Third Quarter 2014 Groundwater Monitoring Report

BP PRODUCTS NORTH AMERICA INC.
Site # 215 – Indianapolis Terminal
2500 N. Tibbs Avenue
Indianapolis, Marion County, IN 46222

Prepared for:
BP Products North America Inc.

Prepared by:
Stantec Consulting Services, Inc.
8770 Guion Road, Suite B
Indianapolis, IN 46268

November 14, 2014

Table of Contents

APPENDICES

1.0 Introduction

Stantec Consulting Services, Inc. (Stantec) has prepared this monitoring report on behalf of BP Products North America Inc. (BP) for the BP Indianapolis Terminal Site #215, located at 2500 North Tibbs Avenue, Indianapolis, Marion County, Indiana (herein referred to as the Site). BP has entered into an Administrative Order by Consent under Section 311 of the Clean Water Act 33 U.S.C. Section 1321 Docket Number V-W-11.C-984 effective November 14, 2011 (referenced herein as the Order). Specifically, this document is part of the Work to Be Performed in accordance with Paragraph V.31.c of the Order that states, "BP shall provide sampling reports through electronic posting for the monthly sampling of Little Eagle Creek and quarterly groundwater sampling to EPA within thirty (30) calendar days after receipt of validated sampling results".

The site is a 42-acre bulk petroleum storage and distribution facility located at 2500 North Tibbs Avenue in Indianapolis, Indiana (Figure 1). Environmental investigations began in 1988 and are currently being conducted by Stantec. This report has been prepared to document groundwater sampling activities completed at the Site during the Third Quarter 2014.

The Site has been in operation as a bulk petroleum storage and distribution facility since 1941. Current Site features are provided on Figure 2. Further details on Site history are documented in Section 1.0 of the Investigation Work Plan, dated April 13, 2012.

The Third Quarter sampling event was conducted in accordance with paragraph V.31.b.iii of the Order that requires, "Quarterly sampling of select on-site monitoring wells as identified by BP and approved by EPA". The locations of the wells and piezometers are depicted on Figure 2.

2.0 Surface Water Monitoring

Surface water samples from nine locations in Little Eagle Creek (identified as 1A, 1B, 2A, 2B, 3A, 3B, 4B, 5B, and 6B) were collected on September 19, 2014. The September surface water sampling event summary is presented in this report. Monthly surface water sampling reports summarizing the other sampling events from the Third Quarter 2014 were submitted under separate cover to U.S. EPA on August 29, and September 29, 2014, respectively. A summary of the September 2014 surface water analytical results is presented in Table 1, and is illustrated on Figure 3. The surface water analytical report is included in Appendix A.

The samples were collected in accordance with the Quality Assurance Project Plan (QAPP) dated January 23, 2012 (Addendums dated April 12, 2012 and March 11, 2014). Samples were placed in coolers with ice, and transported under chain-of-custody procedures to Pace Analytical Services, Inc. (Pace) of Indianapolis, Indiana for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), and polynuclear aromatic hydrocarbons (PAHs). Samples were analyzed via U.S. EPA Method 524.2 and 8270 SIM, respectively.

The data validation for the September 2014 Little Eagle Creek sampling event is located in Appendix B. In accordance with the U.S. EPA correspondence dated April 28, 2014, Addendum to the Quality Assurance Project Plan and Sampling and Analysis Plan, routinely collected data requires 100% verification and 10% validation.

Laboratory analysis of the surface water samples collected during the September sampling event showed that all BTEX and all 16 targeted PAH constituents were below laboratory detection limits.

The September 2014 surface water sampling event was conducted when the pump and treat system was operational.

3.0 Groundwater Monitoring

The Third Quarter 2014 groundwater monitoring event was conducted during the period of September 8, through September 12, 2014 in accordance with the schedule presented in the Quality Assurance Project Plan (QAPP) dated January 23, 2012. The September 2014 groundwater sampling was conducted in accordance with the U.S. EPA approved QAPP except as described in Section 3.2.

3.1 GROUNDWATER ELEVATION MEASUREMENT CORRESPONDENCE

Groundwater elevation data is summarized in Table 2. The groundwater contour map for the Third Quarter of 2014 is presented as Figure 4. In general, the potentiometric surface map indicates that the inferred groundwater flow over the majority of the Site converges on Little Eagle Creek with a localized groundwater depression resulting from the operation of the Groundwater Extraction and Treatment (GWET) system. As illustrated by groundwater elevations presented on Figure 4, it is evident that the local groundwater sink created by the operation of the GWET system is providing hydraulic containment over a large portion of the Site east of the Little Eagle Creek.

3.2 GROUNDWATER MONITORING PROCEDURES

Prior to collection of groundwater samples, groundwater elevation measurements were obtained from each well in accordance with the QAPP dated January 23, 2012. The depth to groundwater was measured with a water level indicator to an accuracy of 0.01-feet. An interface probe was used to measure the depth and thickness of light non-aqueous phase liquid (LNAPL) where encountered. Monitoring wells included in the Revised Sampling Location plan were not sampled if LNAPL was detected in the well.

Groundwater samples were collected in accordance with procedures presented in the QAPP dated January 23, 2012, and with a modified procedure due to low yielding wells. The approved modified procedure is as follows:

- Gauge monitoring well for static water level;
- Purge for stability;
- If groundwater level dropped greater than 0.3 feet during purging, lower pump to the bottom of well and purge dry; and
- Collect sample when water level has recovered to 80% of initial reading, but not exceeding a 24-hour period post-purge.

The following deviations from the QAPP were noted during the sampling event:

- Prior to sampling, OW-32, DHW-64, DHW-87, and DHW-106 were sampled despite the apparent instability of one of the geochemical parameters, oxidation reduction potential (ORP). This deviates from the U.S. EPA approved Low Flow SOP (ERPA-005) because all parameters must be stable or three well volumes have to be purged prior to sampling.

- Prior to sampling, DHW-32 and DHW-106 were sampled without meeting the specified turbidity stability requirements. This deviates from the U.S. EPA approved Low Flow SOP (ERPA-005) because all parameters must be stable or three well volumes have to be purged prior to sampling.

The aforementioned variances were recorded on a Variance/Time Delay Form (ERPA-302) and can be found in Appendix C.

Samples were decanted directly into laboratory-supplied containers and placed on ice in a cooler for delivery to Pace Analytical Laboratories in Indianapolis, Indiana. Per the QAPP dated January 23, 2012, groundwater samples were analyzed for BTEX and PAHs by U.S. EPA Methods 8260 and 8270 SIM, respectively.

Any non-dedicated equipment was decontaminated after each sampling location using a non-phosphate detergent and water with a triple rinse. Decontamination water was contained in 55-gallon drums pending disposal. Purge water was contained in 55-gallon drums and processed through the on-site groundwater treatment system.

3.3 GROUNDWATER MONITORING RESULTS

Groundwater analytical results from the Third Quarter 2014 are summarized in Table 3. Laboratory reports for groundwater analytical results are presented in Appendix D.

For purposes of evaluating the nature and extent of constituent of concern (COC) concentrations in groundwater, available data has been compared to various screening levels developed either by U.S. EPA or the Indiana Department of Environmental Management (IDEM). These screening levels are referenced in this context only for evaluation of nature and extent and should not be construed as remediation objectives. As a conservative measure, groundwater COC concentrations were first compared to U.S. EPA Maximum Contaminant Levels (MCLs). If a specific COC has no MCL, then IDEM's Risk Integrated System of Closure (RISC) Default Closure Level values for residential land use were used as screening levels. Groundwater screening levels are summarized in Table 3. For purposes of this discussion, all of the criteria identified above are referred to as "screening levels."

Groundwater monitoring conducted during the Third Quarter 2014 identified the presence of benzene, xylene, and naphthalene which were all below laboratory detection limits and were estimated values, as indicated by a "NJ" flag in Table 3 and illustrated on Figures 5 through 7. Validation results for the Third Quarter Groundwater Monitoring event can be found in Appendix E.

It should be noted, that wells between the GWET system and Little Eagle Creek (i.e., DHW-64, DHW-86, DHW-87, OW-31, and OW-32) that have historically exhibited benzene concentrations in excess of the screening levels have shown a progressive decline in concentrations. In fact, during the Third Quarter of 2014, none of these wells exhibited detectable benzene concentrations. Review of historic groundwater data since March of 2012 shows a progressive decline in benzene concentrations in these wells. The following provides a summary of concentration changes observed in wells between the GWET system and Little Eagle Creek:

- DHW-64: March 2012 1,460 µg/L benzene declined to <5.o µg/L benzene during September 2014;
- DHW-86: March 2012 747 µg/L benzene declined to <5.o µg/L benzene during September 2014;
- DHW-87: March 2012 21.6 µg/L benzene declined to <5.o µg/L benzene during September 2014;
- OW-31: March 2012 70.6 µg/L benzene declined to <5.o µg/L benzene during September 2014; and,
- OW-32: March 2012 153 µg/L benzene declined to <5.o µg/L benzene during September 2014.

4.0 Capture Zone Analysis

On October 13, 2014 monitoring wells adjacent to the GWET system were gauged to verify groundwater elevations collected during the Third Quarter monitoring event (DHW-100, DHW-115, MW-11, MW-16, DHW-84, DHW-64, PZ-02S, OW-36, OW-35, OW-34, OW-33, OW-32, OW-31, DHW-84, DHW-85, DHW-86, DHW-87, DHW-61, and PZ-03S). The September gauging information exhibited unusual groundwater elevations in several of the monitoring wells near the GWET system (DHW-85, DHW-86, and DHW-87). The October 13th gauging event exhibited groundwater elevations that were more consistent with past investigations as presented on Table 4. The original September gauging data was used to construct Figure 4, September 2014 Groundwater Contour Map and Figure 8, September 2014 Particle Tracking Map. Figure 9, September 2014 Triangular Element Map, used the groundwater elevations collected on October 13, 2014.

A capture zone analysis was performed to evaluate the effectiveness of the on-site groundwater extraction and treatment (GWET) system. The following analyses were conducted:

1. Groundwater potentiometric surface interpolation using kriging with log-linear Interpolation (Figure 8);
2. Particle tracking (Figure 8); and,
3. Gradient vector analysis (Figure 9).

This approach to evaluate groundwater containment uses multiple interpretation techniques (or lines of evidence) to increase the value of the inference that can be made from the collected data sets. All groundwater investigations require some level of spatial and temporal interpretation to allow inference between data measurements and conclusions. Using the methodology described below, meaningful inference can be made regarding the nature of containment and the adequacy of the monitoring network. The following sections summarize the procedures and results for each analysis performed.

4.1 GROUNDWATER POTENTIOMETRIC SURFACE INTERPOLATION USING KRIGING WITH LOG-LINEAR INTERPOLATION

To facilitate the visualization and interpretation of the hydraulic containment of the constituents of concern (COCs) in groundwater, it is necessary to portray the distribution of COCs on the prepared potentiometric, particle-tracking, and hydraulic gradient vector maps (U.S. EPA, 2008). This was accomplished by producing a Target Zone Map.

The Target Zone Map was constructed using the following steps:

1. Summarize concentrations of COCs for the last two comprehensive semi-annual sampling events and identify the highest concentration of each COC at each well location;

2. Plot these values on a map and interpolate between them to construct color-flooded target zones showing the COCs above screening levels; and,

3. Overlay the individual COC maps and interpolate the maximum areal extent of any COC (this becomes the Target Zone to evaluate hydraulic containment).

The Target Zone Map provides a simplified and conservative version of the extent of groundwater contamination and may be used to quickly evaluate the distribution of the targeted COCs in groundwater and assist in interpolation techniques such as capture zone analysis and particle tracking. The Target Zone Map is a conservative representation of the extent of contamination because it ignores temporal variability and disregards potential outliers. This type of conservative approach is desirable because it evaluates the largest possible interpretation of the contaminant zone. Figure 8, September 2014 Particle Tracking Map, is a depiction of the interpolated maximum extent of COCs in groundwater in the second half of 2013 and the first half of 2014. This target zone was overlaid with groundwater elevation contours, capture zones, particle traces and/or hydraulic gradient vectors as appropriate to clearly illustrate the extent of the capture zone with respect to the maximum inferred position of the COC plume.

The September 2014 potentiometric surface data collected from the Site monitoring well network was contoured and is presented in Table 2. Data used as a basis for the potentiometric surface evaluation included measured groundwater elevations and GWET extraction well flow rates. The GWET system was operational for 19 days prior to and during gauging activities for the September 2014 groundwater sampling event. Figure 8 illustrates the potentiometric surface generated using a method of kriging with log-linear interpolation as described in "Kriging Water Levels with a Regional-Linear and Point Logarithmic Drift" (Tonkin, 2002). Kriging is commonly used in hydrogeologic applications for interpretation of groundwater level data to a regular grid suitable for contouring. The application of the selected interpolation method further adds the ability to more appropriately represent the logarithmic effects of groundwater extraction wells and trenches within the potentiometric surfaces. The result of the kriging with log-linear interpolation is uniform gridded data that was then contoured and overlain on the Site base maps. This data was also further used as a basis for particle tracking discussed further in Section 4.2.

As previously stated, a groundwater contour map for the September 2014 monitoring event is presented as Figure 4. Based upon the groundwater contour map, a groundwater depression caused by the operation of the GWET system is evident east of the Little Eagle Creek. The local groundwater in the area with the highest target zone impacts converges on the potentiometric surface low created by the GWET. This includes the area between the GWET and the creek, indicating that the GWET is drawing back impacted water in this zone.

While the potentiometric surface evaluation using the kriging with log-linear drift algorithm has advantages in interpolation of groundwater extraction wells and uniform treatment of the site data, it is limited by the availability and quality of data points. In some areas where there is a

paucity of groundwater elevation data or where groundwater elevation data does not accurately fit the model of log-linear drift, groundwater contours may be less accurately interpreted. For example, the data density is greater near the northern portion of the extraction system due to the presence of numerous monitoring points from previous investigations and pilot studies. However, south of the trench there are fewer monitoring wells and the uncertainty of the interpretation would be anticipated to be larger.

4.2 PARTICLE TRACKING

For the potentiometric surface map, a particle tracking analysis was completed using simulated particles originating from the extent of the Target Zone as defined on Figure 8 and traveling in the inferred direction of groundwater flow until they terminate at a localized groundwater boundary.

Figure 8 presents the traces of hypothetical particles released along the extent of contamination as defined in the Target Zone Map.

The September 2014 Particle Tracking Map (Figure 8), indicates containment of the impacted groundwater. In past quarters, simulated particles on the southwestern extent of the plume indicated potential weakness in the capture zone in this area. However, evaluation of the Third Quarter 2014 data (illustrated on Figure 8) demonstrates complete capture even on the southwestern boundary.

4.3 GRADIENT VECTOR ANALYSIS

For the purposes of identifying the hydraulic gradient (magnitude and direction) in a key portion of the Site between the GWET system and Little Eagle Creek, hydraulic gradients were directly calculated from measured groundwater elevations and solved using the “three point method.” A plane in space may be described by any three points and the calculated azimuth and magnitude of the slope of the plane defines the orientation of the potentiometric surface based upon the plane. The hydraulic gradient vectors (direction and magnitude of gradient) were calculated for the September 2014 monitoring event at key well locations located at the margins of the identified plume. The calculated gradient vectors were further evaluated to assess the effectiveness of the containment system through projection of vectors on Site maps (Figure 9).

Key locations at which gradients were calculated include the following triplets of wells:

- PZ-3, DHW-61, DHW-87;
- PZ-3, DHW-86, DHW-87;
- PZ-3, DHW-86, OW-31;
- OW-32, OW-31, OW-33;

- OW-32, PZ02, OW-33;
- OW-34, PZ02, DHW-64; and,
- MW-16, DHW-84, DHW-100.

Based upon the data available in the triangular elements, groundwater flow direction at the identified triplets is either towards the extraction wells or tangentially in the direction of extraction. The observed hydraulic gradient ranged from 0.0061 feet per foot (ft/ft) to 0.0183 ft/ft. The two monitoring events indicate the dynamics of the groundwater flow system to remain fairly consistent when the GWET system is operating. This is consistent with our understanding of the hydrogeologic conditions of the Site displaying a relatively flat but steady capture being maintained by the GWET system.

It is noted that all of the triangular elements indicate a flow azimuth in the direction of the GWET system except for PZ-3, DHW-86, and OW-31 which indicate groundwater flow directions parallel to the groundwater extraction trench.

4.4 CONCLUSIONS

The analysis presented herein demonstrates that the GWET system exerts effective hydraulic capture of the identified Target Zone and has resulted in an identifiable concentration decline in surface water and down gradient groundwater. This conclusion is based on the following lines of evidence:

1) Particle tracking of the potentiometric surface indicating flow from the delineated target zone to the GWET system;
2) Decreased concentrations of contaminants with time following the start-up of the GWET in monitoring wells located down gradient of the extraction;
3) Reduced distribution of contaminants in surface water down gradient of the GWET; and,
4) Gradient analysis that verifies that groundwater flow direction is towards the GWET at key locations within the Site.

5.0 References

Tonkin, Matthew J. and Larson, Steven P. 2002. "Kriging Water levels with a Regional-Linear and Point-Logarithmic Drift." Ground Water 40, No. 2: pg. 185-193.

U.S. EPA. "A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems." U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/003, 2008.

6.0 Statement of Limitations

The conclusions presented in this report are professional opinions based on the data presented in this report. They are intended only for the purpose, site location and project indicated. The conclusions presented in this report are based on the assumption that conditions do not deviate from those observed during our study, as described in this report. No other warranty is either expressed or implied. This report is intended for the use of Stantec's client and/or the appropriate regulatory agency only; all other uses must be approved by Stantec and the client in writing.

Prepared by:

Kyle J. Amberger, LPG
Project Geologist

Reviewed by:

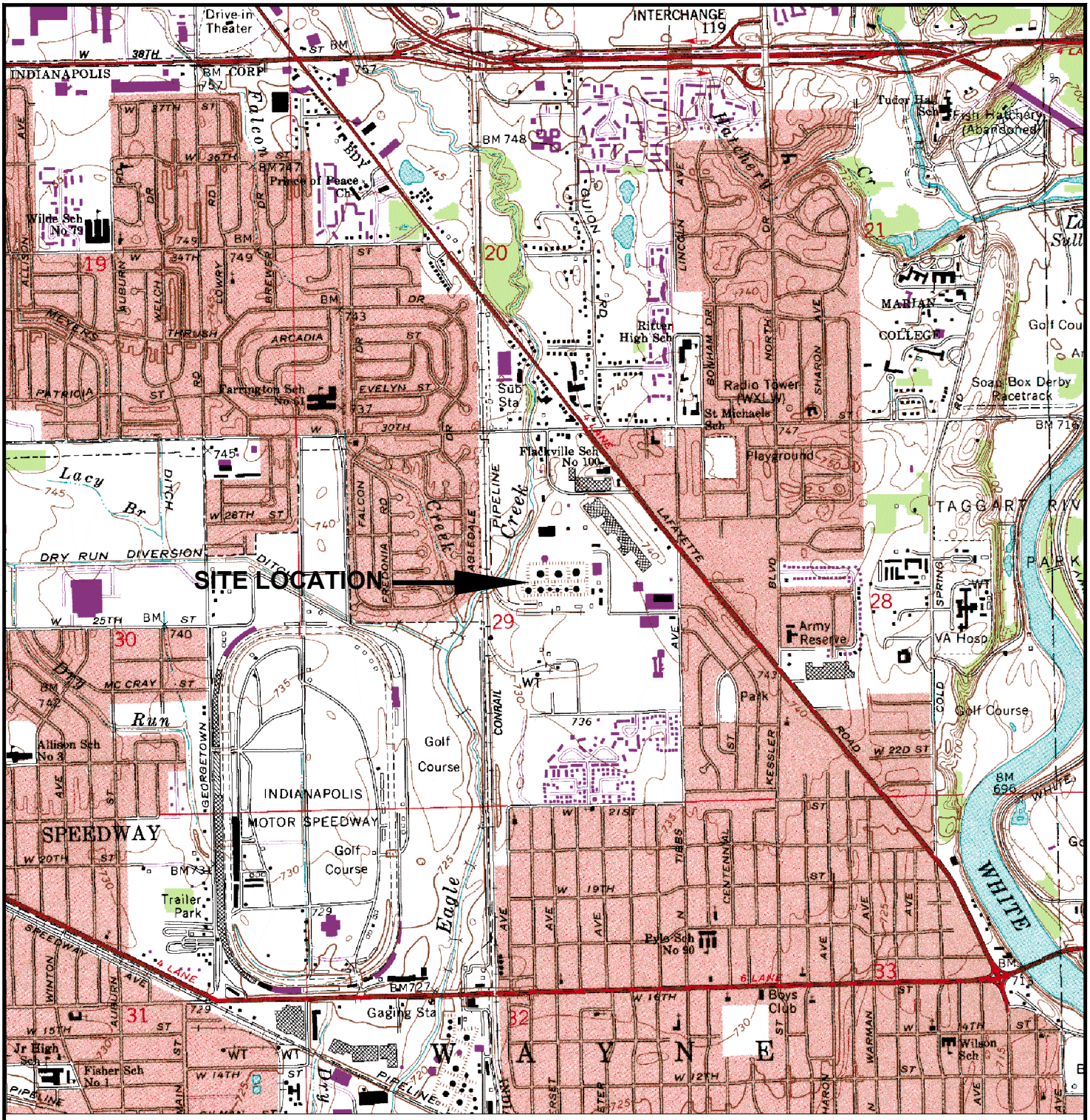
for James M. Kerr, Jr. /afj

James M. Kerr, Jr., LPG
U.S. ES Quality Lead

Approved by:

John W. McInnes, LPG
Managing Principal Geologist

FIGURES



SOURCE:
USGS 7.5 MINUTE
TOPOGRAPHIC MAP–
INDIANAPOLIS WEST, INDIANA
QUADRANGLE, 1967
PHOTOREVISED 1980, PHOTOINSPECTED 1984

