10178327

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

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.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

ANALYTE QUALIFIERS

D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
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.

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SLP Reilly
Pace Project No.: 10178327

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10178327001	**W420-121311**	EPA 3510	OEXT/17473	EPA 8270 by SIM	MSSV/7573
10178327002	**W421-121311**	EPA 3510	OEXT/17473	EPA 8270 by SIM	MSSV/7573
10178327003	**W421D-121311**	EPA 3510	OEXT/17473	EPA 8270 by SIM	MSSV/7573
10178327004	**W421FB-121311**	EPA 3510	OEXT/17473	EPA 8270 by SIM	MSSV/7573
10178327005	**W421FBD-121311**	EPA 3510	OEXT/17473	EPA 8270 by SIM	MSSV/7573

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical

1139-40

10178327

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	AECOM	Report To:	~~Bill Gregg~~ Drew Tarara	Attention:	~~Bill Gregg~~ Drew Tarara
Address:	First National Bank Building	Copy To:	Andrew Tarara	Company Name:	AECOM
Saint Paul, MN 55101		First National Bank Building, Saint Paul, MN 55101		Address:	First National Bank Building, Saint Paul,
Email To:	bill.gregg@aecom.com	Purchase Order No.		Pace Quote Reference:	
Phone:	651-367-2328 Fax:	Client Project ID:	SLP Reilly	Pace Project Manager:	Davy, Carol
Requested Due Date/TAT:	10 Day (Default)	Container Order Number:		Pace Profile #:	22562

Regulatory Agency

State / Location: Minnesota

Requested Analysis Filtered (Y/N)

ITEM#	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	PAH SIM*	Residual Chlorine (Y/N)	
1	W420-121311	WT	G	12/13/11	1430				2	X									X		001
2	W421-121311				1435																002
3	W421D-121311				1440																003
4	W421MS-121311				1445																
5	W421MSD-121311				1450																
6	W421FB-121311				1455																004
7	W421FBD-121311				1500																005
8																					
9																					
10																					
11																					
12																					

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
*16 compound list		12/13/11	1500		12/13/11	1500				
AECOM-Equis edd needed. Email to: amy.sulborski@aecom.com		12/14/11	1120	E Pace	12/14/11	1120	1.5	Y	W	Y
							2.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Andrew J. Tarara

SIGNATURE of SAMPLER:

DATE Signed: 12/13/11

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Revised Date: 02Jun2011 Page 1 of 1
	Document Number: **F-L-213 Rev.01**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Aecom Project # 101 78327

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____ Temp Blank: Yes ☒ No _____

Thermometer Used 80344042 or 80512447 **Type of Ice:** (Wet) Blue None ☐ Samples on Ice, cooling process has begun

Cooler Temperature 1.5 2.0 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 12-14-11

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: WT		
All containers needing acid/base preservation have been checked. Noncompliance are noted in 13.	☐Yes ☐No ☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ HCl Samp #
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	
Exceptions: VOA,Coliform, TOC, Oil and Grease, WI-DRO (water)	☐Yes ☒No	Initial when completed / 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: _____ **Date:** 12-14-11

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)

Data Quality Assessment Memorandum

Date: February 14, 2012

To: Scott Anderson

From: Bill Gregg

Subject: Data Quality Assessment
Low Level PAH Analyses
City of St. Louis Park
St. Louis Park, MN
Lot # 10178327
Appendix O

Distribution: File 0987-0009 File

SUMMARY

A data quality assessment (DQA) was performed on the data for the analysis of 18 aqueous samples and 2 field blanks for Low Level part per billion (ppb) polynuclear aromatic hydrocarbons (PAHs) by SW-846 method 8270C. The samples were collected on December 13, 2011 at the City of St. Louis Park Reilly Tar site in St. Louis Park, MN. The samples were submitted to Pace Analytical Services (Pace) in Minneapolis, MN for analysis. Pace processed and reported the results under lot number 10178327.

The sample results were assessed according to the "Region 5 Standard Operating Procedure for Validation of CLP Organic Data" (2/1997), and the "Quality Assurance Project Plan for Sampling and Analysis – Groundwater and GAC Treatment System Monitoring for the Reilly Industries, Inc. NPL Site, St. Louis Park, Minnesota", June 2010. Modification of the data validation guidance was done to accommodate the non-CLP methodology.

In general, the data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified as estimated due to nonconformances of certain quality control (QC) criteria

SAMPLES

The samples included in this review are listed below.

Sample IDs	Sample IDs
W420-121311	W421FB-121311
W421-121311	W421FBD-121311
W421DUP-121311	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times/sample preservation
- Laboratory blanks/field blanks
- Surrogate spike recoveries
- Matrix spike (MS)/matrix spike duplicate (MSD) results

- Laboratory control sample (LCS) results
- Field duplicate results
- Sample quantitation/detection limit results

DISCUSSION

Agreement of Analyses Conducted With COC Requests

The sample reports were checked to verify that the results corresponded to analytical requests as designated on the COC. No discrepancies were noted.

Holding Times/Sample Preservation

The samples were extracted and analyzed within the method specified holding times.

The cooler temperatures as measured upon sample receipt were 1.5°C and 2.0°C and met the acceptance criteria of above freezing to 6°C.

Laboratory Blanks/Field Blanks

No target compounds were detected in the laboratory method blank or the two field blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance criteria for all samples in this data set.

MS/MSD Results

Recoveries for the MS/MSD all exceeded the QAPP limits. The data were accepted because the LCS was in control for the same data set. No actions were taken.

LCS Results

All target analytes were spiked. The %Rs were within the QAPP QC acceptance criteria for the LCS analyses.

Field Duplicate Results

Samples W421-091411 and W421DUP-091411 was the field duplicate pair analyzed with this data set.

The results for the detected compounds in samples W421-091411 and W421DUP-091411 and their RPDs are tabulated below. The RPDs were within the acceptance criteria except for fluoranthene and pyrene. No actions were taken based on these results.

Compound	W421-121311 (µg/L)	W421DUP-121311 (µg/L)	RPD
Acenaphthene	359	299	18.2
Acenaphthalene	8.1	6.7	18.9
Anthracene	96.8	123	23.8
Benzo(a)anthracene	104	80.3	25.7
Benzo(a)pyrene	69.9	58.5	17.8
Benzo(b)fluoranthene	86.7	71.8	18.8
Benzo(ghi)perylene	36	30.3	17.2
Benzo(k) fluoranthene	46.1	39.6	15.2
Chrysene	82.3	79.3	3.7
Dibenz(ah)anthracene	11.7	9.1	25.0

Compound	W421-121311 (µg/L)	W421DUP-121311 (µg/L)	RPD
Fluoranthene	449	331	30.3
Fluorene	259	219	16.7
Indeno(123-cd)pyrene	30.6	23.2	27.5
Naphthalene	1000	1020	2.0
Phenanthrene	728	551	27.7
Pyrene	323	233	32.4
Criteria: Aqueous RPD ≤ 30, if both sample and duplicate results are > 5x SQL. The RPD criterion is doubled if both sample and duplicate results are <5x SQL.			

Sample Quantitation/Detection Limit Results

The following samples were analyzed at dilutions due to high concentrations of target analytes, especially naphthalene, in the undiluted analyses.

Sample ID	Dilution	Reason
W420-121311	1, 50, and 500	50x for 3 compounds and 500x dilution for naphthalene
W421-121311	1, 50, and 500	50x for 12 compounds and 500x for 2 compounds
W421DUP-121311	1, 10, and 100	10x for 8 compounds and 100x for 7 compounds