Stantec
8770 GUION ROAD, SUITE B
INDIANAPOLIS, INDIANA 46268
PHONE: (317) 876-8375 FAX: (317) 876-8382

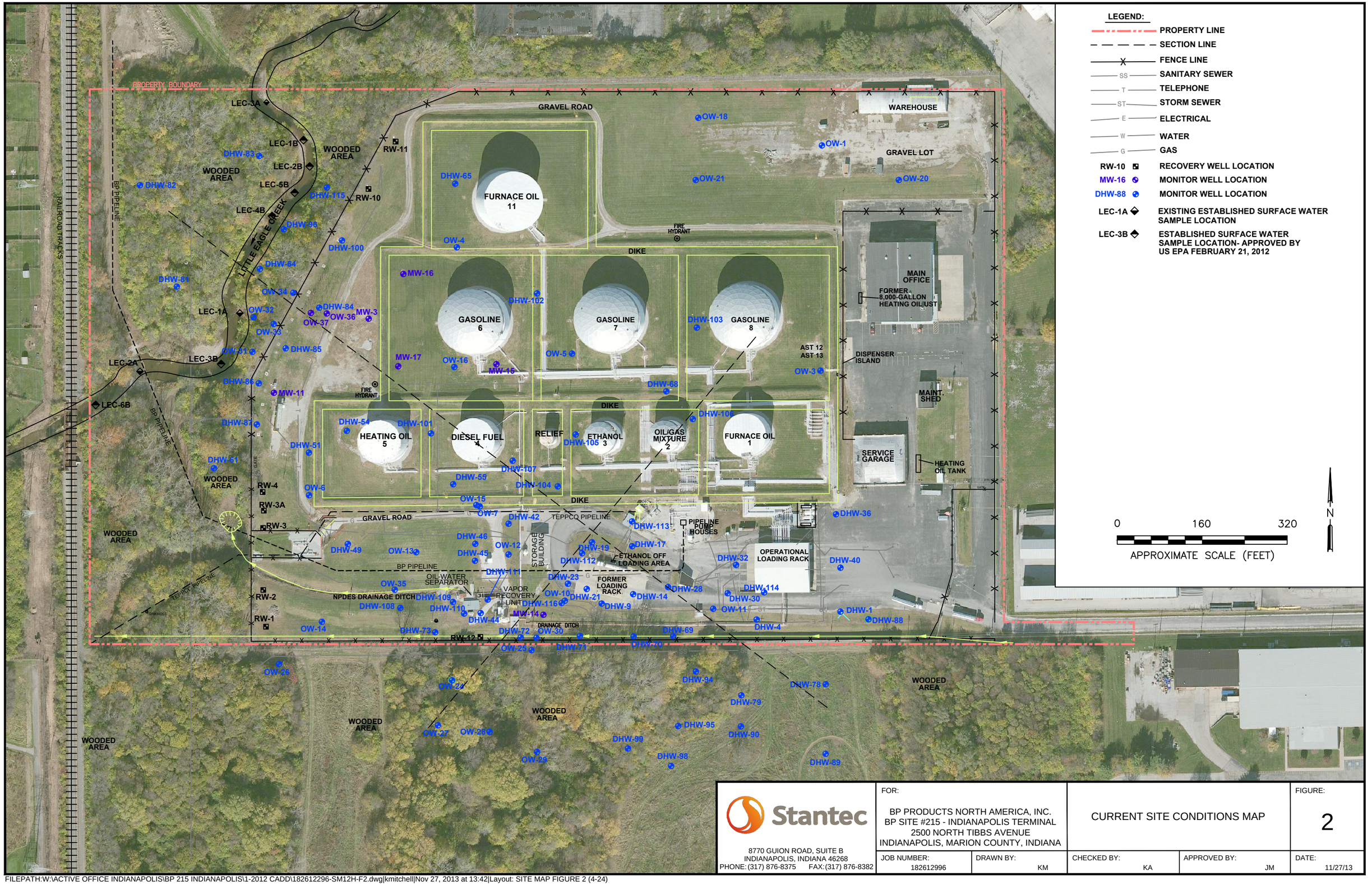
FOR:
BP PRODUCTS NORTH AMERICA, INC.
BP SITE #215 - INDIANAPOLIS TERMINAL
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, INDIANA

SITE LOCATION MAP

FIGURE: 1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182612296	KM	KA	JM	11/27/13

FILEPATH:W:\ACTIVE OFFICE INDIANAPOLIS\BP 215 INDIANAPOLIS\1-2012 CADD\182612296-SLM.dwg|kmitchell|Nov 27, 2013 at 13:43|Layout: FIGURE 1



Stantec
8770 GUION ROAD, SUITE B
INDIANAPOLIS, INDIANA 46268
PHONE: (317) 876-8375 FAX: (317) 876-8382

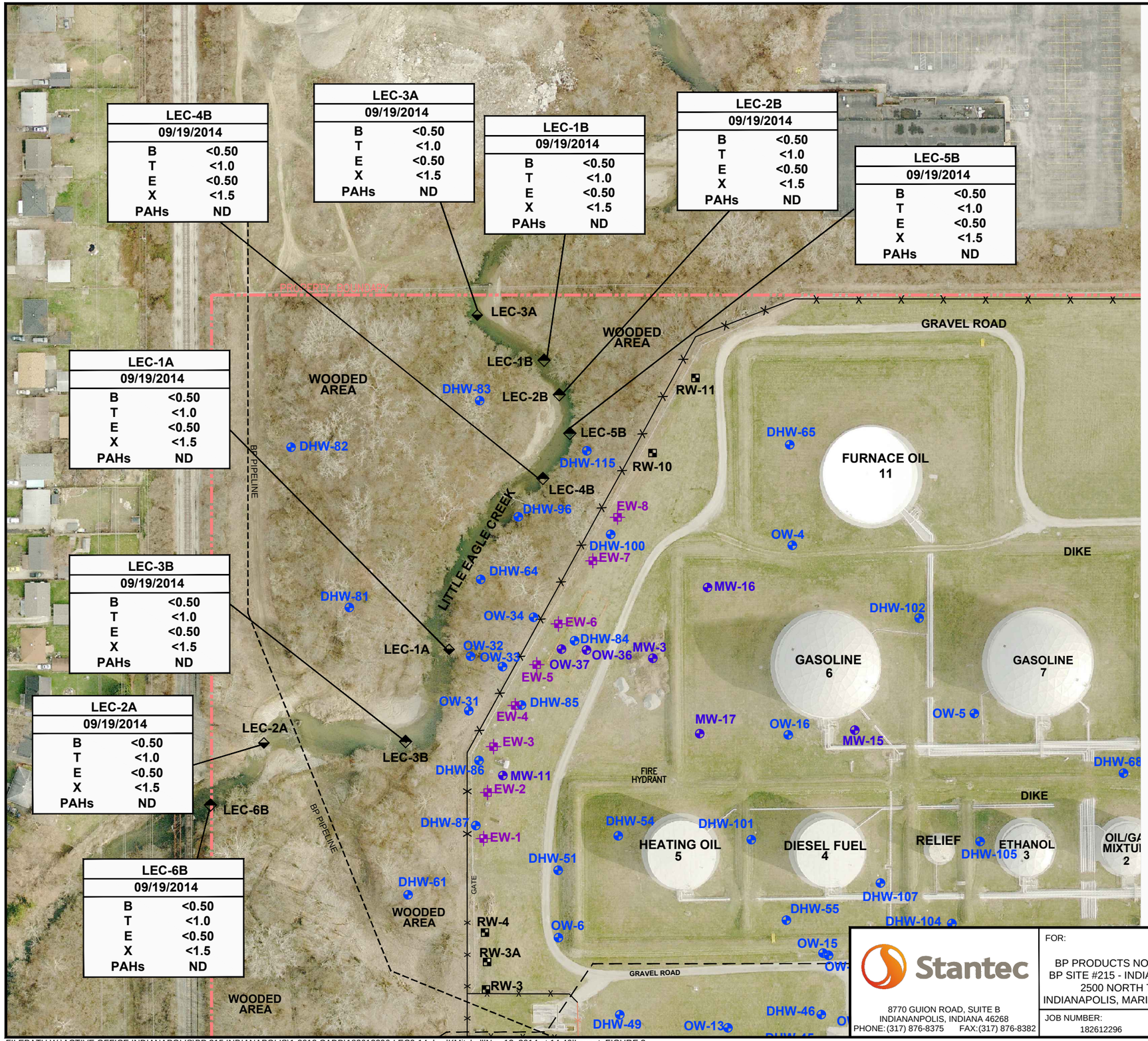
FOR:
BP PRODUCTS NORTH AMERICA, INC.
BP SITE #215 - INDIANAPOLIS TERMINAL
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, INDIANA

CURRENT SITE CONDITIONS MAP

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182612996	KM	KA	JM	11/27/13

FILEPATH:W:\ACTIVE OFFICE INDIANAPOLIS\BP 215 INDIANAPOLIS\1-2012 CADD\182612296-SM12H-F2.dwg|kmitchell|Nov 27, 2013 at 13:42|Layout: SITE MAP FIGURE 2 (4-24)



LEGEND:

- PROPERTY LINE
- FENCE LINE
- RW-10 RECOVERY WELL LOCATION
- MW-16 MONITOR WELL LOCATION
- DHW-88 MONITOR WELL LOCATION
- EW-8 EXTRACTION WELL LOCATION
- LEC-1A EXISTING ESTABLISHED SURFACE WATER SAMPLE LOCATION
- LEC-3B ESTABLISHED SURFACE WATER SAMPLE LOCATION- APPROVED BY US EPA FEBRUARY 21, 2012

LEC-5B	SAMPLE ID NUMBER
09/19/2014	SAMPLE DATE
B <0.50	Benzene
T <1.0	Toluene
E <0.50	Ethylbenzene
X <1.5	Total Xylenes
PAHs ND	Poly Aromatic Hydrocarbons

RESULTS IN ug/L
ALL OTHER TARGETED PAHs NOT LISTED ARE ND
ND= NOT DETECTED

BTEX (SAMPLE METHOD 524.2)
PAH (SAMPLE METHOD 8270 SIM)

0 120 240
APPROXIMATE SCALE (FEET)

N

SOURCE MAP:
DELTA HULL & ASSOCIATES, INC.
INDIANAPOLIS, INDIANA
PROJECT NUMBER 00215SA091, FILE BP_SITE_215.DWG
DATED FEBRUARY 2009

Stantec
8770 GUION ROAD, SUITE B
INDIANANPOLIS, INDIANA 46268
PHONE:(317) 876-8375 FAX:(317) 876-8382

FOR:
BP PRODUCTS NORTH AMERICA, INC.
BP SITE #215 - INDIANAPOLIS TERMINAL
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, INDIANA

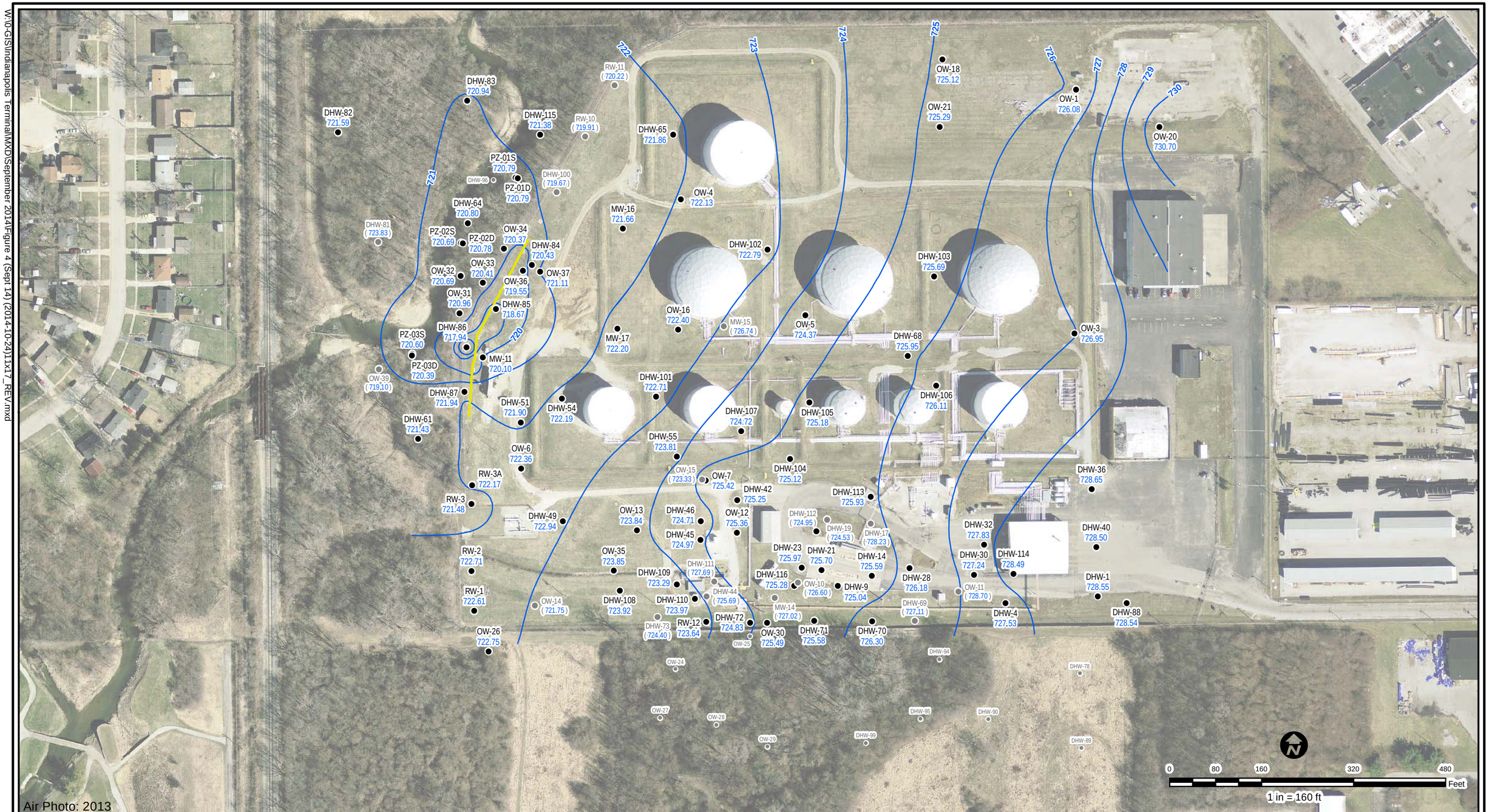
SURFACE WATER SAMPLING RESULTS SEPTEMBER 19, 2014

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182612296	KM	KA	JM	11/03/14

FILEPATH:W:\ACTIVE OFFICE INDIANAPOLIS\BP 215 INDIANAPOLIS\1-2012 CADD\182612296-LEC9-14.dwg|KMitchell|Nov 12, 2014 at 14:46|Layout: FIGURE 3

W:\0-GIS\Indianapolis Terminal\MXD\September 2014\Figure 4 (Sept 14) (2014-10-24)11X17_REV.mxd



Legend

- 723.04 Monitoring Well
- (723.04) Monitoring Well (Not used for contouring)
- Potentiometric Surface Contour

Note:

1) Contour interval = 1 foot

Stantec

8770 GUION ROAD, SUITE B
INDIANAPOLIS, INDIANA
PHONE: (317) 876-8375 FAX: (317) 876-8382

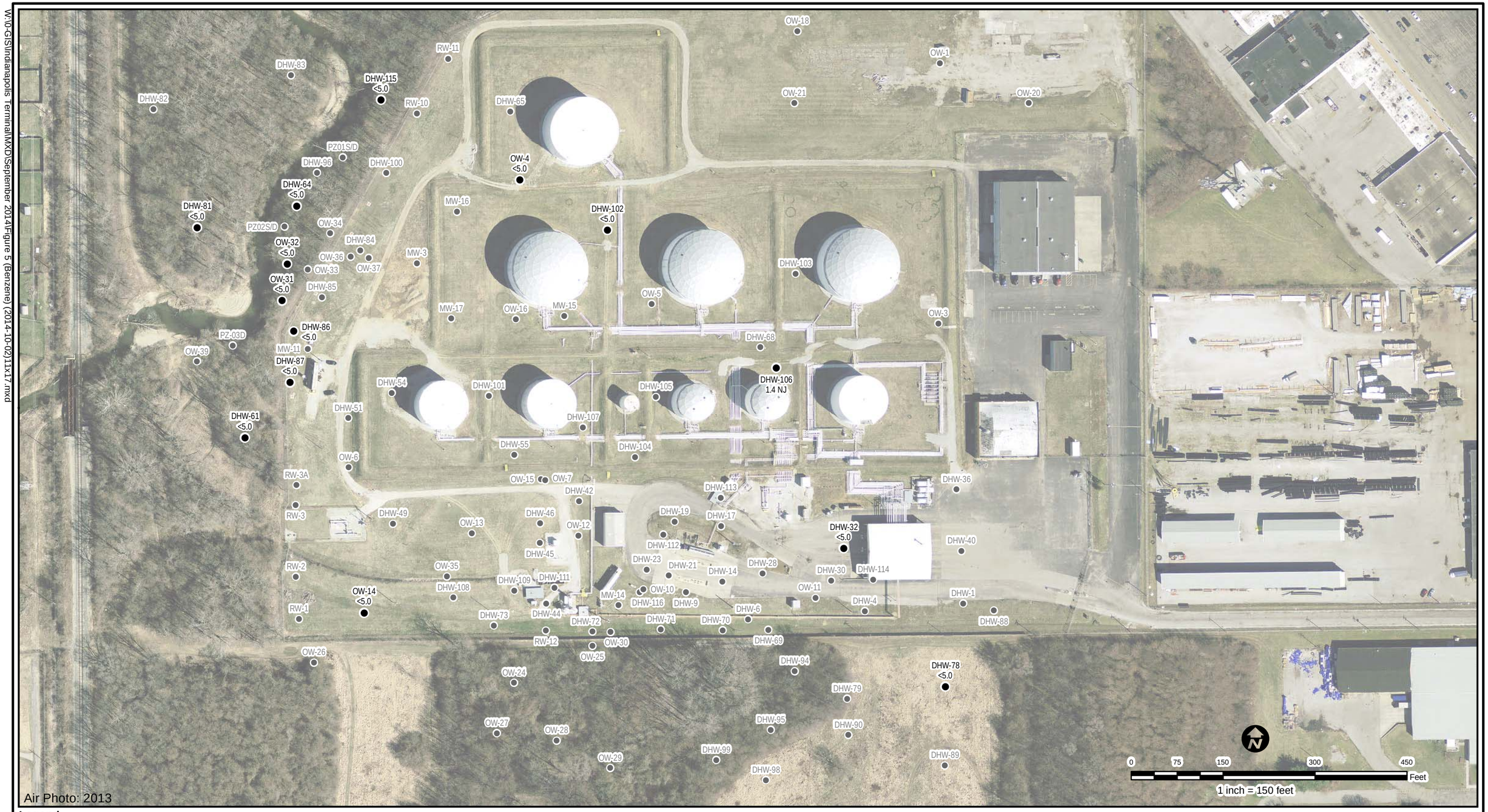
FOR:
BP PRODUCTS NORTH AMERICA, INC
BP SITE #215
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, IN

SEPTEMBER 2014
GROUNDWATER CONTOUR MAP

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182612296	AI	AG	AG	10/24/14

W:\10-GIS\Indianapolis Terminal\MXD\September 2014\Figure 5 (Benzene) (2014-10-02)11x17.mxd



Legend

- Monitoring Wells
- Monitoring Wells (Not Sampled)

Note:

1) Groundwater samples collected between September 10 - 12, 2014
2) Concentrations presented in micrograms per liter (ug/l)
3) Screening level 5 ug/l (MCL)
4) NJ = The reported result is an estimated value by the laboratory

Stantec
8770 GUION ROAD, SUITE B
INDIANAPOLIS, INDIANA
PHONE: (317) 876-8375 FAX: (317) 876-8382

FOR:
BP PRODUCTS NORTH AMERICA, INC.
BP SITE #215 - INDIANAPOLIS TERMINAL
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, INDIANA

BENZENE GROUNDWATER ANALYTICAL RESULTS MAP SEPTEMBER 2014

FIGURE: 5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182602296	AI	KA	JM	10/22/14

W:\10-GIS\Indianapolis Terminal\MXD\September 2014\Figure 6 (ETHYLBENZENE) (2014-10-02)11X17.mxd

Legend

- Monitoring Wells
- Monitoring Wells (Not Sampled)

Note:

1) Groundwater samples collected between September 10 - 12, 2014
2) Concentrations presented in micrograms per liter (ug/L)
3) Screening level 700 ug/l (MCL)
4) NJ = The reported result is an estimated value by the laboratory

Stantec
8770 GUION ROAD, SUITE B
INDIANAPOLIS, INDIANA
PHONE: (317) 876-8375 FAX: (317) 876-8382

FOR:
BP PRODUCTS NORTH AMERICA, INC.
BP SITE #215 - INDIANAPOLIS TERMINAL
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, INDIANA

ETHYLBENZENE GROUNDWATER ANALYTICAL RESULTS MAP SEPTEMBER 2014

FIGURE: 6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182602296	AI	KA	JM	10/22/14

W:\10-GIS\Indianapolis Terminal\MXD\September 2014\Figure 7 (NAPHTHALENE) (2014-10-02)11x17.mxd

Legend

- Monitoring Wells
- Monitoring Wells (Not Sampled)

Note:

1) Groundwater samples collected between September 10 - 12, 2014
2) Concentrations presented in micrograms per liter (ug/l)
3) Screening levels 8.3 ug/L (IDEM Residential Default Closure Level, 2009) and 2000 ug/L (IDEM Industrial Default Closure Level, 2009)
4) NJ = The reported result is an estimated value by the laboratory

Stantec
8770 GUION ROAD, SUITE B
INDIANAPOLIS, INDIANA
PHONE: (317) 876-8375 FAX: (317) 876-8382

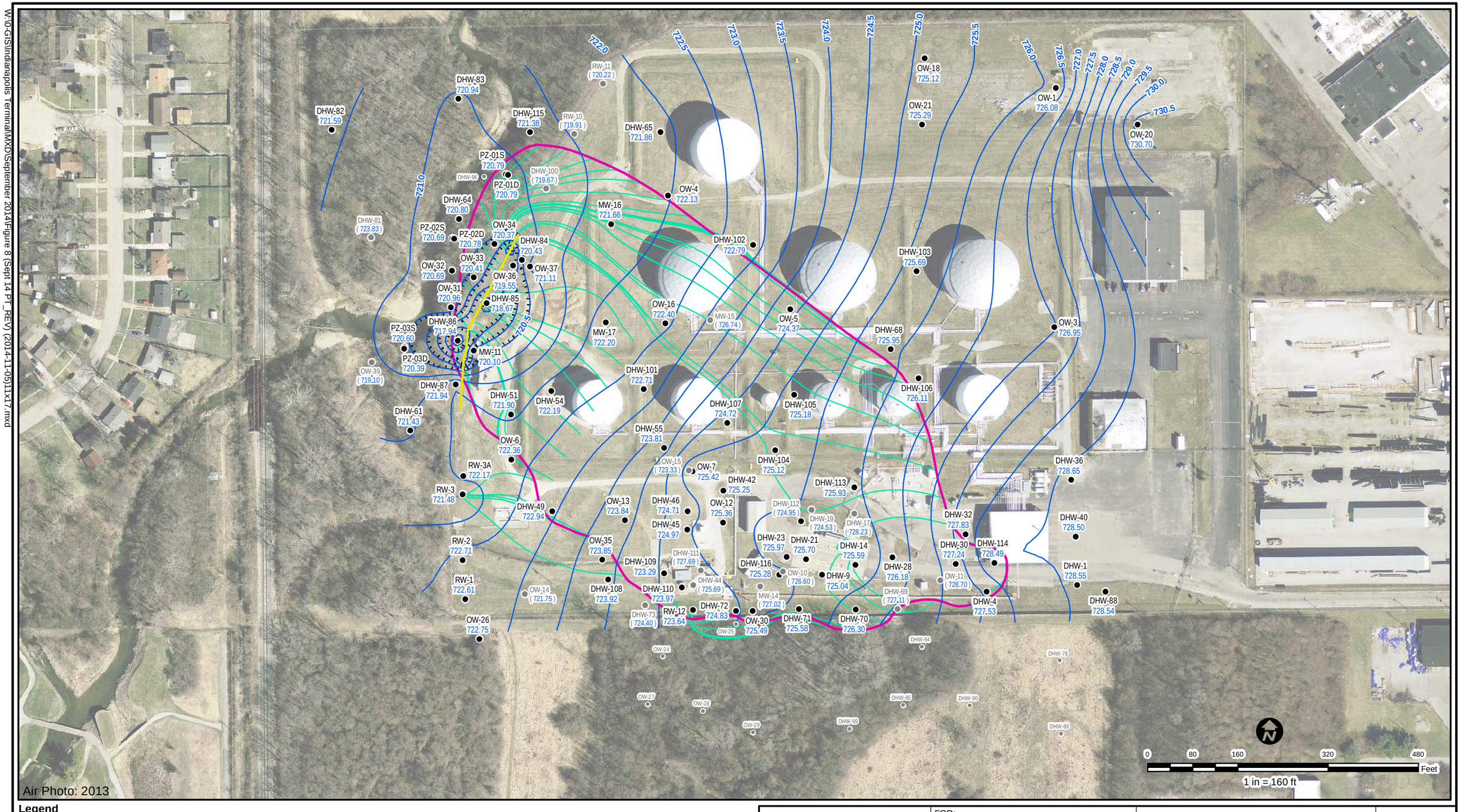
FOR:
BP PRODUCTS NORTH AMERICA, INC.
BP SITE #215 - INDIANAPOLIS TERMINAL
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, INDIANA

NAPHTHALENE GROUNDWATER ANALYTICAL RESULTS MAP SEPTEMBER 2014

FIGURE: 7

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182602296	AI	KA	JM	10/22/14

W:\10-GIS\Indianapolis Terminal\MXD\September 2014\Figure 8 (Sept 14 PT_REV) (2014-11-05)11x17.mxd



Legend

- 723.04 Monitoring Well
- (723.04) Monitoring Well (Not used for contouring)
- Potentiometric Surface Contour
- Remediation Trench
- Target Map
- Particle Tracks

Note:
1) Contour interval = 0.5 foot

Stantec
8770 GUION ROAD, SUITE B
INDIANAPOLIS, INDIANA
PHONE: (317) 876-8375 FAX: (317) 876-8382

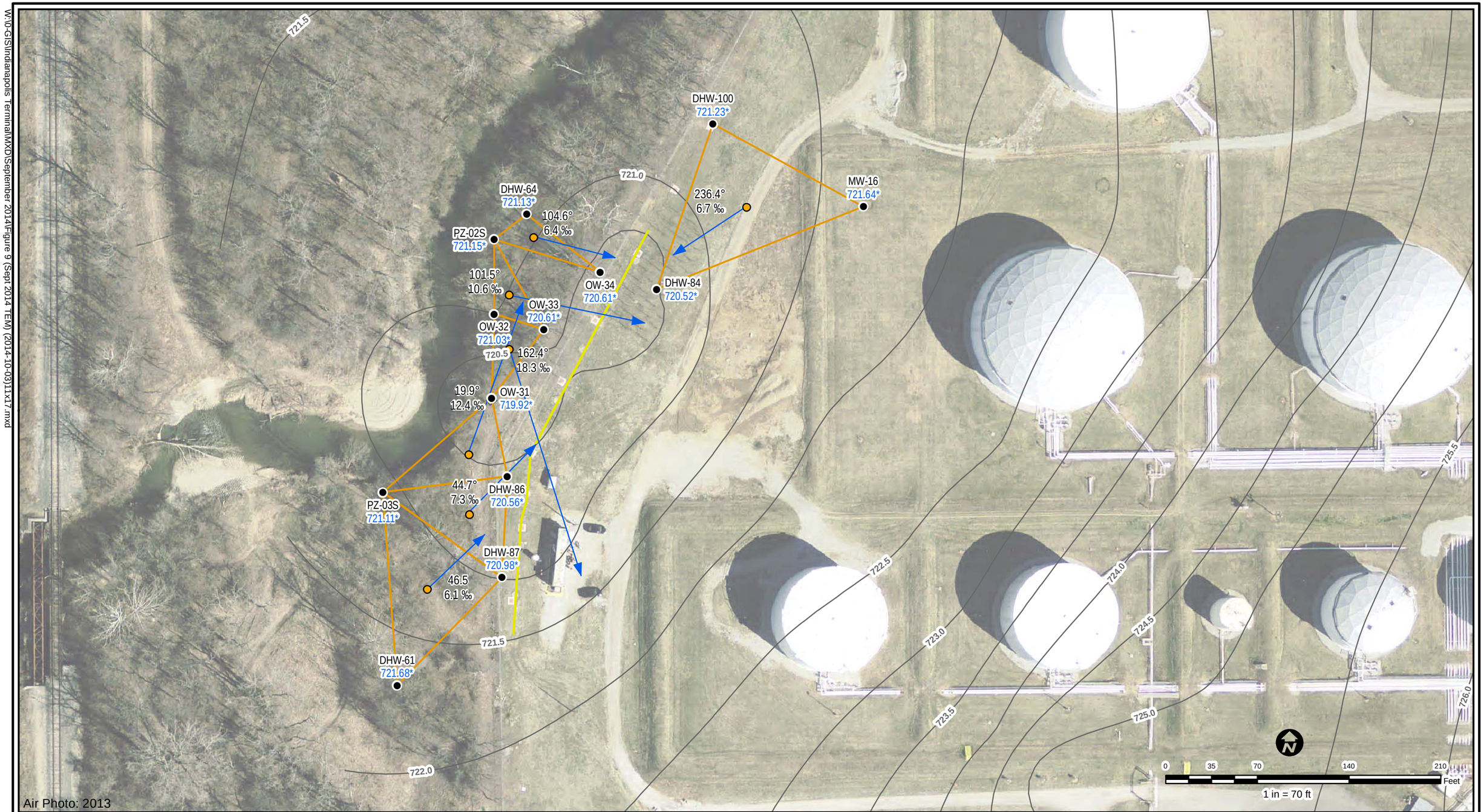
FOR:
BP PRODUCTS NORTH AMERICA, INC
BP SITE #215
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, IN

SEPTEMBER 2014
PARTICLE TRACKING MAP

FIGURE: 8

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182612296	AI	AG	AG	10/24/14

W:\10-GIS\Indianapolis Terminal\MXD\September 2014\Figure 9 (Sept 2014 TEM) (2014-10-03)11X17.mxd



Legend

- Monitoring Well
- Potentiometric Surface Contour
- Remediation Trench
- Target Map
- Triangular Element Direction

Note:

1) North is 0°, East Positive
2) Tracking Distance in ft/1000 ft
3) Contour interval = 0.5 foot
4) * Wells were re-measured on 10/13/2014

Stantec
8770 GUION ROAD, SUITE B
INDIANAPOLIS, INDIANA
PHONE: (317) 876-8375 FAX: (317) 876-8382

FOR:
BP PRODUCTS NORTH AMERICA, INC
BP SITE #215
2500 NORTH TIBBS AVENUE
INDIANAPOLIS, MARION COUNTY, IN

SEPTEMBER 2014
TRIANGULAR ELEMENT MAP

FIGURE: 9

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
182612296	AI	KA	JM	10/17/14

TABLES

TABLE 1
SURFACE WATER ANALYTICAL RESULTS - BTEX AND PAHs
September 19, 2014
BP Products North America Inc.
Site #215 - Indianapolis Terminal
2500 N. Tibbs Avenue
Indianapolis, IN 46222
Stantec Project No.: 182612296

Sample Location				1A		1B	2A	2B	3A	3B	4B	5B	6B	Trip Blank
Sample Date				19-Sep-14	19-Sep-14	19-Sep-14	19-Sep-14	19-Sep-14	19-Sep-14	19-Sep-14	19-Sep-14	19-Sep-14	19-Sep-14	19-Sep-14
Sample ID				BPIT-LEC1A-091914	BPIT-DUP01-091914	BPIT-LEC1B-091914	BPIT-LEC2A-091914	BPIT-LEC2B-091914	BPIT-LEC3A-091914	BPIT-LEC3B-091914	BPIT-LEC4B-091914	BPIT-LEC5B-091914	BPIT-LEC6B-091914	BPIT-TRIPBLANK-091914
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory			USEPA	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE
Laboratory Work Order			Region 5	50104047	50104047	50104047	50104047	50104047	50104047	50104047	50104047	50104047	50104047	50104047
Laboratory Sample ID			RCRA	50104047004	50104047010	50104047008	50104047002	50104047007	50104047009	50104047003	50104047005	50104047006	50104047001	50104047011
Sample Type	Units	SFAL	Ecological		Field Duplicate									Trip Blank
BTEX														
Benzene	µg/L	100[A]	114$_f$[B]	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Toluene	µg/L	2000[A]	253$_f$[B]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/L	1000[A]	14$_{oz}$[B]	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Xylenes, Total	µg/L	40000[A]	27$_{dz}$[B]	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Polycyclic Aromatic Hydrocarbons														
Acenaphthene	µg/L	2100[A]	38$_a$[B]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-
Acenaphthylene	µg/L	n/v	4840$_b$[B]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-
Anthracene	µg/L	11000[A]	0.035$_f$[B]	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	-
Benzo(a)anthracene	µg/L	0.1[A]	0.025$_{cz}$[B]	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	-
Benzo(a)pyrene	µg/L	0.2[A]	0.014$_h$[B]	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	***< 0.10***	-
Benzo(b)fluoranthene	µg/L	0.2[A]	9.07$_b$[B]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-
Benzo(g,h,i)perylene	µg/L	n/v	7.64$_b$[B]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-
Benzo(k)fluoranthene	µg/L	0.2[A]	n/v	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-
Chrysene	µg/L	0.2[A]	n/v	***< 0.50***	***< 0.50***	***< 0.50***	***< 0.50***	***< 0.50***	***< 0.50***	***< 0.50***	***< 0.50***	***< 0.50***	***< 0.50***	-
Dibenzo(a,h)anthracene	µg/L	0.3[A]	n/v	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-
Fluoranthene	µg/L	n/v	1.9$_{fz}$[B]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-
Fluorene	µg/L	1400[A]	19$_d$[B]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-
Indeno(1,2,3-cd)pyrene	µg/L	0.4[A]	4.31$_b$[B]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-
Naphthalene	µg/L	100[A]	13$_{az}$[B]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-
Phenanthrene	µg/L	n/v	3.6$_f$[B]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-
Pyrene	µg/L	1100[A]	0.3$_h$[B]	***< 1.0***	***< 1.0***	***< 1.0***	***< 1.0***	***< 1.0***	***< 1.0***	***< 1.0***	***< 1.0***	***< 1.0***	***< 1.0***	-

See notes on last page

TABLE 1
SURFACE WATER ANALYTICAL RESULTS - BTEX AND PAHs
September 19, 2014

BP Products North America Inc.
Site #215 - Indianapolis Terminal
2500 N. Tibbs Avenue
Indianapolis, IN 46222
Stantec Project No.: 182612296

Notes:

SFAL [A]	Superfund Removal Action Levels - May, 1993
USEPA Region 5 RCRA Ecological [B]	EPA-Region 5 Ecological Screening Levels (August 22, 2003)
6.5[A]	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
< 0.50	Laboratory estimated quantitation limit exceeded standard.
< 0.03	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a	Michigan water quality standards, Rule 57 water quality values, July 23, 2003. The water ESL data for acenaphthene, BHC (gamma), cyanide and parathion are Michigan (final chronic value or FCV) Tier I criteria. Likewise, water ESL data for dieldrin, dioxin, DDT, endrin, hexachlorobenzene, hexachlorobutadiene, mercury, PCB's and toxaphene represent wildlife values (see Notes at end of these footnotes for dioxin, DDT, mercury and PCB's). All of the remaining data are Tier II values.
b	Water Ecological Screening Levels (ESL) based on exposure to a mink (Mustela vision).
c	Indiana water quality standards, Title 327, Article 2, of the Indiana Administrative Code, Feb. 4, 2002. Available at: http://www.ai.org/legislative/iac/t03270/a00020.pdf The water ESL for toxaphene is from the Indiana chronic aquatic criterion for all waters outside of mixing zones (see Table 1 under Rule 1 of 327 IAC 2-1-6 Minimum Surface Water Quality Standards at the above Internet site). The remaining water ESL data are either wildlife values (for dioxin, DDT, mercury and PCB's) or Tier II values for the Indiana Great Lakes Basin (see Great Lakes Basin Criteria and Values Table as developed under Rule 1.5 of 327 IAC Article 2 as referenced above).
d	Ohio water quality standards, Chapter 3745-1 of the Ohio Administrative Code, Dec. 30, 2002. The water ESL data for endrin and parathion are Ohio aquatic life Tier I criteria from the Outside Mixing Zone Average (OMZA). Wildlife values are available for dioxin, DDT, mercury and PCB's. All of the remaining data are Ohio aquatic life Tier II values from the OMZA. See Ohio summary tables for water quality criteria and values along with reference on the development of Tier I criteria and Tier II values.
f	Minnesota water quality standards, Rule 7052.0100, Subpart 2 (water ESL data for arsenic & benzene represents aquatic life chronic standards and dioxin, DDT, mercury and PCB's represents wildlife values), April 13, 2000.
g	Rule 7050.0222, Subpart 2, Feb. 12, 2003.
h	Region 5, RCRA Interim Criteria, based on Aquire database with acceptable review codes and endpoints (life cycle). Must have eight or more acceptable studies (i.e., chronic and/or acute).
o	GLWQI Tier II value as presented in: Suter, G.W. II and Tsao, C.L. 1996. Toxicological benchmarks for screening potential contaminants of concern for effects on aquatic biota, 1996 Revision. ES/ER/TM-96/R2. Available at: http://www.esd.ornl.gov/programs/ecorisk/ecorisk.html
z	Illinois water quality standards, Title 35, Part 302.208, Dec. 20, 2002. Available at: http://www.ipcb.state.il.us/SLR/IPCBandIEPAEnvironmentalRegulations-Title35.asp
	New ESL data is lower than the previous table.

TABLE 2
GROUNDWATER ELEVATION DATA
September 9, 2014
BP Products North America Inc.
Site #215 - Indianapolis Terminal
2500 N. Tibbs Avenue
Indianapolis, Marion County, IN 46222
Stantec Project No.: 182612296

Well ID	Sample Date	Top of Casing Elevation (feet)	Depth to Water (Feet)	GW Elevation (feet)	Depth to LNAPL	LNAPL Thickness (feet)	Measured Total Well Depth (from TOC)	Ground Elevation	Screen Elevation	
DHW-1	09-Sep-14	735.62	7.07	728.55	NA	NA	13.49	735.84	730.84	720.84
DHW-4	09-Sep-14	735.36	7.83	727.53	NA	NA	16.85	735.80	727.80	717.80
DHW-9	09-Sep-14	737.05	12.01	725.04	NA	NA	14.53	737.51	732.51	722.51
DHW-14	09-Sep-14	737.53	11.94	725.59	NA	NA	13.10	737.88	732.88	722.88
DHW-17	09-Sep-14	736.23	8.00	728.23	NA	NA	13.37	736.82	732.82	722.82
DHW-19	09-Sep-14	735.75	11.22	724.53	NA	NA	14.70	736.16	731.16	721.16
DHW-21	09-Sep-14	737.18	11.48	725.70	NA	NA	14.53	737.67	732.67	722.67
DHW-23	09-Sep-14	736.93	10.96	725.97	NA	NA	13.44	737.46	733.46	723.46
DHW-28	09-Sep-14	737.50	11.32	726.18	NA	NA	13.61	737.75	733.75	723.75
DHW-30	09-Sep-14	737.36	10.12	727.24	NA	NA	12.90	737.78	733.78	723.78
DHW-32	09-Sep-14	736.30	8.47	727.83	NA	NA	13.53	736.57	732.57	722.57
DHW-36	09-Sep-14	735.76	7.11	728.65	NA	NA	19.71	735.89	731.89	721.89
DHW-40	09-Sep-14	735.61	7.11	728.50	NA	NA	13.10	735.90	731.90	721.90
DHW-42	09-Sep-14	735.39	10.14	725.25	NA	NA	13.72	735.71	731.71	721.71
DHW-44	09-Sep-14	735.18	9.54	725.69	9.48	0.06	NA	735.58	730.58	720.58
DHW-45	09-Sep-14	734.93	9.96	724.97	NA	NA	13.43	735.32	731.32	721.32
DHW-46	09-Sep-14	735.07	10.36	724.71	NA	NA	13.57	735.42	731.42	721.42
DHW-49	09-Sep-14	732.37	9.43	722.94	NA	NA	14.50	732.66	727.66	717.66
DHW-51	09-Sep-14	732.18	10.28	721.90	NA	NA	15.00	732.40	726.40	716.40
DHW-54	09-Sep-14	738.76	16.57	722.19	NA	NA	18.18	735.70	730.70	720.70
DHW-55	09-Sep-14	738.91	15.10	723.81	NA	NA	17.80	736.03	731.03	721.03
DHW-61	09-Sep-14	730.26	8.83	721.43	NA	NA	11.59	730.65	728.65	718.65
DHW-64	09-Sep-14	727.51	6.71	720.80	NA	NA	10.01	727.80	725.80	715.80
DHW-65	09-Sep-14	738.30	16.44	721.86	NA	NA	17.84	735.78	730.78	720.78
DHW-68	09-Sep-14	743.01	17.06	725.95	NA	NA	21.05	740.02	732.02	722.02
DHW-69	09-Sep-14	733.15	6.04	727.11	NA	NA	15.22	730.28	728.28	718.28
DHW-70	09-Sep-14	732.14	5.84	726.30	NA	NA	15.26	728.86	726.86	716.86
DHW-71	09-Sep-14	731.37	5.79	725.58	NA	NA	15.17	728.44	726.44	716.44
DHW-72	09-Sep-14	731.84	7.01	724.83	NA	NA	15.15	728.71	726.71	716.71
DHW-73	09-Sep-14	734.55	10.15	724.40	NA	NA	15.20	731.59	729.59	719.59
DHW-78	09-Sep-14	737.67	9.15	728.52	NA	NA	12.79	738.04	734.54	724.54
DHW-81	10-Sep-14	731.51	7.68	723.83	NA	NA	17.59	728.68	722.68	712.68
DHW-82	10-Sep-14	734.08	12.49	721.59	NA	NA	16.97	731.27	727.27	717.27
DHW-83	10-Sep-14	731.47	10.53	720.94	NA	NA	16.10	728.35	724.35	714.35
DHW-84	08-Sep-14	731.30	10.87	720.43	NA	NA	13.35	731.94	727.94	717.94
DHW-85	09-Sep-14	732.90	14.23	718.67	NA	NA	15.81	733.14	727.14	717.14
DHW-86	09-Sep-14	731.65	13.71	717.94	NA	NA	14.17	732.07	727.07	717.07
DHW-87	09-Sep-14	731.31	9.37	721.94	NA	NA	14.14	731.65	727.65	717.65
DHW-88	09-Sep-14	735.03	6.49	728.54	NA	NA	15.01	735.56	731.56	721.56
DHW-89**	09-Sep-14	736.31	7.81	728.50	NA	NA	12.64	736.81	733.31	723.31
DHW-99**	09-Sep-14	737.47	4.70	732.77	NA	NA	13.75	733.95	730.95	720.95
DHW-100	09-Sep-14	731.59	11.92	719.67	NA	NA	14.80	732.01	726.01	716.01
DHW-101	09-Sep-14	738.35	15.64	722.71	NA	NA	18.41	735.58	729.58	719.58
DHW-102	09-Sep-14	740.94	18.15	722.79	NA	NA	23.07	737.65	727.65	717.65
DHW-103	09-Sep-14	739.94	14.25	725.69	NA	NA	18.46	737.09	731.09	721.09
DHW-104	09-Sep-14	739.35	14.23	725.12	NA	NA	21.34	736.55	726.55	716.55
DHW-105	09-Sep-14	738.70	13.52	725.18	NA	NA	18.34	735.98	729.98	719.98
DHW-106	09-Sep-14	739.65	13.54	726.11	NA	NA	20.54	736.72	728.72	718.72
DHW-107	09-Sep-14	739.25	14.53	724.72	NA	NA	19.78	736.59	726.59	716.59
DHW-108	09-Sep-14	735.10	11.18	723.92	NA	NA	20.01	735.59	725.59	715.59
DHW-109	09-Sep-14	734.30	11.01	723.29	NA	NA	14.92	734.68	729.68	719.68
DHW-110	09-Sep-14	734.85	10.88	723.97	NA	NA	14.42	735.71	730.71	720.71
DHW-111	09-Sep-14	735.43	7.74	727.69	NA	NA	14.75	735.67	730.67	720.67
DHW-112	09-Sep-14	735.70	11.19	724.95	10.60	0.59	15.69	737.02	731.02	721.02
DHW-113	09-Sep-14	736.55	10.62	725.93	NA	NA	17.57	736.79	726.79	716.79
DHW-114	09-Sep-14	737.93	9.44	728.49	NA	NA	13.24	738.13	732.13	722.13
DHW-115	09-Sep-14	731.81	10.43	721.38	NA	NA	15.01	732.03	726.03	716.03
DHW-116	09-Sep-14	735.91	10.63	725.28	NA	NA	14.97	736.11	731.11	721.11
MW-11	09-Sep-14	731.81	11.71	720.10	NA	NA	15.21	731.93	726.43	716.43
MW-14	09-Sep-14	734.96	7.94	727.02	NA	NA	13.36	735.45	727.95	717.95
MW-15	09-Sep-14	738.98	12.24	726.74	NA	NA	17.87	736.17	736.17	736.17
MW-16	09-Sep-14	738.94	17.28	721.66	NA	NA	20.55	735.58	735.58	735.58
MW-17	09-Sep-14	739.07	16.87	722.20	NA	NA	20.40	735.84	735.84	735.84
OW-1	08-Sep-14	740.51	14.43	726.08	NA	NA	20.43	738.24	729.19	719.19
OW-3	08-Sep-14	738.64	11.69	726.95	NA	NA	15.42	736.73	733.64	723.64
OW-4	09-Sep-14	738.56	16.43	722.13	NA	NA	17.49	736.25	731.42	721.42
OW-5	09-Sep-14	738.47	14.10	724.37	NA	NA	19.79	735.81	728.52	718.52

TABLE 2
GROUNDWATER ELEVATION DATA
September 9, 2014
BP Products North America Inc.
Site #215 - Indianapolis Terminal
2500 N. Tibbs Avenue
Indianapolis, Marion County, IN 46222
Stantec Project No.: 182612296

Well ID	Sample Date	Top of Casing Elevation (feet)	Depth to Water (Feet)	GW Elevation (feet)	Depth to LNAPL	LNAPL Thickness (feet)	Measured Total Well Depth (from TOC)	Ground Elevation	Screen Elevation	
OW-6	09-Sep-14	734.92	12.56	722.36	NA	NA	15.59	732.70	729.44	719.44
OW-7	09-Sep-14	737.31	11.89	725.42	NA	NA	16.61	736.35	730.65	720.65
OW-10	09-Sep-14	738.54	11.94	726.60	NA	NA	15.32	736.46	733.25	723.25
OW-11	09-Sep-14	740.92	12.22	728.70	NA	NA	18.83	738.00	731.86	721.86
OW-12	09-Sep-14	735.34	9.98	725.36	NA	NA	12.89	735.51	735.51	735.51
OW-13	09-Sep-14	729.91	6.07	723.84	NA	NA	12.35	730.23	730.23	730.23
OW-14	09-Sep-14	731.78	10.03	721.75	NA	NA	13.85	732.10	724.60	719.60
OW-15	09-Sep-14	736.25	12.92	723.33	NA	NA	18.31	736.64	727.14	717.14
OW-16	09-Sep-14	739.96	17.56	722.40	NA	NA	21.98	736.25	726.25	716.25
OW-18	08-Sep-14	737.30	12.18	725.12	NA	NA	17.24	737.57	730.07	720.07
OW-20	08-Sep-14	737.54	6.84	730.70	NA	NA	14.65	737.90	732.90	722.90
OW-21	08-Sep-14	737.94	12.65	725.29	NA	NA	17.34	738.16	730.66	720.66
OW-26	09-Sep-14	733.28	10.53	722.75	NA	NA	15.38	731.57	727.67	717.67
OW-30	09-Sep-14	728.50	3.01	725.49	NA	NA	12.91	728.92	725.92	715.92
OW-31	09-Sep-14	734.38	13.42	720.96	NA	NA	15.88	730.81	728.21	718.21
OW-32	09-Sep-14	729.28	8.59	720.69	NA	NA	11.51	726.53	722.23	717.23
OW-33	09-Sep-14	735.60	15.19	720.41	NA	NA	16.95	731.81	727.81	717.81
OW-34	09-Sep-14	734.81	14.44	720.37	NA	NA	17.21	731.39	726.89	716.89
OW-35	09-Sep-14	732.24	8.39	723.85	NA	NA	15.29	729.77	726.77	716.77
OW-36	08-Sep-14	731.63	12.08	719.55	NA	NA	13.70	732.13	732.13	732.13
OW-37	08-Sep-14	732.49	11.38	721.11	NA	NA	13.40	732.68	732.68	732.68
OW-39	09-Sep-14	729.72	10.62	719.10	NA	NA	13.46	729.36	724.36	719.36
PZ01D	09-Sep-14	733.10	12.31	720.79	NA	NA	13.16	999.99	986.99	985.99
PZ01S	09-Sep-14	733.02	12.23	720.79	NA	NA	17.17	999.99	990.99	989.99
PZ02D	09-Sep-14	729.44	8.66	720.78	NA	NA	9.91	999.99	990.99	989.99
PZ02S	09-Sep-14	729.33	8.64	720.69	NA	NA	14.09	999.99	994.99	993.99
PZ03D	09-Sep-14	730.23	9.84	720.39	NA	NA	10.11	999.99	989.99	988.99
PZ03S	09-Sep-14	730.14	9.54	720.60	NA	NA	13.80	999.99	993.99	992.99
RW-1	09-Sep-14	732.24	9.63	722.61	NA	NA	14.26	732.46	722.46	719.96
RW-2	09-Sep-14	733.67	10.96	722.71	NA	NA	17.46	733.90	723.90	721.40
RW-3	09-Sep-14	728.62	7.14	721.48	NA	NA	12.22	730.42	720.42	717.92
RW-3A	09-Sep-14	730.44	8.27	722.17	NA	NA	12.59	731.26	731.26	731.26
RW-10	09-Sep-14	732.99	13.08	719.91	NA	NA	19.54	734.75	718.75	716.25
RW-11	09-Sep-14	733.14	12.92	720.22	NA	NA	13.69	734.40	718.90	716.40
RW-12	09-Sep-14	729.72	6.08	723.64	NA	NA	13.30	729.68	726.58	716.58

Notes:

NA = Not Applicable

NS = Not Surveyed

Current Top of Casing data collected during March 2011 survey. Top of Casing and Groundwater Elevation data generated prior to March 2011 have been checked but not verifie

No well construction logs available for OW-12, OW-13, MW-15, MW-16, and MW-17.

For wells OW-1, OW-3, OW-4, OW-5, OW-6, OW-7, OW-10, and OW-11 - The well construction diagrams did not identify screen depths relative to the ground surface. However, screen lengths were identified on these diagrams. The maximum total well depth measurements from the December 2004 and May 2005 sampling events were presumed to be the bottom of the screen and the screen elevations displayed in this table were calculated based on measured total well depths.

In wells containing LNAPL, a specific gravity of 0.75 was used to correct the groundwater elevation for the weight and thickness of LNAPL using the formula,

GWE = TOC elevation - (DTW - (Product Thickness x 0.75))

**Wells are located south of site where a recent solar panel farm was constructed. Wells will be resurveyed.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - BTEX AND PAHs
September 2014
BP Products North America Inc.
Site #215 - Indianapolis Terminal
2500 N. Tibbs Avenue
Indianapolis, Marion County, IN 46222
Stantec Project No.: 182612296

Sample Location				DHW-32	DHW-61	DHW-64	DHW-78	DHW-81	DHW-86		DHW-87	DHW-102	DHW-106	DHW-115	OW-4	OW-14	OW-31	OW-32		Equipment Blanks			Trip Blank	
Sample Date				12-Sep-14	11-Sep-14	11-Sep-14	10-Sep-14	10-Sep-14	12-Sep-14	11-Sep-14	12-Sep-14	12-Sep-14	12-Sep-14	11-Sep-14	12-Sep-14	10-Sep-14	11-Sep-14	11-Sep-14	11-Sep-14	10-Sep-14	12-Sep-14	12-Sep-14	10-Sep-14	11-Sep-14
Sample ID				BPIT-DHW32-091214	BPIT-DHW61-091114	BPIT-DHW64-091114	BPIT-DHW78-091014	BPIT-DHW81-091014	BPIT-DHW86-091214	BPIT-DUP02-091214	BPIT-DHW87-091214	BPIT-DHW102-091214	BPIT-DHW106-091214	BPIT-DHW115-091114	BPIT-OW4-091214	BPIT-OW14-091014	BPIT-OW31-091114	BPIT-OW32-091114	BPIT-DUP01-091114	BPIT-EB01-091014	BPIT-EB02-091214	BPIT-EB03-091214	BPIT-TRIPBLANK-091014	BPIT-TRIPBLANK02-091114
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE	PACE
Laboratory Work Order				50103706	50103706	50103706	50103607	50103607	50103706	50103706	50103706	50103707	50103707	50103706	50103706	50103607	50103706	50103706	50103706	50103607	50103706	50103706	50103607	50103706
Laboratory Sample ID				50103706004	50103706005	50103706009	50103607003	50103607001	50103706001	50103706011	50103706003	50103707001	50103707002	50103706008	50103706002	50103607002	50103706006	50103706007	50103706010	50103607004	50103706012	50103706013	50103607005	50103706015
Sample Type	Units	EPA	IDEM							Field Duplicate									Field Duplicate	Equip Blank	Equip Blank	Equip Blank	Trip Blank	Trip Blank
BTEX																								
Benzene	µg/L	5[A]	n/v	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	1.4 NJ	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/L	1000[A]	n/v	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/L	700[A]	n/v	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Xylenes, Total	µg/L	10000[A]	n/v	< 10.0	< 10.0	< 10.0	5.1 NJ	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Polycyclic Aromatic Hydrocarbons																								
Acenaphthene	µg/L	n/v	460[B] 6100[C]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	-
Acenaphthylene	µg/L	n/v	71[B] 730[C]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	-
Anthracene	µg/L	n/v	2300[B] 31000[C]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-	-
Benzo(a)anthracene	µg/L	n/v	1.2[B] 3.9[C]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-	-
Benzo(a)pyrene	µg/L	0.2[A]	0.39[C]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-	-
Benzo(b)fluoranthene	µg/L	n/v	1.2[B] 3.9[C]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-	-
Benzo(g,h,i)perylene	µg/L	n/v	0.26[S1][B] 0.26[S1][C]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-	-
Benzo(k)fluoranthene	µg/L	n/v	12[B] 39[C]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-	-
Chrysene	µg/L	n/v	120[B] 390[C]	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	-	-
Dibenzo(a,h)anthracene	µg/L	n/v	0.12[B] 0.39[C]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-	-
Fluoranthene	µg/L	n/v	1500[B] 4100[C]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	-
Fluorene	µg/L	n/v	310[B] 4100[C]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	-
Indeno(1,2,3-cd)pyrene	µg/L	n/v	1.2[B] 3.9[C]	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	-	-
Naphthalene	µg/L	n/v	8.3[B] 2000[C]	< 1.0	< 1.0	< 1.0	0.66 NJ	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	-
Phenanthrene	µg/L	n/v	23[B] 310[C]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	-
Pyrene	µg/L	n/v	1100[B] 3100[C]	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-	-

Notes:

EPA-Region 9	EPA-Region 9 Regional Screening Table (November 2010)
[A]	EPA-Region 9 Regional Screening Levels
IDEM	Indiana Department of Environmental Management
[B]	IDEM RISC Residential Default Closure Level (IDEM, 2009)
[C]	IDEM RISC Industrial Default Closure Level (IDEM, 2009)
6.5[A]	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
< 0.50	Laboratory reportable detection limit exceeded standard.
< 0.03	The analyte was not detected above the laboratory reportable detection limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
[S1]	IDEM RISC - Residential / Industrial Default Closure Levels (IDEM, 2004)
NJ	The reported result is an estimated value.
PIII	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

TABLE 4
GROUNDWATER ELEVATION DATA
October 13, 2014
BP Products North America Inc.
Site #215 - Indianapolis Terminal
2500 N. Tibbs Avenue
Indianapolis, Marion County, IN 46222
Stantec Project No.: 182612296

Well ID	Sample Date	Top of Casing Elevation (feet)	Depth to Water (Feet)	GW Elevation (feet)	Depth to LNAPL	LNAPL Thickness (feet)	Measured Total Well Depth (from TOC)	Ground Elevation	Screen Elevation	
DHW-61	09-Sep-14	730.26	8.58	721.68	NA	NA	11.59	730.65	728.65	718.65
DHW-64	09-Sep-14	727.51	6.38	721.13	NA	NA	10.01	727.80	725.80	715.80
DHW-84	08-Sep-14	731.30	10.78	720.52	NA	NA	13.35	731.94	727.94	717.94
DHW-85	09-Sep-14	732.90	12.35	720.55	NA	NA	15.81	733.14	727.14	717.14
DHW-86	09-Sep-14	731.65	11.09	720.56	NA	NA	14.17	732.07	727.07	717.07
DHW-87	09-Sep-14	731.31	10.33	720.98	NA	NA	14.14	731.65	727.65	717.65
DHW-100	09-Sep-14	731.59	10.36	721.23	NA	NA	14.80	732.01	726.01	716.01
DHW-115	09-Sep-14	731.81	10.47	721.34	NA	NA	15.01	732.03	726.03	716.03
MW-11	09-Sep-14	731.81	11.16	720.65	NA	NA	15.21	731.93	726.43	716.43
MW-16	09-Sep-14	738.94	17.30	721.64	NA	NA	20.55	735.58	735.58	735.58
OW-31	09-Sep-14	734.38	14.46	719.92	NA	NA	15.88	730.81	728.21	718.21
OW-32	09-Sep-14	729.28	8.25	721.03	NA	NA	11.51	726.53	722.23	717.23
OW-33	09-Sep-14	735.60	14.99	720.61	NA	NA	16.95	731.81	727.81	717.81
OW-34	09-Sep-14	734.81	14.20	720.61	NA	NA	17.21	731.39	726.89	716.89
OW-36	08-Sep-14	731.63	11.84	719.79	NA	NA	13.70	732.13	732.13	732.13
OW-37	08-Sep-14	732.49	11.25	721.24	NA	NA	13.40	732.68	732.68	732.68
OW-39	09-Sep-14	729.72	9.54	720.18	NA	NA	13.46	729.36	724.36	719.36
PZ01D	09-Sep-14	733.10	11.97	721.13	NA	NA	13.16	999.99	986.99	985.99
PZ01S	09-Sep-14	733.02	8.98	724.04	NA	NA	17.17	999.99	990.99	989.99
PZ02D	09-Sep-14	729.44	8.28	721.16	NA	NA	9.91	999.99	990.99	989.99
PZ02S	09-Sep-14	729.33	8.18	721.15	NA	NA	14.09	999.99	994.99	993.99
PZ03D	09-Sep-14	730.23	9.10	721.13	NA	NA	10.11	999.99	989.99	988.99
PZ03S	09-Sep-14	730.14	9.03	721.11	NA	NA	13.80	999.99	993.99	992.99

Notes:

NA = Not Applicable

Current Top of Casing data collected during March 2011 survey. Top of Casing and Groundwater Elevation data generated prior to March 2011 have been checked but not verifie

No well construction logs available for MW-16.

Appendix A Surface Water Analytical Report

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

October 03, 2014

Mr. Kyle Amberger
Stantec
8770 Guion Rd
Suite B
Indianapolis, IN 46268

RE: Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Dear Mr. Amberger:
Enclosed are the analytical results for sample(s) received by the laboratory on September 19, 2014. 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,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
Project Manager

Enclosures

cc: Mr. Ryan Julien, Stantec

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project:	Indianapolis Terminal BP#215
Pace Project No.:	50104047

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky UST Certification #: 0042
Louisiana/NELAP Certification #: 04076
Ohio VAP Certification #: CL-0065
West Virginia Certification #: 330

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50104047001	**BPIT-LEC6B-091914**	Water	09/19/14 09:50	09/19/14 12:54
50104047002	**BPIT-LEC2A-091914**	Water	09/19/14 10:00	09/19/14 12:54
50104047003	**BPIT-LEC3B-091914**	Water	09/19/14 10:08	09/19/14 12:54
50104047004	**BPIT-LEC1A-091914**	Water	09/19/14 10:14	09/19/14 12:54
50104047005	**BPIT-LEC4B-091914**	Water	09/19/14 10:20	09/19/14 12:54
50104047006	**BPIT-LEC5B-091914**	Water	09/19/14 10:30	09/19/14 12:54
50104047007	**BPIT-LEC2B-091914**	Water	09/19/14 10:34	09/19/14 12:54
50104047008	**BPIT-LEC1B-091914**	Water	09/19/14 10:40	09/19/14 12:54
50104047009	**BPIT-LEC3A-091914**	Water	09/19/14 10:45	09/19/14 12:54
50104047010	**BPIT-DUP01-091914**	Water	09/19/14 08:00	09/19/14 12:54
50104047011	**BPIT-TRIPBLANK-091914**	Water	09/19/14 08:00	09/19/14 12:54

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50104047001	**BPIT-LEC6B-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047002	**BPIT-LEC2A-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047003	**BPIT-LEC3B-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047004	**BPIT-LEC1A-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047005	**BPIT-LEC4B-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047006	**BPIT-LEC5B-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047007	**BPIT-LEC2B-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047008	**BPIT-LEC1B-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047009	**BPIT-LEC3A-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047010	**BPIT-DUP01-091914**	EPA 8270 by SIM LVE	CEM	18
		EPA 524.2	RSW	7
50104047011	**BPIT-TRIPBLANK-091914**	EPA 524.2	RSW	7

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC6B-091914 **Lab ID: 50104047001** Collected: 09/19/14 09:50 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:04	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:04	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:04	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:04	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:04	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:04	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:04	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:04	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 01:04	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:04	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:04	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:04	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:04	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:04	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:04	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:04	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	46	%.	21-114	1	09/24/14 08:53	09/25/14 01:04	321-60-8	
p-Terphenyl-d14 (S)	75	%.	25-131	1	09/24/14 08:53	09/25/14 01:04	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 15:45	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 15:45	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 15:45	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 15:45	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	102	%.	70-130	1		10/02/14 15:45	460-00-4	
Dibromofluoromethane (S)	123	%.	70-130	1		10/02/14 15:45	1868-53-7	
Toluene-d8 (S)	97	%.	70-130	1		10/02/14 15:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC2A-091914 **Lab ID: 50104047002** Collected: 09/19/14 10:00 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:23	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:23	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:23	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:23	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:23	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 01:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:23	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:23	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:23	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:23	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:23	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:23	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	53	%.	21-114	1	09/24/14 08:53	09/25/14 01:23	321-60-8	
p-Terphenyl-d14 (S)	81	%.	25-131	1	09/24/14 08:53	09/25/14 01:23	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 16:18	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 16:18	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 16:18	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 16:18	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	96	%.	70-130	1		10/02/14 16:18	460-00-4	
Dibromofluoromethane (S)	108	%.	70-130	1		10/02/14 16:18	1868-53-7	
Toluene-d8 (S)	97	%.	70-130	1		10/02/14 16:18	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC3B-091914 **Lab ID: 50104047003** Collected: 09/19/14 10:08 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:41	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:41	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:41	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:41	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:41	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:41	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:41	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:41	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 01:41	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:41	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:41	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:41	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:41	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:41	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:41	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:41	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	61	%.	21-114	1	09/24/14 08:53	09/25/14 01:41	321-60-8	
p-Terphenyl-d14 (S)	89	%.	25-131	1	09/24/14 08:53	09/25/14 01:41	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 04:12	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 04:12	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 04:12	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 04:12	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	98	%.	70-130	1		10/02/14 04:12	460-00-4	
Dibromofluoromethane (S)	101	%.	70-130	1		10/02/14 04:12	1868-53-7	
Toluene-d8 (S)	97	%.	70-130	1		10/02/14 04:12	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC1A-091914 **Lab ID: 50104047004** Collected: 09/19/14 10:14 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:59	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:59	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:59	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:59	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:59	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:59	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 01:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:59	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:59	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:59	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 01:59	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:59	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:59	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 01:59	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	54	%.	21-114	1	09/24/14 08:53	09/25/14 01:59	321-60-8	
p-Terphenyl-d14 (S)	80	%.	25-131	1	09/24/14 08:53	09/25/14 01:59	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 04:45	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 04:45	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 04:45	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 04:45	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	100	%.	70-130	1		10/02/14 04:45	460-00-4	
Dibromofluoromethane (S)	101	%.	70-130	1		10/02/14 04:45	1868-53-7	
Toluene-d8 (S)	101	%.	70-130	1		10/02/14 04:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC4B-091914 **Lab ID: 50104047005** Collected: 09/19/14 10:20 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:17	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:17	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:17	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:17	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:17	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 02:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:17	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:17	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:17	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:17	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:17	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:17	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:17	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	64	%.	21-114	1	09/24/14 08:53	09/25/14 02:17	321-60-8	
p-Terphenyl-d14 (S)	79	%.	25-131	1	09/24/14 08:53	09/25/14 02:17	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 05:18	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 05:18	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 05:18	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 05:18	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	96	%.	70-130	1		10/02/14 05:18	460-00-4	
Dibromofluoromethane (S)	100	%.	70-130	1		10/02/14 05:18	1868-53-7	
Toluene-d8 (S)	99	%.	70-130	1		10/02/14 05:18	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC5B-091914 **Lab ID: 50104047006** Collected: 09/19/14 10:30 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:35	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:35	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:35	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:35	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:35	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:35	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:35	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 02:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:35	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:35	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:35	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:35	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:35	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:35	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:35	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	59	%.	21-114	1	09/24/14 08:53	09/25/14 02:35	321-60-8	
p-Terphenyl-d14 (S)	87	%.	25-131	1	09/24/14 08:53	09/25/14 02:35	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 05:51	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 05:51	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 05:51	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 05:51	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	100	%.	70-130	1		10/02/14 05:51	460-00-4	
Dibromofluoromethane (S)	102	%.	70-130	1		10/02/14 05:51	1868-53-7	
Toluene-d8 (S)	100	%.	70-130	1		10/02/14 05:51	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC2B-091914 **Lab ID: 50104047007** Collected: 09/19/14 10:34 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:53	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:53	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:53	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:53	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:53	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:53	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 02:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:53	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:53	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 02:53	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:53	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:53	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 02:53	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	49	%.	21-114	1	09/24/14 08:53	09/25/14 02:53	321-60-8	
p-Terphenyl-d14 (S)	75	%.	25-131	1	09/24/14 08:53	09/25/14 02:53	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 06:25	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 06:25	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 06:25	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 06:25	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	95	%.	70-130	1		10/02/14 06:25	460-00-4	
Dibromofluoromethane (S)	100	%.	70-130	1		10/02/14 06:25	1868-53-7	
Toluene-d8 (S)	99	%.	70-130	1		10/02/14 06:25	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC1B-091914 **Lab ID: 50104047008** Collected: 09/19/14 10:40 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:11	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:11	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:11	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:11	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:11	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:11	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:11	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:11	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 03:11	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:11	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:11	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:11	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:11	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:11	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:11	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:11	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	55	%.	21-114	1	09/24/14 08:53	09/25/14 03:11	321-60-8	
p-Terphenyl-d14 (S)	78	%.	25-131	1	09/24/14 08:53	09/25/14 03:11	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 06:58	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 06:58	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 06:58	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 06:58	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	98	%.	70-130	1		10/02/14 06:58	460-00-4	
Dibromofluoromethane (S)	103	%.	70-130	1		10/02/14 06:58	1868-53-7	
Toluene-d8 (S)	96	%.	70-130	1		10/02/14 06:58	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-LEC3A-091914 **Lab ID: 50104047009** Collected: 09/19/14 10:45 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:29	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:29	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:29	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:29	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:29	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 03:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:29	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:29	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 03:29	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:29	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:29	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 03:29	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	57	%.	21-114	1	09/24/14 08:53	09/25/14 03:29	321-60-8	
p-Terphenyl-d14 (S)	76	%.	25-131	1	09/24/14 08:53	09/25/14 03:29	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 08:04	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 08:04	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 08:04	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 08:04	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	94	%.	70-130	1		10/02/14 08:04	460-00-4	
Dibromofluoromethane (S)	104	%.	70-130	1		10/02/14 08:04	1868-53-7	
Toluene-d8 (S)	98	%.	70-130	1		10/02/14 08:04	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-DUP01-091914 **Lab ID: 50104047010** Collected: 09/19/14 08:00 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 04:23	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 04:23	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 04:23	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 04:23	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 04:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 04:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 04:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 04:23	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/24/14 08:53	09/25/14 04:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 04:23	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 04:23	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 04:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/24/14 08:53	09/25/14 04:23	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 04:23	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 04:23	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/24/14 08:53	09/25/14 04:23	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	63	%.	21-114	1	09/24/14 08:53	09/25/14 04:23	321-60-8	
p-Terphenyl-d14 (S)	82	%.	25-131	1	09/24/14 08:53	09/25/14 04:23	1718-51-0	
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 07:31	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 07:31	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 07:31	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 07:31	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	95	%.	70-130	1		10/02/14 07:31	460-00-4	
Dibromofluoromethane (S)	102	%.	70-130	1		10/02/14 07:31	1868-53-7	
Toluene-d8 (S)	98	%.	70-130	1		10/02/14 07:31	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Sample: BPIT-TRIPBLANK-091914 **Lab ID: 50104047011** Collected: 09/19/14 08:00 Received: 09/19/14 12:54 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV	Analytical Method: EPA 524.2							
Benzene	ND	ug/L	0.50	1		10/02/14 16:51	71-43-2	N2
Ethylbenzene	ND	ug/L	0.50	1		10/02/14 09:44	100-41-4	N2
Toluene	ND	ug/L	1.0	1		10/02/14 09:44	108-88-3	N2
Xylene (Total)	ND	ug/L	1.5	1		10/02/14 09:44	1330-20-7	N2
Surrogates								
4-Bromofluorobenzene (S)	99	%.	70-130	1		10/02/14 09:44	460-00-4	
Dibromofluoromethane (S)	100	%.	70-130	1		10/02/14 09:44	1868-53-7	
Toluene-d8 (S)	97	%.	70-130	1		10/02/14 09:44	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

QC Batch: MSV/69288 Analysis Method: EPA 524.2
QC Batch Method: EPA 524.2 Analysis Description: 524.2 MSV
Associated Lab Samples: 50104047003, 50104047004, 50104047005, 50104047006, 50104047007, 50104047008, 50104047009, 50104047010, 50104047011

METHOD BLANK: 1166160 Matrix: Water
Associated Lab Samples: 50104047003, 50104047004, 50104047005, 50104047006, 50104047007, 50104047008, 50104047009, 50104047010, 50104047011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	10/02/14 02:33	N2
Ethylbenzene	ug/L	ND	0.50	10/02/14 02:33	N2
Toluene	ug/L	ND	1.0	10/02/14 02:33	N2
Xylene (Total)	ug/L	ND	1.5	10/02/14 02:33	N2
4-Bromofluorobenzene (S)	%.	100	70-130	10/02/14 02:33	
Dibromofluoromethane (S)	%.	99	70-130	10/02/14 02:33	
Toluene-d8 (S)	%.	98	70-130	10/02/14 02:33	

LABORATORY CONTROL SAMPLE: 1166161

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	49.2	98	70-130	N2
Ethylbenzene	ug/L	50	50.6	101	70-130	N2
Toluene	ug/L	50	48.3	97	70-130	N2
Xylene (Total)	ug/L	150	153	102	70-130	N2
4-Bromofluorobenzene (S)	%.			102	70-130	
Dibromofluoromethane (S)	%.			100	70-130	
Toluene-d8 (S)	%.			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1166162 1166163

Parameter	Units	50104047009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	49.2	45.7	98	91	70-130	7	20	N2
Ethylbenzene	ug/L	ND	50	50	50.7	47.7	101	95	70-130	6	20	N2
Toluene	ug/L	ND	50	50	47.3	44.8	94	89	70-130	5	20	N2
Xylene (Total)	ug/L	ND	150	150	149	141	100	94	70-130	6	20	N2
4-Bromofluorobenzene (S)	%.						105	105	70-130			
Dibromofluoromethane (S)	%.						103	101	70-130			
Toluene-d8 (S)	%.						98	99	70-130			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

QC Batch: MSV/69365 Analysis Method: EPA 524.2
QC Batch Method: EPA 524.2 Analysis Description: 524.2 MSV
Associated Lab Samples: 50104047001, 50104047002

METHOD BLANK: 1167454 Matrix: Water
Associated Lab Samples: 50104047001, 50104047002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	10/02/14 15:12	N2
Ethylbenzene	ug/L	ND	0.50	10/02/14 15:12	N2
Toluene	ug/L	ND	1.0	10/02/14 15:12	N2
Xylene (Total)	ug/L	ND	1.5	10/02/14 15:12	N2
4-Bromofluorobenzene (S)	%.	99	70-130	10/02/14 15:12	
Dibromofluoromethane (S)	%.	113	70-130	10/02/14 15:12	
Toluene-d8 (S)	%.	97	70-130	10/02/14 15:12	

LABORATORY CONTROL SAMPLE: 1167455

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	45.1	90	70-130	N2
Ethylbenzene	ug/L	50	45.6	91	70-130	N2
Toluene	ug/L	50	42.8	86	70-130	N2
Xylene (Total)	ug/L	150	135	90	70-130	N2
4-Bromofluorobenzene (S)	%.			95	70-130	
Dibromofluoromethane (S)	%.			97	70-130	
Toluene-d8 (S)	%.			100	70-130	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

QC Batch: OEXT/36991 Analysis Method: EPA 8270 by SIM LVE
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH LV by SIM MSSV
Associated Lab Samples: 50104047001, 50104047002, 50104047003, 50104047004, 50104047005, 50104047006, 50104047007, 50104047008, 50104047009, 50104047010

METHOD BLANK: 1161416 Matrix: Water
Associated Lab Samples: 50104047001, 50104047002, 50104047003, 50104047004, 50104047005, 50104047006, 50104047007, 50104047008, 50104047009, 50104047010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	1.0	09/24/14 22:40	
Acenaphthylene	ug/L	ND	1.0	09/24/14 22:40	
Anthracene	ug/L	ND	0.10	09/24/14 22:40	
Benzo(a)anthracene	ug/L	ND	0.10	09/24/14 22:40	
Benzo(a)pyrene	ug/L	ND	0.10	09/24/14 22:40	
Benzo(b)fluoranthene	ug/L	ND	0.10	09/24/14 22:40	
Benzo(g,h,i)perylene	ug/L	ND	0.10	09/24/14 22:40	
Benzo(k)fluoranthene	ug/L	ND	0.10	09/24/14 22:40	
Chrysene	ug/L	ND	0.50	09/24/14 22:40	
Dibenz(a,h)anthracene	ug/L	ND	0.10	09/24/14 22:40	
Fluoranthene	ug/L	ND	1.0	09/24/14 22:40	
Fluorene	ug/L	ND	1.0	09/24/14 22:40	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	09/24/14 22:40	
Naphthalene	ug/L	ND	1.0	09/24/14 22:40	
Phenanthrene	ug/L	ND	1.0	09/24/14 22:40	
Pyrene	ug/L	ND	1.0	09/24/14 22:40	
2-Fluorobiphenyl (S)	%.	39	21-114	09/24/14 22:40	
p-Terphenyl-d14 (S)	%.	70	25-131	09/24/14 22:40	

LABORATORY CONTROL SAMPLE: 1161417

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	5.7	57	39-117	
Acenaphthylene	ug/L	10	5.5	55	40-120	
Anthracene	ug/L	10	7.6	76	48-126	
Benzo(a)anthracene	ug/L	10	7.9	79	51-134	
Benzo(a)pyrene	ug/L	10	7.6	76	48-141	
Benzo(b)fluoranthene	ug/L	10	7.1	71	49-139	
Benzo(g,h,i)perylene	ug/L	10	6.0	60	44-134	
Benzo(k)fluoranthene	ug/L	10	7.9	79	48-140	
Chrysene	ug/L	10	8.7	87	53-136	
Dibenz(a,h)anthracene	ug/L	10	5.8	58	44-132	
Fluoranthene	ug/L	10	8.4	84	50-135	
Fluorene	ug/L	10	6.5	65	44-124	
Indeno(1,2,3-cd)pyrene	ug/L	10	5.8	58	45-132	
Naphthalene	ug/L	10	4.8	48	30-112	
Phenanthrene	ug/L	10	7.3	73	47-128	
Pyrene	ug/L	10	8.1	81	50-134	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

LABORATORY CONTROL SAMPLE: 1161417

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%.			51	21-114	
p-Terphenyl-d14 (S)	%.			82	25-131	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1161418 1161419

Parameter	Units	50104047009 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	10	10	7.0	5.5	70	55	28-116	23	20	R1
Acenaphthylene	ug/L	ND	10	10	6.9	5.4	69	54	34-115	25	20	R1
Anthracene	ug/L	ND	10	10	8.2	7.3	82	73	39-121	12	20	
Benzo(a)anthracene	ug/L	ND	10	10	6.6	6.1	66	61	31-127	8	20	
Benzo(a)pyrene	ug/L	ND	10	10	4.2	3.7	42	37	10-121	15	20	
Benzo(b)fluoranthene	ug/L	ND	10	10	4.3	3.9	43	39	10-119	10	20	
Benzo(g,h,i)perylene	ug/L	ND	10	10	2.5	2.4	25	24	10-108	4	20	
Benzo(k)fluoranthene	ug/L	ND	10	10	4.6	4.1	46	41	10-118	11	20	
Chrysene	ug/L	ND	10	10	7.0	6.3	70	63	32-127	11	20	
Dibenz(a,h)anthracene	ug/L	ND	10	10	2.4	2.3	24	23	10-104	4	20	
Fluoranthene	ug/L	ND	10	10	8.5	8.0	85	80	38-131	5	20	
Fluorene	ug/L	ND	10	10	7.4	6.0	74	60	33-121	21	20	R1
Indeno(1,2,3-cd)pyrene	ug/L	ND	10	10	2.5	2.3	25	23	10-108	6	20	
Naphthalene	ug/L	ND	10	10	6.4	5.2	64	52	16-119	22	20	R1
Phenanthrene	ug/L	ND	10	10	7.8	7.0	78	70	32-130	12	20	
Pyrene	ug/L	ND	10	10	8.1	7.7	81	77	39-131	4	20	
2-Fluorobiphenyl (S)	%.						66	51	21-114			
p-Terphenyl-d14 (S)	%.						73	69	25-131			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

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.

PQL - Practical Quantitation Limit.

RL - Reporting 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.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

N2	The lab does not hold TNI accreditation for this parameter.
R1	RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Indianapolis Terminal BP#215
Pace Project No.: 50104047

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50104047001	**BPIT-LEC6B-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047002	**BPIT-LEC2A-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047003	**BPIT-LEC3B-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047004	**BPIT-LEC1A-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047005	**BPIT-LEC4B-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047006	**BPIT-LEC5B-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047007	**BPIT-LEC2B-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047008	**BPIT-LEC1B-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047009	**BPIT-LEC3A-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047010	**BPIT-DUP01-091914**	EPA 3510	OEXT/36991	EPA 8270 by SIM LVE	MSSV/16181
50104047001	**BPIT-LEC6B-091914**	EPA 524.2	MSV/69365		
50104047002	**BPIT-LEC2A-091914**	EPA 524.2	MSV/69365		
50104047003	**BPIT-LEC3B-091914**	EPA 524.2	MSV/69288		
50104047004	**BPIT-LEC1A-091914**	EPA 524.2	MSV/69288		
50104047005	**BPIT-LEC4B-091914**	EPA 524.2	MSV/69288		
50104047006	**BPIT-LEC5B-091914**	EPA 524.2	MSV/69288		
50104047007	**BPIT-LEC2B-091914**	EPA 524.2	MSV/69288		
50104047008	**BPIT-LEC1B-091914**	EPA 524.2	MSV/69288		
50104047009	**BPIT-LEC3A-091914**	EPA 524.2	MSV/69288		
50104047010	**BPIT-DUP01-091914**	EPA 524.2	MSV/69288		
50104047011	**BPIT-TRIPBLANK-091914**	EPA 524.2	MSV/69288		

Laboratory Management Program LaMP Chain of Custody Record

KBH

Page 1 of 2

BP Site Node Path: BP > USA > IN > Marion > Indianapolis Termina | Req Due Date (mm/dd/yy): | Rush TAT: Yes ___ No X

BP Facility No: # 215 | Lab Work Order Number: 50104047

Lab Name:	Pace Analytical	Facility Address:	2500 North Tibbs Ave.	Consultant/Contractor:	Stantec Consulting Corp.
Lab Address:	7726 Moller Road, Indianapolis, IN 46268	City, State, ZIP Code:	Indianapolis, IN 46222	Consultant/Contractor Project No:	182612301.601.681
Lab PM:	Tina Sayer	Lead Regulatory Agency:	EPA	Address:	8770 Guion Rd., Suite B, Indianapolis, IN 46268
Lab Phone:	317-875-5894	California Global ID No.:		Consultant/Contractor PM:	Kyle Amberger
Lab Shipping Accnt:		Enfos Proposal No:	007VX-0017	Phone: 317-876-8375 x 240	Email: kyle.amberger@stantec.com
Lab Bottle Order No:		Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email EDD To: Kyle Amberger	and to lab.enfosdoc@bp.com
Other Info:		Stage: OMM 60	Activity: Project Spend 81	Invoice To:	BP X Contractor ___

BP Project Manager (PM): Bruno Mancini

BP PM Phone: 216-271-8852

BP PM Email: bruno.mancini@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: BTEX by 524	PAHs by 8270SIM	MS/MSD	Report Type & QC Level
001	BP IT-LEC6B-091914	9/19/14	950		X			5	2			3		X	X		
002	BP IT-LEC2A-091914	9/19/14	1000		X			5	2			3		X	X		
003	BP IT-LEC3B-091914	9/19/14	1008		X			5	2			3		X	X		
004	BP IT-LEC1A-091914	9/19/14	1014		X			5	2			3		X	X		
005	BP IT-LEC4B-091914	9/19/14	1020		X			5	2			3		X	X		
006	BP IT-LEC5B-091914	9/19/14	1030		X			5	2			3		X	X		
007	BP IT-LEC2B-091914	9/19/14	1034		X			5	2			3		X	X		
008	BP IT-LEC1B-091914	9/19/14	1040		X			5	2			3		X	X		
009	BP IT-LEC3A-091914	9/19/14	1045		X			15	6			9		X	X	X	3x Sample Vol. for MS/MSD
010	BP IT-DUP01-091914	9/19/14	—		X			5	2			3		X	X		

Standard X

Full Data Package ___

Comments

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

Sampler's Name:	Nick Jose	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Stantec	[signature] / Stantec	9/19/14	1254	[signature] / PACE	9/19/14	1254
Shipment Method:	Hand Delivered	Ship Date: —					
Shipment Tracking No:	—						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 1.2 °C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Laboratory Management Program LaMP Chain of Custody Record

BP Site Node Path: BP > USA > IN > Marion > Indianapolis Termina | Req Due Date (mm/dd/yy): _____ | Rush TAT: Yes ___ No X

BP Facility No: # 215 | Lab Work Order Number: 50104047

Lab Name: Pace Analytical	Facility Address: 2500 North Tibbs Ave.	Consultant/Contractor: Stantec Consulting Corp.
Lab Address: 7726 Moller Road, Indianapolis, IN 46268	City, State, ZIP Code: Indianapolis, IN 46222	Consultant/Contractor Project No: 182612301.601.681
Lab PM: Tina Sayer	Lead Regulatory Agency: EPA	Address: 8770 Guion Rd., Suite B, Indianapolis, IN 46268
Lab Phone: 317-875-5894	California Global ID No.:	Consultant/Contractor PM: Kyle Amberger
Lab Shipping Accnt:	Enfos Proposal No: 007VX-0017	Phone: 317-876-8375 x 240 Email: kyle.amberger@stantec.com
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: Kyle Amberger and to lab.enfosdoc@bp.com
Other Info:	Stage: OMM 60 Activity: Project Spend 81	Invoice To: BP X Contractor ___

BP Project Manager (PM): Bruno Mancini

BP PM Phone: 216-271-8852

BP PM Email: bruno.mancini@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: BTEX by 524	Requested Analyses: PAHs by 8270SIM
01	BP IT-TRIPBLANK-091914	9/19/14	—		X			3				3		X	

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

Comments

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

Sampler's Name: Nick Tosa	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stantec	[signature] / Stantec	9/19/14	1254	[signature] / PACE	9/19/14	1254
Shipment Method: Hand Delivered Ship Date: —						
Shipment Tracking No: —						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 1.2 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Sample Condition Upon Receipt

Pace Analytical

Client Name: BP STANTEC Project # 50104047

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

Tracking #: _____

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

Date/Time 5035A kits placed in freezer _____

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other foam

Thermometer 1 2 3 4 5 6 (A) B C D E F **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.2°C **Ice Visible in Sample Containers:** ☐ yes ☒ no

(Corrected, if applicable)

Temp should be above freezing to 6°C **Comments:**

Date and initials of person examining contents: 9/19/14 SH

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.
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	5.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	6.
Containers Intact:	☒Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☒Yes	☐No	☐N/A	8.
All containers needing acid/base pres. have been checked? **exceptions: VOA, coliform, TOC, O&G** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted.	☐Yes	☐No	☒N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	10.
Trip Blank Present:	☒Yes	☐No	☐N/A	11.
Trip Blank Custody Seals Present	☒Yes	☐No	☐N/A	
Project Manager Review:				
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	12.
Sufficient Volume:	☒Yes	☐No	☐N/A	13.
Correct Containers Used:	☒Yes	☐No	☐N/A	14.

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: J Sayer **Date:** 9/19/14

Form F-IN-Q-290-rev.06, 05Aug2014

Sample Container Count

CLIENT: BP STANTEC

COC PAGE 1, 2 of 2

COC ID# _____

Project # 50104047

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R	4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	BP1U	SPST	_____	pH <2	pH>12	Comments
1	3			2																	
2	↓			↓																	
3																					
4																					
5																					
6																					
7																					
8	↓			↓																	
9	9			6																	
10	3			2																	
11	3																				TB
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber gl	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber gla	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber g	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber g	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber g	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gl	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

Appendix B Surface Water Data Validation

Stantec Analytical Validation Checklist — Report No. 101614-EC-01

Project Name: BP – Indy Terminal # 215	Project Number: 182612296
Stantec Validator: Elizabeth Crowley	Laboratory: Pace Analytical, Indianapolis, IL
Date Validated: 10/16/14	Laboratory Project Number: 50104047
Sample Start-End Date: 09/19/14	Laboratory Report Date: 10/03/14

Parameters Validated: Volatile Organic Compounds (VOC) by 524.2 and Poly Aromatic Hydrocarbons by 8270 SIM LVE

Associated Chain(s) of Custody – no numbers/10 aqueous field samples and 1 Trip Blank
Samples Validated – BPIT-LEC2A-091914 and BPIT-LEC1B-091914

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ The analyte 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 analyte in the sample.
N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?		X
Comments:		
3. Were sample Chain-of-Custody forms complete?	X	
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	X	
Comments:		
5. Were sample holding times met?	X	
Comments:		
6. Were correct concentration units reported?	X	
Comments:		

7. Were detections found in laboratory blank samples?		Yes	No X
Comments:			
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?		Yes	No X
Comments:			
9. Were instrument calibrations within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
10. Were surrogate recoveries within laboratory control limits?		Yes X	No
Comments:			
11. Were laboratory control sample recoveries within laboratory control limits?		Yes X	No
Comments:			
12. Were matrix spike recoveries within laboratory control limits?		Yes X	No
Comments:			
13. Were RPDs within control limits?		Yes X	No
Comments:			
14. Were dilutions required on any samples?		Yes	No X
Comments:			
15. Were Tentatively Identified Compounds (TIC) present?		Yes	No X
Comments:			
16. Were organic system performance criteria met?	NA	Yes	No
Comments: Level II data package – no data provided.			
17. Were GC/MS internal standards within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
18. Were inorganic system performance criteria met?	NA	Yes	No
Comments: No inorganic samples submitted.			

19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample No. Primary Sample No.		Yes X	No
Comments: All results non-detect, RPD within limits.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other: Validation Limit		Yes X	No
Comments: Ten percent or minimum one sample validated. Validation criteria, flags and level of confidence apply to validated sample(s) only.			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Appendix C Variances

Stantec	Variance / Time Delay Form	ERPA-302	
		Page 1 of 1	
		Rev. 1.1	Apr 2011

Site Name BP- Indianapolis Terminal

Location 2500 N. Tibbs Avenue

Stantec Project No. 182612296

The purpose of this form is to document variances from the Work Plan scope or design specifications and/or document instances of time delays. Fax or deliver to the Stantec project office with the daily report. Please print legibly.

Variance / Time Delay Began	Variance / Time Delay Ended	Duration of Variance / Time Delay
9/11/2014	9/12/2014	2 days
Date & Time	Date & Time	

Description of Variance

Work Plan Task / Spec Section: SOP – ERPA-005 (Section 7.1)

Reason for Delay AND/OR Variance

Prior to sampling, OW-32, DHW-64, DHW-87 and DHW-106 were sampled despite the apparent instability of one of the geochemical parameters, oxidation reduction potential (ORP). This deviates from the U.S. EPA approved Low Flow SOP (ERPA-005) because all parameters must be stable or 3 well volumes has to be purged prior to sampling.

Stantec Personnel Kyle Amberger
Print

Signature _____ **Date** 9/15/2014

THIS INFORMATION FOR AUTHORIZED COMPANY USE ONLY
STANTEC CONSULTING

Stantec	Variance / Time Delay Form	ERPA-302	
		Page 1 of 1	
		Rev. 1.1	Apr 2011

Site Name BP- Indianapolis Terminal

Location 2500 N. Tibbs Avenue

Stantec Project No. 182612296

The purpose of this form is to document variances from the Work Plan scope or design specifications and/or document instances of time delays. Fax or deliver to the Stantec project office with the daily report. Please print legibly.

Variance / Time Delay Began	Variance / Time Delay Ended	Duration of Variance / Time Delay
9/12/2014	9/12/2014	1 day
Date & Time	Date & Time	

Description of Variance

Work Plan Task / Spec Section: SOP – ERPA-005 (Section 7.1)

Reason for Delay AND/OR Variance

Prior to sampling, DHW-32 and DHW-106 were sampled without meeting the specified turbidity stability requirements. This deviates from the U.S. EPA approved Low Flow SOP (ERPA-005) because all parameters must be stable or 3 well volumes has to be purged prior to sampling.

Stantec Personnel Kyle Amberger
Print

Signature _____ **Date** 9/15/2014

THIS INFORMATION FOR AUTHORIZED COMPANY USE ONLY
STANTEC CONSULTING

Appendix D Groundwater Analytical Report

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

September 23, 2014

Mr. Kyle Amberger
Stantec
8770 Guion Rd
Suite B
Indianapolis, IN 46268

RE: Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Dear Mr. Amberger:
Enclosed are the analytical results for sample(s) received by the laboratory on September 11, 2014. 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,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
Project Manager

Enclosures

cc: Mr. Ryan Julien, Stantec

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project:	Indianapolis Terminal BP#215
Pace Project No.:	50103607

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky UST Certification #: 0042
Louisiana/NELAP Certification #: 04076
Ohio VAP Certification #: CL-0065
West Virginia Certification #: 330

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50103607001	**BPIT-DHW81-091014**	Water	09/10/14 11:06	09/11/14 15:05
50103607002	**BPIT-OW14-091014**	Water	09/10/14 13:11	09/11/14 15:05
50103607003	**BPIT-DHW78-091014**	Water	09/10/14 17:33	09/11/14 15:05
50103607004	**BPIT-EB01-091014**	Water	09/10/14 18:00	09/11/14 15:05
50103607005	**BPIT-TripBlank-091014**	Water	09/10/14 18:00	09/11/14 15:05

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50103607001	**BPIT-DHW81-091014**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	DAE	7
50103607002	**BPIT-OW14-091014**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	DAE	7
50103607003	**BPIT-DHW78-091014**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	DAE	7
50103607004	**BPIT-EB01-091014**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	DAE	7
50103607005	**BPIT-TripBlank-091014**	EPA 8260	DAE	7

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Sample: BPIT-DHW81-091014 **Lab ID: 50103607001** Collected: 09/10/14 11:06 Received: 09/11/14 15:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 10:44	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 10:44	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 10:44	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 10:44	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 10:44	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 10:44	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 10:44	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 10:44	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/12/14 09:19	09/15/14 10:44	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 10:44	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 10:44	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 10:44	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 10:44	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 10:44	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 10:44	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 10:44	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	52	%.	21-114	1	09/12/14 09:19	09/15/14 10:44	321-60-8	
p-Terphenyl-d14 (S)	71	%.	25-131	1	09/12/14 09:19	09/15/14 10:44	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/22/14 20:59	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/22/14 20:59	100-41-4	
Toluene	ND	ug/L	5.0	1		09/22/14 20:59	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/22/14 20:59	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	79-116	1		09/22/14 20:59	1868-53-7	
Toluene-d8 (S)	100	%.	81-110	1		09/22/14 20:59	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	80-114	1		09/22/14 20:59	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Sample: BPIT-OW14-091014 **Lab ID: 50103607002** Collected: 09/10/14 13:11 Received: 09/11/14 15:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 11:38	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 11:38	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 11:38	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 11:38	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 11:38	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 11:38	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 11:38	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 11:38	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/12/14 09:19	09/15/14 11:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 11:38	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 11:38	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 11:38	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 11:38	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 11:38	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 11:38	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 11:38	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	66	%.	21-114	1	09/12/14 09:19	09/15/14 11:38	321-60-8	
p-Terphenyl-d14 (S)	90	%.	25-131	1	09/12/14 09:19	09/15/14 11:38	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/22/14 14:12	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/22/14 14:12	100-41-4	
Toluene	ND	ug/L	5.0	1		09/22/14 14:12	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/22/14 14:12	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97	%.	79-116	1		09/22/14 14:12	1868-53-7	
Toluene-d8 (S)	100	%.	81-110	1		09/22/14 14:12	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	80-114	1		09/22/14 14:12	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Sample: BPIT-DHW78-091014 **Lab ID: 50103607003** Collected: 09/10/14 17:33 Received: 09/11/14 15:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:32	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:32	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:32	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:32	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:32	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:32	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/12/14 09:19	09/15/14 12:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:32	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:32	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:32	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:32	193-39-5	
Naphthalene	**0.66J**	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:32	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:32	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:32	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%.	21-114	1	09/12/14 09:19	09/15/14 12:32	321-60-8	
p-Terphenyl-d14 (S)	81	%.	25-131	1	09/12/14 09:19	09/15/14 12:32	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/22/14 19:54	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/22/14 19:54	100-41-4	
Toluene	ND	ug/L	5.0	1		09/22/14 19:54	108-88-3	
Xylene (Total)	**5.1J**	ug/L	10.0	1		09/22/14 19:54	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	79-116	1		09/22/14 19:54	1868-53-7	
Toluene-d8 (S)	99	%.	81-110	1		09/22/14 19:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	80-114	1		09/22/14 19:54	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Sample: BPIT-EB01-091014 **Lab ID: 50103607004** Collected: 09/10/14 18:00 Received: 09/11/14 15:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:50	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:50	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:50	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:50	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:50	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:50	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:50	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:50	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/12/14 09:19	09/15/14 12:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:50	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:50	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/12/14 09:19	09/15/14 12:50	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:50	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:50	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/12/14 09:19	09/15/14 12:50	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	53	%.	21-114	1	09/12/14 09:19	09/15/14 12:50	321-60-8	
p-Terphenyl-d14 (S)	101	%.	25-131	1	09/12/14 09:19	09/15/14 12:50	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/22/14 20:26	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/22/14 20:26	100-41-4	
Toluene	ND	ug/L	5.0	1		09/22/14 20:26	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/22/14 20:26	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	79-116	1		09/22/14 20:26	1868-53-7	
Toluene-d8 (S)	97	%.	81-110	1		09/22/14 20:26	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	80-114	1		09/22/14 20:26	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Sample: BPIT-TripBlank-091014 **Lab ID: 50103607005** Collected: 09/10/14 18:00 Received: 09/11/14 15:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/22/14 13:40	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/22/14 13:40	100-41-4	
Toluene	ND	ug/L	5.0	1		09/22/14 13:40	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/22/14 13:40	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	79-116	1		09/22/14 13:40	1868-53-7	
Toluene-d8 (S)	98	%.	81-110	1		09/22/14 13:40	2037-26-5	
4-Bromofluorobenzene (S)	94	%.	80-114	1		09/22/14 13:40	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

QC Batch: MSV/68944 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 50103607001, 50103607003, 50103607004

METHOD BLANK: 1160510 Matrix: Water
Associated Lab Samples: 50103607001, 50103607003, 50103607004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	5.0	09/22/14 12:51	
Ethylbenzene	ug/L	ND	5.0	09/22/14 12:51	
Toluene	ug/L	ND	5.0	09/22/14 12:51	
Xylene (Total)	ug/L	ND	10.0	09/22/14 12:51	
4-Bromofluorobenzene (S)	%.	95	80-114	09/22/14 12:51	
Dibromofluoromethane (S)	%.	101	79-116	09/22/14 12:51	
Toluene-d8 (S)	%.	97	81-110	09/22/14 12:51	

LABORATORY CONTROL SAMPLE: 1160511

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	43.5	87	74-122	
Ethylbenzene	ug/L	50	48.6	97	66-133	
Toluene	ug/L	50	43.2	86	72-122	
Xylene (Total)	ug/L	150	145	96	70-124	
4-Bromofluorobenzene (S)	%.			98	80-114	
Dibromofluoromethane (S)	%.			105	79-116	
Toluene-d8 (S)	%.			99	81-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1160512 1160513

Parameter	Units	50103607001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	44.3	42.6	89	85	62-129	4	20	
Ethylbenzene	ug/L	ND	50	50	49.2	47.7	98	95	28-153	3	20	
Toluene	ug/L	ND	50	50	43.6	42.9	87	86	50-132	2	20	
Xylene (Total)	ug/L	ND	150	150	144	140	96	93	29-145	3	20	
4-Bromofluorobenzene (S)	%.						101	101	80-114			
Dibromofluoromethane (S)	%.						112	107	79-116			
Toluene-d8 (S)	%.						97	101	81-110			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

QC Batch: MSV/68946
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 50103607002, 50103607005

METHOD BLANK: 1160516 Matrix: Water
Associated Lab Samples: 50103607002, 50103607005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	5.0	09/22/14 13:07	
Ethylbenzene	ug/L	ND	5.0	09/22/14 13:07	
Toluene	ug/L	ND	5.0	09/22/14 13:07	
Xylene (Total)	ug/L	ND	10.0	09/22/14 13:07	
4-Bromofluorobenzene (S)	%.	97	80-114	09/22/14 13:07	
Dibromofluoromethane (S)	%.	100	79-116	09/22/14 13:07	
Toluene-d8 (S)	%.	99	81-110	09/22/14 13:07	

LABORATORY CONTROL SAMPLE: 1160517

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	49.1	98	74-122	
Ethylbenzene	ug/L	50	50.7	101	66-133	
Toluene	ug/L	50	46.8	94	72-122	
Xylene (Total)	ug/L	150	147	98	70-124	
4-Bromofluorobenzene (S)	%.			99	80-114	
Dibromofluoromethane (S)	%.			98	79-116	
Toluene-d8 (S)	%.			100	81-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1160518 1160519

Parameter	Units	50103607002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	49.6	49.2	99	98	62-129	1	20	
Ethylbenzene	ug/L	ND	50	50	49.1	50.0	98	100	28-153	2	20	
Toluene	ug/L	ND	50	50	45.3	46.2	91	92	50-132	2	20	
Xylene (Total)	ug/L	ND	150	150	144	144	96	96	29-145	0	20	
4-Bromofluorobenzene (S)	%.						102	100	80-114			
Dibromofluoromethane (S)	%.						100	100	79-116			
Toluene-d8 (S)	%.						100	100	81-110			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

QC Batch: OEXT/36900 Analysis Method: EPA 8270 by SIM LVE
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH LV by SIM MSSV
Associated Lab Samples: 50103607001, 50103607002, 50103607003, 50103607004

METHOD BLANK: 1155453 Matrix: Water
Associated Lab Samples: 50103607001, 50103607002, 50103607003, 50103607004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	1.0	09/15/14 09:31	
Acenaphthylene	ug/L	ND	1.0	09/15/14 09:31	
Anthracene	ug/L	ND	0.10	09/15/14 09:31	
Benzo(a)anthracene	ug/L	ND	0.10	09/15/14 09:31	
Benzo(a)pyrene	ug/L	ND	0.10	09/15/14 09:31	
Benzo(b)fluoranthene	ug/L	ND	0.10	09/15/14 09:31	
Benzo(g,h,i)perylene	ug/L	ND	0.10	09/15/14 09:31	
Benzo(k)fluoranthene	ug/L	ND	0.10	09/15/14 09:31	
Chrysene	ug/L	ND	0.50	09/15/14 09:31	
Dibenz(a,h)anthracene	ug/L	ND	0.10	09/15/14 09:31	
Fluoranthene	ug/L	ND	1.0	09/15/14 09:31	
Fluorene	ug/L	ND	1.0	09/15/14 09:31	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	09/15/14 09:31	
Naphthalene	ug/L	ND	1.0	09/15/14 09:31	
Phenanthrene	ug/L	ND	1.0	09/15/14 09:31	
Pyrene	ug/L	ND	1.0	09/15/14 09:31	
2-Fluorobiphenyl (S)	%.	60	21-114	09/15/14 09:31	
p-Terphenyl-d14 (S)	%.	92	25-131	09/15/14 09:31	

LABORATORY CONTROL SAMPLE: 1155454

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.4	74	39-117	
Acenaphthylene	ug/L	10	7.7	77	40-120	
Anthracene	ug/L	10	9.5	95	48-126	
Benzo(a)anthracene	ug/L	10	9.8	98	51-134	
Benzo(a)pyrene	ug/L	10	10.2	102	48-141	
Benzo(b)fluoranthene	ug/L	10	9.1	91	49-139	
Benzo(g,h,i)perylene	ug/L	10	9.5	95	44-134	
Benzo(k)fluoranthene	ug/L	10	11.0	110	48-140	
Chrysene	ug/L	10	10.3	103	53-136	
Dibenz(a,h)anthracene	ug/L	10	9.3	93	44-132	
Fluoranthene	ug/L	10	10	100	50-135	
Fluorene	ug/L	10	8.4	84	44-124	
Indeno(1,2,3-cd)pyrene	ug/L	10	9.3	93	45-132	
Naphthalene	ug/L	10	5.9	59	30-112	
Phenanthrene	ug/L	10	8.9	89	47-128	
Pyrene	ug/L	10	9.3	93	50-134	
2-Fluorobiphenyl (S)	%.			61	21-114	
p-Terphenyl-d14 (S)	%.			100	25-131	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1155455 1155456

Parameter	Units	50103607001 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	10	10	7.0	7.5	70	75	28-116	6	20	
Acenaphthylene	ug/L	ND	10	10	7.4	7.8	74	78	34-115	5	20	
Anthracene	ug/L	ND	10	10	8.2	8.5	82	85	39-121	4	20	
Benzo(a)anthracene	ug/L	ND	10	10	7.7	7.9	77	79	31-127	2	20	
Benzo(a)pyrene	ug/L	ND	10	10	6.2	6.2	62	62	10-121	0	20	
Benzo(b)fluoranthene	ug/L	ND	10	10	5.9	6.0	59	60	10-119	2	20	
Benzo(g,h,i)perylene	ug/L	ND	10	10	5.6	5.5	56	55	10-108	2	20	
Benzo(k)fluoranthene	ug/L	ND	10	10	7.0	7.0	70	70	10-118	0	20	
Chrysene	ug/L	ND	10	10	8.1	8.3	81	83	32-127	2	20	
Dibenz(a,h)anthracene	ug/L	ND	10	10	5.5	5.3	55	53	10-104	3	20	
Fluoranthene	ug/L	ND	10	10	9.1	9.4	91	94	38-131	3	20	
Fluorene	ug/L	ND	10	10	8.0	8.3	80	83	33-121	4	20	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10	10	5.5	5.4	55	54	10-108	3	20	
Naphthalene	ug/L	ND	10	10	6.4	6.9	64	69	16-119	8	20	
Phenanthrene	ug/L	ND	10	10	8.4	8.6	84	86	32-130	2	20	
Pyrene	ug/L	ND	10	10	8.7	9.0	87	90	39-131	3	20	
2-Fluorobiphenyl (S)	%.						67	77	21-114			
p-Terphenyl-d14 (S)	%.						88	79	25-131			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1155457 1155458

Parameter	Units	50103607002 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	10	10	7.3	6.9	73	69	28-116	5	20	
Acenaphthylene	ug/L	ND	10	10	7.6	7.2	76	72	34-115	5	20	
Anthracene	ug/L	ND	10	10	9.3	9.0	93	90	39-121	3	20	
Benzo(a)anthracene	ug/L	ND	10	10	8.7	8.3	87	83	31-127	5	20	
Benzo(a)pyrene	ug/L	ND	10	10	8.0	7.5	80	75	10-121	7	20	
Benzo(b)fluoranthene	ug/L	ND	10	10	7.3	7.0	73	70	10-119	5	20	
Benzo(g,h,i)perylene	ug/L	ND	10	10	6.4	6.2	64	62	10-108	4	20	
Benzo(k)fluoranthene	ug/L	ND	10	10	8.8	8.3	88	83	10-118	5	20	
Chrysene	ug/L	ND	10	10	9.3	9.0	93	90	32-127	3	20	
Dibenz(a,h)anthracene	ug/L	ND	10	10	6.3	5.8	63	58	10-104	8	20	
Fluoranthene	ug/L	ND	10	10	9.8	9.3	98	93	38-131	5	20	
Fluorene	ug/L	ND	10	10	8.5	8.0	85	80	33-121	5	20	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10	10	6.4	6.0	64	60	10-108	6	20	
Naphthalene	ug/L	ND	10	10	6.6	6.0	66	60	16-119	9	20	
Phenanthrene	ug/L	ND	10	10	8.9	8.6	89	86	32-130	4	20	
Pyrene	ug/L	ND	10	10	9.3	9.0	93	90	39-131	4	20	
2-Fluorobiphenyl (S)	%.						73	73	21-114			
p-Terphenyl-d14 (S)	%.						94	89	25-131			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

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.

PQL - Practical Quantitation Limit.

RL - Reporting 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.

TNI - The NELAC Institute.

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Indianapolis Terminal BP#215
Pace Project No.: 50103607

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50103607001	**BPIT-DHW81-091014**	EPA 3510	OEXT/36900	EPA 8270 by SIM LVE	MSSV/16109
50103607002	**BPIT-OW14-091014**	EPA 3510	OEXT/36900	EPA 8270 by SIM LVE	MSSV/16109
50103607003	**BPIT-DHW78-091014**	EPA 3510	OEXT/36900	EPA 8270 by SIM LVE	MSSV/16109
50103607004	**BPIT-EB01-091014**	EPA 3510	OEXT/36900	EPA 8270 by SIM LVE	MSSV/16109
50103607001	**BPIT-DHW81-091014**	EPA 8260	MSV/68944		
50103607002	**BPIT-OW14-091014**	EPA 8260	MSV/68946		
50103607003	**BPIT-DHW78-091014**	EPA 8260	MSV/68944		
50103607004	**BPIT-EB01-091014**	EPA 8260	MSV/68944		
50103607005	**BPIT-TripBlank-091014**	EPA 8260	MSV/68946		

Laboratory Management Program LaMP Chain of Custody Record

JK Page 1 of 1

BP Site Node Path: BP > USA > IN > Marion > Indianapolis Termina | Req Due Date (mm/dd/yy): | Rush TAT: Yes ___ No X

BP Facility No: # 215 | Lab Work Order Number: 50103607

Lab Name:	Pace Analytical	Facility Address:	2500 North Tibbs Ave.	Consultant/Contractor:	Stantec Consulting Corp.
Lab Address:	7726 Moller Road, Indianapolis, IN 46268	City, State, ZIP Code:	Indianapolis, IN 46222	Consultant/Contractor Project No:	182612301.601.681
Lab PM:	Tina Sayer	Lead Regulatory Agency:	EPA	Address:	8770 Guion Rd., Suite B, Indianapolis, IN 46268
Lab Phone:	317-875-5894	California Global ID No.:		Consultant/Contractor PM:	Kyle Amberger
Lab Shipping Accnt:		Enfos Proposal No:	007VX-0017	Phone: 317-876-8375 x 240	Email: kyle.amberger@stantec.com
Lab Bottle Order No:	-	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email EDD To: Kyle Amberger	and to lab.enfosdoc@bp.com
Other Info:		Stage: OMM 60	Activity: Project Spend 81	Invoice To:	BP X Contractor ___

BP Project Manager (PM): Bruno Mancini

BP PM Phone: 216-271-8852

BP PM Email: bruno.mancini@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: BTEX by 8260	PAHs by 8270SIM	MS/MSD	Comments
001	BPIT-DHW8-091014	09/10/14	11:06		X		Y	15	6			9		X	X	X	collected ew MS/MSD
002	BPIT-OW14-091014	09/10/14	13:11		X		Y	15	6			9		X	X	X	collected ew MS/MSD
003	BPIT-DHW79-091014	09/10/14	17:33		X		Y	5	2			3		X	X		
004	BPIT-EB01-091014	09/10/14	18:00		X		N	5	2			3		X	X		
005	BPIT-TripBlnK-091014	09/10/14	———		X		N	3				3		X			

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

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

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Brandon Hiatt						
Sampler's Company: Stantec	Brandon Hiatt / Stantec	09/10/14	19:30	/ Stantec	9/10/14	900
Shipment Method: Pick-up Ship Date: 09/11/2014	/ Stantec	9/11/14	13:15		9/11/14	115
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes (No) | Temp Blank (Yes) No | Cooler Temp on Receipt: .9 °F/C | Trip Blank (Yes) No | MS/MSD Sample Submitted: (Yes) No

Julie Roncoli .90C 9-11-14 14:45

Sample Condition Upon Receipt

Pace Analytical

Client Name: BP-Stantec Project # 50103607

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

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Date/Time 5035A kits placed in freezer _____

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer 1 2 3 4 5 6 A B C D E F **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 9.0C **Ice Visible in Sample Containers:** ☐ yes ☑ no

(Corrected, if applicable)

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: CAP 9-11-14

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.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	5.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No	☐N/A	8.
All containers needing acid/base pres. have been checked? CAP 9-11-14 **exceptions: VOA, coliform, TOC, O&G** All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted.	☑Yes	☐No	☑N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	10.
Trip Blank Present:	☑Yes	☐No	☐N/A	11.
Trip Blank Custody Seals Present	☑Yes	☐No	☐N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14.

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: J Sayer **Date:** 9/11/14

Form F-IN-Q-290-rev.06, 05Aug2014

Sample Container Count

CLIENT: BP-Stantec

COC PAGE 1 of 1

COC ID# _____

Project # 50103607

Pace Analytical
www.pacelabs.com

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R	4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	BP1U	SPST	_____	pH <2	pH>12	Comments
1	9			6																	
2	9			6																	
3	3			2																	
4	3			2																	
5	3																				
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber gl	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber gla	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber g	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber g	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber g	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gl	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

October 27, 2014

Mr. Kyle Amberger
Stantec
8770 Guion Rd
Suite B
Indianapolis, IN 46268

RE: Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Dear Mr. Amberger:
Enclosed are the analytical results for sample(s) received by the laboratory on September 12, 2014. 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.

Revised report. Collection date of Dup-2 changed (lab error). 10/27/14tms

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

Sincerely,

Tina Sayer
tina.sayer@pacelabs.com
Project Manager

Enclosures

cc: Mr. Ryan Julien, Stantec

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project:	BP#215 Indianapolis Terminal
Pace Project No.:	50103706

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky UST Certification #: 0042
Louisiana/NELAP Certification #: 04076
Ohio VAP Certification #: CL-0065
West Virginia Certification #: 330

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50103706001	**BPIT-DHW86-091214**	Water	09/12/14 10:14	09/12/14 18:11
50103706002	**BPIT-OW4-091214**	Water	09/12/14 11:41	09/12/14 18:11
50103706003	**BPIT-DHW87-091214**	Water	09/12/14 09:21	09/12/14 18:11
50103706004	**BPIT-DHW32-091214**	Water	09/12/14 15:50	09/12/14 18:11
50103706005	**BPIT-DHW61-091114**	Water	09/11/14 15:28	09/12/14 18:11
50103706006	**BPIT-OW31-091114**	Water	09/11/14 14:38	09/12/14 18:11
50103706007	**BPIT-OW32-091114**	Water	09/11/14 13:28	09/12/14 18:11
50103706008	**BPIT-DHW115-091114**	Water	09/11/14 11:24	09/12/14 18:11
50103706009	**BPIT-DHW64-091114**	Water	09/11/14 12:19	09/12/14 18:11
50103706010	**BPIT-DUP01-091114**	Water	09/11/14 08:00	09/12/14 18:11
50103706011	**BPIT-DUP02-091214**	Water	09/12/14 08:00	09/12/14 18:11
50103706012	**BPIT-EB02-091214**	Water	09/12/14 08:00	09/12/14 18:11
50103706013	**BPIT-EB03-091214**	Water	09/12/14 16:45	09/12/14 18:11
50103706014	**BPIT-EB03-091215**	Water	09/12/14 16:45	09/12/14 18:11
50103706015	**BPIT-Tripblank02-091114**	Water	09/11/14 08:00	09/12/14 18:11

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50103706001	**BPIT-DHW86-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706002	**BPIT-OW4-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706003	**BPIT-DHW87-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706004	**BPIT-DHW32-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706005	**BPIT-DHW61-091114**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706006	**BPIT-OW31-091114**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706007	**BPIT-OW32-091114**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706008	**BPIT-DHW115-091114**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706009	**BPIT-DHW64-091114**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706010	**BPIT-DUP01-091114**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706011	**BPIT-DUP02-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706012	**BPIT-EB02-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706013	**BPIT-EB03-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	GRM	7
50103706015	**BPIT-Tripblank02-091114**	EPA 8260	GRM	7

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-DHW86-091214 **Lab ID: 50103706001** Collected: 09/12/14 10:14 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:53	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:53	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:53	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:53	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:53	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:53	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 00:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:53	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:53	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:53	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:53	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:53	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:53	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	59	%.	21-114	1	09/15/14 12:45	09/16/14 00:53	321-60-8	
p-Terphenyl-d14 (S)	82	%.	25-131	1	09/15/14 12:45	09/16/14 00:53	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 03:42	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 03:42	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 03:42	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 03:42	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	79-116	1		09/23/14 03:42	1868-53-7	
Toluene-d8 (S)	101	%.	81-110	1		09/23/14 03:42	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	80-114	1		09/23/14 03:42	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-OW4-091214 **Lab ID: 50103706002** Collected: 09/12/14 11:41 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:11	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:11	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:11	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:11	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:11	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:11	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:11	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:11	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 01:11	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:11	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:11	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:11	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:11	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:11	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:11	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:11	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	52	%.	21-114	1	09/15/14 12:45	09/16/14 01:11	321-60-8	
p-Terphenyl-d14 (S)	84	%.	25-131	1	09/15/14 12:45	09/16/14 01:11	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 05:21	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 05:21	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 05:21	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 05:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	79-116	1		09/23/14 05:21	1868-53-7	
Toluene-d8 (S)	100	%.	81-110	1		09/23/14 05:21	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	80-114	1		09/23/14 05:21	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-DHW87-091214 **Lab ID: 50103706003** Collected: 09/12/14 09:21 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:30	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:30	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:30	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:30	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:30	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:30	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:30	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:30	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 01:30	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:30	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:30	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:30	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:30	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:30	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:30	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:30	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	54	%.	21-114	1	09/15/14 12:45	09/16/14 01:30	321-60-8	
p-Terphenyl-d14 (S)	88	%.	25-131	1	09/15/14 12:45	09/16/14 01:30	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 05:53	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 05:53	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 05:53	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 05:53	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	79-116	1		09/23/14 05:53	1868-53-7	
Toluene-d8 (S)	100	%.	81-110	1		09/23/14 05:53	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	80-114	1		09/23/14 05:53	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-DHW32-091214 **Lab ID: 50103706004** Collected: 09/12/14 15:50 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:48	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:48	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:48	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:48	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:48	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 01:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:48	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:48	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:48	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 01:48	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:48	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:48	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 01:48	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	59	%.	21-114	1	09/15/14 12:45	09/16/14 01:48	321-60-8	
p-Terphenyl-d14 (S)	82	%.	25-131	1	09/15/14 12:45	09/16/14 01:48	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 06:26	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 06:26	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 06:26	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 06:26	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107	%.	79-116	1		09/23/14 06:26	1868-53-7	
Toluene-d8 (S)	100	%.	81-110	1		09/23/14 06:26	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	80-114	1		09/23/14 06:26	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-DHW61-091114 **Lab ID: 50103706005** Collected: 09/11/14 15:28 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 22:47	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 22:47	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 22:47	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 22:47	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 22:47	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 22:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 22:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 22:47	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/15/14 22:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 22:47	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 22:47	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 22:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 22:47	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 22:47	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 22:47	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 22:47	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	63	%.	21-114	1	09/15/14 12:45	09/15/14 22:47	321-60-8	
p-Terphenyl-d14 (S)	84	%.	25-131	1	09/15/14 12:45	09/15/14 22:47	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 06:59	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 06:59	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 06:59	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 06:59	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	79-116	1		09/23/14 06:59	1868-53-7	
Toluene-d8 (S)	99	%.	81-110	1		09/23/14 06:59	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	80-114	1		09/23/14 06:59	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-OW31-091114 **Lab ID: 50103706006** Collected: 09/11/14 14:38 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:05	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:05	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:05	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:05	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:05	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:05	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:05	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/15/14 23:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:05	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:05	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:05	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:05	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:05	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:05	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	62	%.	21-114	1	09/15/14 12:45	09/15/14 23:05	321-60-8	
p-Terphenyl-d14 (S)	84	%.	25-131	1	09/15/14 12:45	09/15/14 23:05	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 07:32	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 07:32	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 07:32	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 07:32	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	79-116	1		09/23/14 07:32	1868-53-7	
Toluene-d8 (S)	99	%.	81-110	1		09/23/14 07:32	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	80-114	1		09/23/14 07:32	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-OW32-091114 **Lab ID: 50103706007** Collected: 09/11/14 13:28 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:23	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:23	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:23	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:23	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:23	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/15/14 23:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:23	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:23	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:23	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:23	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:23	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:23	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	47	%.	21-114	1	09/15/14 12:45	09/15/14 23:23	321-60-8	
p-Terphenyl-d14 (S)	63	%.	25-131	1	09/15/14 12:45	09/15/14 23:23	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 08:05	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 08:05	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 08:05	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 08:05	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	79-116	1		09/23/14 08:05	1868-53-7	
Toluene-d8 (S)	100	%.	81-110	1		09/23/14 08:05	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	80-114	1		09/23/14 08:05	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-DHW115-091114 **Lab ID: 50103706008** Collected: 09/11/14 11:24 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:41	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:41	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:41	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:41	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:41	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:41	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:41	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:41	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/15/14 23:41	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:41	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:41	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:41	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:41	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:41	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:41	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:41	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	70	%.	21-114	1	09/15/14 12:45	09/15/14 23:41	321-60-8	
p-Terphenyl-d14 (S)	94	%.	25-131	1	09/15/14 12:45	09/15/14 23:41	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 08:38	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 08:38	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 08:38	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 08:38	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	109	%.	79-116	1		09/23/14 08:38	1868-53-7	
Toluene-d8 (S)	99	%.	81-110	1		09/23/14 08:38	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	80-114	1		09/23/14 08:38	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-DHW64-091114 **Lab ID: 50103706009** Collected: 09/11/14 12:19 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:59	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:59	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:59	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:59	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:59	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:59	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/15/14 23:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:59	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:59	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:59	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/15/14 23:59	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:59	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:59	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/15/14 23:59	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	68	%.	21-114	1	09/15/14 12:45	09/15/14 23:59	321-60-8	
p-Terphenyl-d14 (S)	86	%.	25-131	1	09/15/14 12:45	09/15/14 23:59	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 16:58	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 16:58	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 16:58	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 16:58	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106	%.	79-116	1		09/23/14 16:58	1868-53-7	
Toluene-d8 (S)	101	%.	81-110	1		09/23/14 16:58	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	80-114	1		09/23/14 16:58	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-DUP01-091114 **Lab ID: 50103706010** Collected: 09/11/14 08:00 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:17	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:17	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:17	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:17	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:17	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 00:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:17	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:17	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:17	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:17	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:17	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:17	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:17	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	53	%.	21-114	1	09/15/14 12:45	09/16/14 00:17	321-60-8	
p-Terphenyl-d14 (S)	71	%.	25-131	1	09/15/14 12:45	09/16/14 00:17	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 17:30	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 17:30	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 17:30	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 17:30	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%.	79-116	1		09/23/14 17:30	1868-53-7	
Toluene-d8 (S)	99	%.	81-110	1		09/23/14 17:30	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	80-114	1		09/23/14 17:30	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-DUP02-091214 **Lab ID: 50103706011** Collected: 09/12/14 08:00 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:35	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:35	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:35	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:35	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:35	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:35	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:35	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 00:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:35	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:35	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:35	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 00:35	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:35	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:35	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 00:35	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	67	%.	21-114	1	09/15/14 12:45	09/16/14 00:35	321-60-8	
p-Terphenyl-d14 (S)	86	%.	25-131	1	09/15/14 12:45	09/16/14 00:35	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 18:04	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 18:04	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 18:04	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 18:04	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	79-116	1		09/23/14 18:04	1868-53-7	
Toluene-d8 (S)	99	%.	81-110	1		09/23/14 18:04	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	80-114	1		09/23/14 18:04	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-EB02-091214 **Lab ID: 50103706012** Collected: 09/12/14 08:00 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:06	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:06	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:06	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:06	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:06	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:06	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 02:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:06	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:06	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:06	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:06	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:06	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:06	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	64	%.	21-114	1	09/15/14 12:45	09/16/14 02:06	321-60-8	
p-Terphenyl-d14 (S)	96	%.	25-131	1	09/15/14 12:45	09/16/14 02:06	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 18:36	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 18:36	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 18:36	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 18:36	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	109	%.	79-116	1		09/23/14 18:36	1868-53-7	
Toluene-d8 (S)	99	%.	81-110	1		09/23/14 18:36	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	80-114	1		09/23/14 18:36	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-EB03-091214 **Lab ID: 50103706013** Collected: 09/12/14 16:45 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:24	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:24	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:24	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:24	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:24	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:24	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:24	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:24	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 02:24	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:24	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:24	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:24	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:24	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:24	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:24	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:24	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	61	%.	21-114	1	09/15/14 12:45	09/16/14 02:24	321-60-8	
p-Terphenyl-d14 (S)	97	%.	25-131	1	09/15/14 12:45	09/16/14 02:24	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 19:10	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 19:10	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 19:10	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 19:10	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107	%.	79-116	1		09/23/14 19:10	1868-53-7	
Toluene-d8 (S)	100	%.	81-110	1		09/23/14 19:10	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	80-114	1		09/23/14 19:10	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Sample: BPIT-Tripblank02-091114 **Lab ID: 50103706015** Collected: 09/11/14 08:00 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 19:42	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 19:42	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 19:42	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 19:42	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	109	%.	79-116	1		09/23/14 19:42	1868-53-7	
Toluene-d8 (S)	100	%.	81-110	1		09/23/14 19:42	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	80-114	1		09/23/14 19:42	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

QC Batch: MSV/68963 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 50103706001, 50103706002, 50103706003, 50103706004, 50103706005, 50103706006, 50103706007, 50103706008

METHOD BLANK: 1160711 Matrix: Water
Associated Lab Samples: 50103706001, 50103706002, 50103706003, 50103706004, 50103706005, 50103706006, 50103706007, 50103706008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	5.0	09/23/14 00:25	
Ethylbenzene	ug/L	ND	5.0	09/23/14 00:25	
Toluene	ug/L	ND	5.0	09/23/14 00:25	
Xylene (Total)	ug/L	ND	10.0	09/23/14 00:25	
4-Bromofluorobenzene (S)	%.	102	80-114	09/23/14 00:25	
Dibromofluoromethane (S)	%.	104	79-116	09/23/14 00:25	
Toluene-d8 (S)	%.	101	81-110	09/23/14 00:25	

LABORATORY CONTROL SAMPLE: 1160712

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	47.3	95	74-122	
Ethylbenzene	ug/L	50	47.6	95	66-133	
Toluene	ug/L	50	45.4	91	72-122	
Xylene (Total)	ug/L	150	138	92	70-124	
4-Bromofluorobenzene (S)	%.			99	80-114	
Dibromofluoromethane (S)	%.			104	79-116	
Toluene-d8 (S)	%.			100	81-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1160713 1160714

Parameter	Units	50103706001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	50	50	45.1	41.1	90	82	62-129	9	20	
Ethylbenzene	ug/L	ND	50	50	33.4	31.1	66	61	28-153	7	20	
Toluene	ug/L	ND	50	50	36.9	34.8	73	68	50-132	6	20	
Xylene (Total)	ug/L	ND	150	150	95.9	89.4	64	60	29-145	7	20	
4-Bromofluorobenzene (S)	%.						98	99	80-114			
Dibromofluoromethane (S)	%.						108	107	79-116			
Toluene-d8 (S)	%.						99	100	81-110			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

QC Batch: MSV/68998 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 50103706009, 50103706010, 50103706011, 50103706012, 50103706013, 50103706015

METHOD BLANK: 1161295 Matrix: Water
Associated Lab Samples: 50103706009, 50103706010, 50103706011, 50103706012, 50103706013, 50103706015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	5.0	09/23/14 14:06	
Ethylbenzene	ug/L	ND	5.0	09/23/14 14:06	
Toluene	ug/L	ND	5.0	09/23/14 14:06	
Xylene (Total)	ug/L	ND	10.0	09/23/14 14:06	
4-Bromofluorobenzene (S)	%.	101	80-114	09/23/14 14:06	
Dibromofluoromethane (S)	%.	106	79-116	09/23/14 14:06	
Toluene-d8 (S)	%.	100	81-110	09/23/14 14:06	

LABORATORY CONTROL SAMPLE: 1161296

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	49.1	98	74-122	
Ethylbenzene	ug/L	50	51.3	103	66-133	
Toluene	ug/L	50	49.4	99	72-122	
Xylene (Total)	ug/L	150	151	101	70-124	
4-Bromofluorobenzene (S)	%.			101	80-114	
Dibromofluoromethane (S)	%.			105	79-116	
Toluene-d8 (S)	%.			100	81-110	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

QC Batch: OEXT/36915 Analysis Method: EPA 8270 by SIM LVE
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH LV by SIM MSSV
Associated Lab Samples: 50103706001, 50103706002, 50103706003, 50103706004, 50103706005, 50103706006, 50103706007, 50103706008, 50103706009, 50103706010, 50103706011, 50103706012, 50103706013

METHOD BLANK: 1156673 Matrix: Water
Associated Lab Samples: 50103706001, 50103706002, 50103706003, 50103706004, 50103706005, 50103706006, 50103706007, 50103706008, 50103706009, 50103706010, 50103706011, 50103706012, 50103706013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	1.0	09/15/14 21:52	
Acenaphthylene	ug/L	ND	1.0	09/15/14 21:52	
Anthracene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(a)anthracene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(a)pyrene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(b)fluoranthene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(g,h,i)perylene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(k)fluoranthene	ug/L	ND	0.10	09/15/14 21:52	
Chrysene	ug/L	ND	0.50	09/15/14 21:52	
Dibenz(a,h)anthracene	ug/L	ND	0.10	09/15/14 21:52	
Fluoranthene	ug/L	ND	1.0	09/15/14 21:52	
Fluorene	ug/L	ND	1.0	09/15/14 21:52	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	09/15/14 21:52	
Naphthalene	ug/L	ND	1.0	09/15/14 21:52	
Phenanthrene	ug/L	ND	1.0	09/15/14 21:52	
Pyrene	ug/L	ND	1.0	09/15/14 21:52	
2-Fluorobiphenyl (S)	%.	41	21-114	09/15/14 21:52	
p-Terphenyl-d14 (S)	%.	66	25-131	09/15/14 21:52	

LABORATORY CONTROL SAMPLE: 1156674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.2	72	39-117	
Acenaphthylene	ug/L	10	7.1	71	40-120	
Anthracene	ug/L	10	8.9	89	48-126	
Benzo(a)anthracene	ug/L	10	9.0	90	51-134	
Benzo(a)pyrene	ug/L	10	9.1	91	48-141	
Benzo(b)fluoranthene	ug/L	10	8.6	86	49-139	
Benzo(g,h,i)perylene	ug/L	10	9.2	92	44-134	
Benzo(k)fluoranthene	ug/L	10	10.6	106	48-140	
Chrysene	ug/L	10	9.8	98	53-136	
Dibenz(a,h)anthracene	ug/L	10	8.5	85	44-132	
Fluoranthene	ug/L	10	9.4	94	50-135	
Fluorene	ug/L	10	8.1	81	44-124	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.8	88	45-132	
Naphthalene	ug/L	10	5.9	59	30-112	
Phenanthrene	ug/L	10	8.5	85	47-128	
Pyrene	ug/L	10	9.0	90	50-134	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

LABORATORY CONTROL SAMPLE: 1156674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Fluorobiphenyl (S)	%.			60	21-114	
p-Terphenyl-d14 (S)	%.			90	25-131	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

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.

PQL - Practical Quantitation Limit.

RL - Reporting 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.

TNI - The NELAC Institute.

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103706

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50103706001	**BPIT-DHW86-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706002	**BPIT-OW4-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706003	**BPIT-DHW87-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706004	**BPIT-DHW32-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706005	**BPIT-DHW61-091114**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706006	**BPIT-OW31-091114**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706007	**BPIT-OW32-091114**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706008	**BPIT-DHW115-091114**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706009	**BPIT-DHW64-091114**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706010	**BPIT-DUP01-091114**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706011	**BPIT-DUP02-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706012	**BPIT-EB02-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706013	**BPIT-EB03-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103706001	**BPIT-DHW86-091214**	EPA 8260	MSV/68963		
50103706002	**BPIT-OW4-091214**	EPA 8260	MSV/68963		
50103706003	**BPIT-DHW87-091214**	EPA 8260	MSV/68963		
50103706004	**BPIT-DHW32-091214**	EPA 8260	MSV/68963		
50103706005	**BPIT-DHW61-091114**	EPA 8260	MSV/68963		
50103706006	**BPIT-OW31-091114**	EPA 8260	MSV/68963		
50103706007	**BPIT-OW32-091114**	EPA 8260	MSV/68963		
50103706008	**BPIT-DHW115-091114**	EPA 8260	MSV/68963		
50103706009	**BPIT-DHW64-091114**	EPA 8260	MSV/68998		
50103706010	**BPIT-DUP01-091114**	EPA 8260	MSV/68998		
50103706011	**BPIT-DUP02-091214**	EPA 8260	MSV/68998		
50103706012	**BPIT-EB02-091214**	EPA 8260	MSV/68998		
50103706013	**BPIT-EB03-091214**	EPA 8260	MSV/68998		
50103706015	**BPIT-Tripblank02-091114**	EPA 8260	MSV/68998		

Laboratory Management Program LaMP Chain of Custody Record TMS

Page 1 of 2

BP Site Node Path: BP > USA > IN > Marion > Indianapolis Termina

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

BP Facility No: # 215

Lab Work Order Number: _____

Lab Name: Pace Analytical	Facility Address: 2500 North Tibbs Ave.	Consultant/Contractor: Stantec Consulting Corp.	
Lab Address: 7726 Moller Road, Indianapolis, IN 46268	City, State, ZIP Code: Indianapolis, IN 46222	Consultant/Contractor Project No: 182612301.601.681	
Lab PM: Tina Sayer	Lead Regulatory Agency: EPA	Address: 8770 Guion Rd., Suite B, Indianapolis, IN 46268	
Lab Phone: 317-875-5894	California Global ID No.:	Consultant/Contractor PM: Kyle Amberger	
Lab Shipping Accnt:	Enfos Proposal No: 007VX-0017	Phone: 317-876-8375 x 240	Email: kyle.amberger@stantec.com
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: Kyle Amberger	and to lab.enfosdoc@bp.com
Other Info:	Stage: OMM 60 Activity: Project Spend 81	Invoice To: BP X	Contractor ___
BP Project Manager (PM): Bruno Mancini			
BP PM Phone: 216-271-8852			
BP PM Email: bruno.mancini@bp.com			

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: BTEX by 8260	Requested Analyses: PAHs by 8270SIM	Report Type & QC Level
001	BPIT-DHW86-091214	09/12/14	~~2134~~ 1014		X		Y	5	2			3		X	X	
002	BPIT-OW4-091214	09/12/14	11:41		X		Y	5	2			3		X	X	
003	BPIT-DHW87-091214	09/12/14	9:21		X		Y	5	2			3		X	X	
004	BPIT-DHW32-091214	09/12/14	15:50		X		Y	5	2			3		X	X	
005	BPIT-DHW61-091114	09/11/14	15:28		X		Y	5	2			3		X	X	
006	BPIT-~~OW3~~-091114	09/11/14	14:38		X		Y	5	2			3		X	X	OW-31 9/15/14 TM
007	BPIT-OW32-091114	09/11/14	13:28		X		Y	5	2			3		X	X	
008	BPIT-DHW115-091114	09/11/14	11:24		X		Y	5	2			3		X	X	
009	BPIT-DHW64-091114	09/11/14	12:19		X		Y	5	2			3		X	X	
010	BPIT-Dup01-091114	09/11/14	—		X		Y	5	2			3		X	X	

Comments

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

Standard ___

Full Data Package ___

50103706

Sampler's Name: Brandon Hiatt	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stantec	Brandon Hiatt / Stantec	09/12/14	18:11	Colette Weaver / PACE	091214	1811
Shipment Method: Drop off Ship Date: 09/12/13						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.1 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Laboratory Management Program LaMP Chain of Custody Record R213646

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

BP Facility No: _____ Lab Work Order Number: _____

Lab Name:	Facility Address:	Consultant/Contractor:
Lab Address:	City, State, ZIP Code:	Consultant/Contractor Project No:
Lab PM:	Lead Regulatory Agency:	Address:
Lab Phone:	California Global ID No.:	Consultant/Contractor PM:
Lab Shipping Accnt:	Enfos Proposal No:	Phone: Email:
Lab Bottle Order No:	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor ___

BP Project Manager (PM):

BP PM Phone:

BP PM Email:

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

SDG 103706

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Is this location a well?	No. Containers / Preservative: Total Number of Container:	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: BTEX 8260	PAH 8270SIM (Alkylated PAHs)	Report Type & QC Level
01	BPIT-Dup02-091214	09/12/14	—		X		Y	5	2			3		✓	✓	
02	BPIT-EB02-091214	09/12/14	8:00		X		N	5	2			3		✓	✓	
03	BPIT-EB03-091214	09/12/14	16:45		X		N	5	2			3		✓	✓	
06	BPIT-TripBlank02-091114	09/11/14	—		X		N	3				3		✓		Reported on level 4 SDG

Sampler's Name: Brandon Mirkff	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stantec	Brandon Mirkff / Stantec	09/12/14	18:11	Colette Weaver / PACE	9/17/14	1811
Shipment Method: Drop off Ship Date: 09/12/14						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.1 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Sample Condition Upon Receipt

Pace Analytical

Client Name: BP-Stantec Project # SD103706

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

Tracking #: _____

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

Date/Time 5035A kits placed in freezer _____

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer 1 2 3 4 5 6 (A) B C D E F **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 2.1c **Ice Visible in Sample Containers:** ☐ yes ☒ no

(Corrected, if applicable)

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 091314 CW

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.
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	5.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	6.
Containers Intact:	☒Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☐Yes	☒No	☐N/A	8. COC says BPIT-OW3-091114 @ 1438 & containers says BPIT-OW31-091114 @ 1438
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G	☐Yes	☒No	☐N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted.				
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	10.
Trip Blank Present: 091314 CW	☒Yes	☐No	☐N/A	11.
Trip Blank Custody Seals Present CW	☒Yes	☐No	☒N/A	
Project Manager Review:				
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	12.
Sufficient Volume:	☒Yes	☐No	☐N/A	13.
Correct Containers Used:	☒Yes	☐No	☐N/A	14.

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

Person Contacted: K. Amberger Date/Time: 9/15/14 0910

Comments/ Resolution:

Use OW-31 rather than OW-3.

YSayer 9/15/14

Project Manager Review: Kenneth Hunt **Date:** 9/13/14

Form F-IN-Q-290-rev.06, 05Aug2014

Sample Container Count

CLIENT: BP- Stantec

COC PAGE 1 of 2

COC ID# _____

Project # 50103704

Pace Analytical
www.pacelabs.com

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R	4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	BP1U	SPST	_____	pH <2	pH>12	Comments
1	3			2																	
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10	3			2																	
11																					
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber gl	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber gla	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber g	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber g	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber g	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gl	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

Sample Container Count

CLIENT: BP-Stantec

COC PAGE 2 of 2
COC ID# R213646

Project # SDI03704

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R	4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	BP1U	SPST	_____	pH <2	pH>12	Comments
1	3			2																	
2	↓			↓																	
3	↓			2																	
4	3	Reported on levels project																			
5																					9/15/14 TMB
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber gl	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber gla	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber g	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber g	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber g	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gl	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

September 26, 2014

Mr. Kyle Amberger
Stantec
8770 Guion Rd
Suite B
Indianapolis, IN 46268

RE: Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

Dear Mr. Amberger:
Enclosed are the analytical results for sample(s) received by the laboratory on September 12, 2014. 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,

Tina Sayer

Tina Sayer
tina.sayer@pacelabs.com
Project Manager

Enclosures

cc: Mr. Ryan Julien, Stantec

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project:	BP#215 Indianapolis Terminal
Pace Project No.:	50103707

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky UST Certification #: 0042
Louisiana/NELAP Certification #: 04076
Ohio VAP Certification #: CL-0065
West Virginia Certification #: 330

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50103707001	**BPIT-DHW102-091214**	Water	09/12/14 12:39	09/12/14 18:11
50103707002	**BPIT-DHW106-091214**	Water	09/12/14 13:55	09/12/14 18:11

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

Lab ID	Sample ID	Method	Analysts	Analytes Reported
50103707001	**BPIT-DHW102-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	RSW	7
50103707002	**BPIT-DHW106-091214**	EPA 8270 by SIM LVE	CEM	18
		EPA 8260	RSW	7

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

Sample: BPIT-DHW102-091214 **Lab ID: 50103707001** Collected: 09/12/14 12:39 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:42	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:42	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:42	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:42	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:42	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:42	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:42	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:42	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 02:42	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:42	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:42	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:42	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 02:42	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:42	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:42	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 02:42	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	69	%.	21-114	1	09/15/14 12:45	09/16/14 02:42	321-60-8	
p-Terphenyl-d14 (S)	96	%.	25-131	1	09/15/14 12:45	09/16/14 02:42	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		09/23/14 22:32	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/23/14 22:32	100-41-4	
Toluene	ND	ug/L	5.0	1		09/23/14 22:32	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/23/14 22:32	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	79-116	1		09/23/14 22:32	1868-53-7	
Toluene-d8 (S)	96	%.	81-110	1		09/23/14 22:32	2037-26-5	
4-Bromofluorobenzene (S)	94	%.	80-114	1		09/23/14 22:32	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

Sample: BPIT-DHW106-091214 **Lab ID: 50103707002** Collected: 09/12/14 13:55 Received: 09/12/14 18:11 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAHLV	Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 03:00	83-32-9	
Acenaphthylene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 03:00	208-96-8	
Anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 03:00	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 03:00	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 03:00	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 03:00	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 03:00	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 03:00	207-08-9	
Chrysene	ND	ug/L	0.50	1	09/15/14 12:45	09/16/14 03:00	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 03:00	53-70-3	
Fluoranthene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 03:00	206-44-0	
Fluorene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 03:00	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	09/15/14 12:45	09/16/14 03:00	193-39-5	
Naphthalene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 03:00	91-20-3	
Phenanthrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 03:00	85-01-8	
Pyrene	ND	ug/L	1.0	1	09/15/14 12:45	09/16/14 03:00	129-00-0	
Surrogates								
2-Fluorobiphenyl (S)	64	%.	21-114	1	09/15/14 12:45	09/16/14 03:00	321-60-8	
p-Terphenyl-d14 (S)	83	%.	25-131	1	09/15/14 12:45	09/16/14 03:00	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**1.4J**	ug/L	5.0	1		09/24/14 02:55	71-43-2	
Ethylbenzene	ND	ug/L	5.0	1		09/24/14 02:55	100-41-4	
Toluene	ND	ug/L	5.0	1		09/24/14 02:55	108-88-3	
Xylene (Total)	ND	ug/L	10.0	1		09/24/14 02:55	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	95	%.	79-116	1		09/24/14 02:55	1868-53-7	
Toluene-d8 (S)	99	%.	81-110	1		09/24/14 02:55	2037-26-5	
4-Bromofluorobenzene (S)	87	%.	80-114	1		09/24/14 02:55	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

QC Batch: MSV/68980
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 50103707001

METHOD BLANK: 1161179 Matrix: Water
Associated Lab Samples: 50103707001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	5.0	09/23/14 14:14	
Ethylbenzene	ug/L	ND	5.0	09/23/14 14:14	
Toluene	ug/L	ND	5.0	09/23/14 14:14	
Xylene (Total)	ug/L	ND	10.0	09/23/14 14:14	
4-Bromofluorobenzene (S)	%.	96	80-114	09/23/14 14:14	
Dibromofluoromethane (S)	%.	102	79-116	09/23/14 14:14	
Toluene-d8 (S)	%.	96	81-110	09/23/14 14:14	

LABORATORY CONTROL SAMPLE: 1161180

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	52.0	104	74-122	
Ethylbenzene	ug/L	50	53.6	107	66-133	
Toluene	ug/L	50	48.8	98	72-122	
Xylene (Total)	ug/L	150	159	106	70-124	
4-Bromofluorobenzene (S)	%.			103	80-114	
Dibromofluoromethane (S)	%.			101	79-116	
Toluene-d8 (S)	%.			99	81-110	

MATRIX SPIKE SAMPLE: 1161181

Parameter	Units	50103707001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	50	39.7	79	62-129	
Ethylbenzene	ug/L	ND	50	41.1	82	28-153	
Toluene	ug/L	ND	50	38.5	75	50-132	
Xylene (Total)	ug/L	ND	150	120	80	29-145	
4-Bromofluorobenzene (S)	%.				97	80-114	
Dibromofluoromethane (S)	%.				97	79-116	
Toluene-d8 (S)	%.				98	81-110	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

QC Batch: MSV/68981
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 50103707002

METHOD BLANK: 1161182 Matrix: Water
Associated Lab Samples: 50103707002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	5.0	09/24/14 02:22	
Ethylbenzene	ug/L	ND	5.0	09/24/14 02:22	
Toluene	ug/L	ND	5.0	09/24/14 02:22	
Xylene (Total)	ug/L	ND	10.0	09/24/14 02:22	
4-Bromofluorobenzene (S)	%.	90	80-114	09/24/14 02:22	
Dibromofluoromethane (S)	%.	99	79-116	09/24/14 02:22	
Toluene-d8 (S)	%.	100	81-110	09/24/14 02:22	

LABORATORY CONTROL SAMPLE: 1161183

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	46.0	92	74-122	
Ethylbenzene	ug/L	50	49.2	98	66-133	
Toluene	ug/L	50	46.0	92	72-122	
Xylene (Total)	ug/L	150	148	99	70-124	
4-Bromofluorobenzene (S)	%.			100	80-114	
Dibromofluoromethane (S)	%.			97	79-116	
Toluene-d8 (S)	%.			101	81-110	

MATRIX SPIKE SAMPLE: 1161184

Parameter	Units	50103711001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	50	44.5	89	62-129	
Ethylbenzene	ug/L	ND	50	48.5	97	28-153	
Toluene	ug/L	ND	50	46.2	92	50-132	
Xylene (Total)	ug/L	ND	150	142	95	29-145	
4-Bromofluorobenzene (S)	%.				99	80-114	
Dibromofluoromethane (S)	%.				97	79-116	
Toluene-d8 (S)	%.				101	81-110	

SAMPLE DUPLICATE: 1161185

Parameter	Units	50103711002 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		20	
Ethylbenzene	ug/L	ND	ND		20	
Toluene	ug/L	ND	ND		20	
Xylene (Total)	ug/L	ND	ND		20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

SAMPLE DUPLICATE: 1161185

Parameter	Units	50103711002 Result	Dup Result	RPD	Max RPD	Qualifiers
4-Bromofluorobenzene (S)	%.	96	88	9		
Dibromofluoromethane (S)	%.	100	102	2		
Toluene-d8 (S)	%.	105	98	7		

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

QC Batch: OEXT/36915
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by SIM LVE
Analysis Description: 8270 Water PAH LV by SIM MSSV
Associated Lab Samples: 50103707001, 50103707002

METHOD BLANK: 1156673 Matrix: Water
Associated Lab Samples: 50103707001, 50103707002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	1.0	09/15/14 21:52	
Acenaphthylene	ug/L	ND	1.0	09/15/14 21:52	
Anthracene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(a)anthracene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(a)pyrene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(b)fluoranthene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(g,h,i)perylene	ug/L	ND	0.10	09/15/14 21:52	
Benzo(k)fluoranthene	ug/L	ND	0.10	09/15/14 21:52	
Chrysene	ug/L	ND	0.50	09/15/14 21:52	
Dibenz(a,h)anthracene	ug/L	ND	0.10	09/15/14 21:52	
Fluoranthene	ug/L	ND	1.0	09/15/14 21:52	
Fluorene	ug/L	ND	1.0	09/15/14 21:52	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	09/15/14 21:52	
Naphthalene	ug/L	ND	1.0	09/15/14 21:52	
Phenanthrene	ug/L	ND	1.0	09/15/14 21:52	
Pyrene	ug/L	ND	1.0	09/15/14 21:52	
2-Fluorobiphenyl (S)	%.	41	21-114	09/15/14 21:52	
p-Terphenyl-d14 (S)	%.	66	25-131	09/15/14 21:52	

LABORATORY CONTROL SAMPLE: 1156674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	7.2	72	39-117	
Acenaphthylene	ug/L	10	7.1	71	40-120	
Anthracene	ug/L	10	8.9	89	48-126	
Benzo(a)anthracene	ug/L	10	9.0	90	51-134	
Benzo(a)pyrene	ug/L	10	9.1	91	48-141	
Benzo(b)fluoranthene	ug/L	10	8.6	86	49-139	
Benzo(g,h,i)perylene	ug/L	10	9.2	92	44-134	
Benzo(k)fluoranthene	ug/L	10	10.6	106	48-140	
Chrysene	ug/L	10	9.8	98	53-136	
Dibenz(a,h)anthracene	ug/L	10	8.5	85	44-132	
Fluoranthene	ug/L	10	9.4	94	50-135	
Fluorene	ug/L	10	8.1	81	44-124	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.8	88	45-132	
Naphthalene	ug/L	10	5.9	59	30-112	
Phenanthrene	ug/L	10	8.5	85	47-128	
Pyrene	ug/L	10	9.0	90	50-134	
2-Fluorobiphenyl (S)	%.			60	21-114	
p-Terphenyl-d14 (S)	%.			90	25-131	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

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.

PQL - Practical Quantitation Limit.

RL - Reporting 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.

TNI - The NELAC Institute.

Pace Analytical Services, Inc.
Not NELAP Accredited
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BP#215 Indianapolis Terminal
Pace Project No.: 50103707

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50103707001	**BPIT-DHW102-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103707002	**BPIT-DHW106-091214**	EPA 3510	OEXT/36915	EPA 8270 by SIM LVE	MSSV/16116
50103707001	**BPIT-DHW102-091214**	EPA 8260	MSV/68980		
50103707002	**BPIT-DHW106-091214**	EPA 8260	MSV/68981		

Laboratory Management Program LaMP Chain of Custody Record

✓ TMS

Page 1 of 1

BP Site Node Path: BP > USA > IN > Marion > Indianapolis Termina

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

BP Facility No: # 215

Lab Work Order Number: _____

Lab Name: Pace Analytical	Facility Address: 2500 North Tibbs Ave.	Consultant/Contractor: Stantec Consulting Corp.
Lab Address: 7726 Moller Road, Indianapolis, IN 46268	City, State, ZIP Code: Indianapolis, IN 46222	Consultant/Contractor Project No: 182612301.601.681
Lab PM: Tina Sayer	Lead Regulatory Agency: EPA	Address: 8770 Guion Rd., Suite B, Indianapolis, IN 46268
Lab Phone: 317-875-5894	California Global ID No.:	Consultant/Contractor PM: Kyle Amberger
Lab Shipping Accnt:	Enfos Proposal No: 007VX-0017	Phone: 317-876-8375 x 240 Email: kyle.amberger@stantec.com
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: Kyle Amberger and to lab.enfosdoc@bp.com
Other Info:	Stage: OMM 60 Activity: Project Spend 81	Invoice To: BP X Contractor ___

BP Project Manager (PM): Bruno Mancini

BP PM Phone: 216-271-8852

BP PM Email: bruno.mancini@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	Requested Analyses: BTEX by 8260	Requested Analyses: PAHs by 8270SIM	Report Type & QC Level
001	BPLT-DMW102-091214	09/12/14	12:39		X		Y	5	2			3		X	X	level III data
002	BPLT-DMW106-091214	09/12/14	13:55		X		Y	5	2			3		X	X	level IV data
003	BPLT-Tripblank2-091114	09/11/14	—		X		N	3				3		X	X	

Standard ___

Full Data Package X

50103707

Comments

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

Sampler's Name: Brandon Hoots	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stantec	Brandon Hoots / Stantec	09/12/14	18:11	Colette Weaver / PACE	091214	1811
Shipment Method: Drop-off Ship Date: 09/12/14						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.1 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Sample Condition Upon Receipt

Pace Analytical

Client Name: BP-Stantec Project # 50103707

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

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Date/Time 5035A kits placed in freezer _____

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used 1 2 3 4 6 (A) B C D E **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 2.1c **Ice Visible in Sample Containers:** ☐ yes ☑ no

(Corrected, if applicable)

Temp should be above freezing to 6°C **Comments:**

Date and Initials of person examining contents: 091314 CW

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.~~
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	5.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	6.
Containers Intact:	☑Yes	☐No	☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes	☐No	☐N/A	8.
All containers needing acid/base pres. have been checked? **exceptions:** (VOA) coliform, TOC, O&G	☐Yes	☑No	☐N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted.				
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	10.
Trip Blank Present:	☑Yes	☐No	☐N/A	11.
Trip Blank Custody Seals Present	☑Yes	☐No	☐N/A	
Project Manager Review				
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	12.
Sufficient Volume:	☑Yes	☐No	☐N/A	13.
Correct Containers Used:	☑Yes	☐No	☐N/A	14.

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

Person Contacted: K. Amberger Date/Time: 9/15/14 @ 0910

Comments/ Resolution: Cancel trip blank (reported on 50103706)

Y Sayer 9/15/14

Project Manager Review: Kenneth Hunt **Date:** 9/13/14

Form F-IN-Q-290-rev.05, 10Sep2013

Sample Container Count

CLIENT: BP-Stantec

COC PAGE 1 of 1
COC ID#

Project # 50103707

Sample Line Item	DG9H	AG1U	WGFU	AG0U	R	4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C	BP1U	SPST		pH <2	pH>12	Comments
1	3			2																	
2	3			2																	
3	3																				
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber gl	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber gla	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber g	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber g	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber g	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gl	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

Appendix E Groundwater Data Validation

Stantec Analytical Validation Checklist **Report No. 101614-EC-02**

Project Name: BP – Indy Terminal # 215	Project Number: 182612296
Stantec Validator: Elizabeth Crowley	Laboratory: Pace Analytical, Indianapolis, IL
Date Validated: 10/16/14	Laboratory Project Number: 50103607
Sample Start-End Date: 09/10/14	Laboratory Report Date: 09/23/14

Parameters Validated: Volatile Organic Compounds (VOC) by 8260 and Poly Aromatic Hydrocarbons by 8270 SIM LVE

Associated Chain(s) of Custody – no numbers/3 aqueous field samples, 1 Equipment Blank and 1 Trip Blank

Samples Validated – BPIT-OW14-091014

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ The analyte 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 analyte in the sample.
N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B The analyte was detected in the method, field and/or trip blank.

1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X	No
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes	No X
Comments:		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		
6. Were correct concentration units reported?	Yes X	No
Comments:		

7. Were detections found in laboratory blank samples?		Yes	No X
Comments:			
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?		Yes	No X
Comments:			
9. Were instrument calibrations within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
10. Were surrogate recoveries within laboratory control limits?		Yes X	No
Comments:			
11. Were laboratory control sample recoveries within laboratory control limits?		Yes X	No
Comments:			
12. Were matrix spike recoveries within laboratory control limits?		Yes X	No
Comments:			
13. Were RPDs within control limits?		Yes X	No
Comments:			
14. Were dilutions required on any samples?		Yes	No X
Comments:			
15. Were Tentatively Identified Compounds (TIC) present?		Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL			
16. Were organic system performance criteria met?	NA	Yes	No
Comments: Level II data package – no data provided.			
17. Were GC/MS internal standards within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
18. Were inorganic system performance criteria met?	NA	Yes	No
Comments: No inorganic samples submitted.			

19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample No. Primary Sample No.	Yes	No X
Comments:		
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No / Initials EAC
Comments:		
21. Other: Validation Limit	Yes X	No
Comments: Ten percent or minimum one sample validated. Validation criteria, flags and level of confidence apply to validated sample(s) only.		

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Analytical Validation Checklist — Report No. 101614-EC-03

Project Name: BP – Indy Terminal # 215	Project Number: 182612296
Stantec Validator: Elizabeth Crowley	Laboratory: Pace Analytical, Indianapolis, IL
Date Validated: 10/16/14	Laboratory Project Number: 50103706
Sample Start-End Date: 09/11-09/12/14	Laboratory Report Date: 09/26/14

Parameters Validated: Volatile Organic Compounds (VOC) by 8260 and Poly Aromatic Hydrocarbons by 8270 SIM LVE

Associated Chain(s) of Custody – no numbers/11 aqueous field samples, 2 Equipment Blank and 1 Trip Blank

Samples Validated – BPIT-OW4-091214 and BPIT-DHW115-091114

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

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

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

UJ The analyte 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 analyte in the sample.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?		X
Comments:		
3. Were sample Chain-of-Custody forms complete?	X	
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	X	
Comments:		
5. Were sample holding times met?	X	
Comments:		
6. Were correct concentration units reported?	X	
Comments:		

7. Were detections found in laboratory blank samples?		Yes	No X
Comments:			
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?		Yes	No X
Comments:			
9. Were instrument calibrations within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
10. Were surrogate recoveries within laboratory control limits?		Yes X	No
Comments:			
11. Were laboratory control sample recoveries within laboratory control limits?		Yes X	No
Comments:			
12. Were matrix spike recoveries within laboratory control limits?		Yes X	No
Comments:			
13. Were RPDs within control limits?		Yes X	No
Comments:			
14. Were dilutions required on any samples?		Yes	No X
Comments:			
15. Were Tentatively Identified Compounds (TIC) present?		Yes	No X
Comments:			
16. Were organic system performance criteria met?	NA	Yes	No
Comments: Level II data package – no data provided.			
17. Were GC/MS internal standards within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
18. Were inorganic system performance criteria met?	NA	Yes	No
Comments: No inorganic samples submitted.			

19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample No. Primary Sample No.	Yes X	No
Comments: All results non-detect, RPDs within limits.		
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No Initials EAC
Comments:		
21. Other: Validation Limit	Yes X	No
Comments: Ten percent or minimum one sample validated. Validation criteria, flags and level of confidence apply to validated sample(s) only.		

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Analytical Validation Checklist — Report No. 101614-EC-04

Project Name: BP – Indy Terminal # 215	Project Number: 182612296
Stantec Validator: Elizabeth Crowley	Laboratory: Pace Analytical, Indianapolis, IL
Date Validated: 10/16/14	Laboratory Project Number: 50103707
Sample Start-End Date: 09/12/14	Laboratory Report Date: 09/26/14

Parameters Validated: Volatile Organic Compounds (VOC) by 8260 and Poly Aromatic Hydrocarbons by 8270 SIM LVE

Associated Chain(s) of Custody – no numbers/2 aqueous field samples

Samples Validated – BPIT-DHW102-091214

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

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

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

UJ The analyte 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 analyte in the sample.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?		X
Comments:		
3. Were sample Chain-of-Custody forms complete?	X	
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	X	
Comments:		
5. Were sample holding times met?	X	
Comments:		
6. Were correct concentration units reported?	X	
Comments:		

7. Were detections found in laboratory blank samples?		Yes	No X
Comments:			
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?		Yes	No X
Comments: Trip blank results reported in Pace data package 50103706.			
9. Were instrument calibrations within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
10. Were surrogate recoveries within laboratory control limits?		Yes X	No
Comments:			
11. Were laboratory control sample recoveries within laboratory control limits?		Yes X	No
Comments:			
12. Were matrix spike recoveries within laboratory control limits?		Yes X	No
Comments:			
13. Were RPDs within control limits?		Yes X	No
Comments:			
14. Were dilutions required on any samples?		Yes	No X
Comments:			
15. Were Tentatively Identified Compounds (TIC) present?		Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged “NJ”. Reason Code – SQL			
16. Were organic system performance criteria met?	NA	Yes	No
Comments: Level II data package – no data provided.			
17. Were GC/MS internal standards within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
18. Were inorganic system performance criteria met?	NA	Yes	No
Comments: No inorganic samples submitted.			

19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample No. Primary Sample No.	Yes	No X
Comments:		
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No / Initials EAC
Comments:		
21. Other: Validation Limit	Yes X	No
Comments: Ten percent or minimum one sample validated. Validation criteria, flags and level of confidence apply to validated sample(s) only.		

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			