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Remediation Progress Report
Fourth Quarter 2013

Phillips 66 Renton Terminal
2423 Lind Avenue Southwest
Renton, Washington

Agreed Order No. DE 7882
Agency No. 2070

Conestoga-Rovers & Associates
20818 44th Ave. West, Suite 190
Lynnwood, Washington 98036

July 2014 • 070496 • Report No. 34

Partners in Sustainability

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Agreed Order No. DE 7882
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Matthew Davis, LG

Edwin Turner, LG

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Section 1.0 Introduction

This remediation progress report summarizes the field activities, system operational parameters, compliance sampling results, and system performance for the period of October 1, 2013 through December 31, 2013 at the Phillips 66 Company Renton Terminal located at 2423 Lind Avenue Southwest, Renton, Washington (Site, Figure 1). On August 5, 2010 ExxonMobil Oil Corporation, ConocoPhillips (now Phillips 66) Risk Management and Remediation, and The Washington State Department of Ecology (Ecology) entered into an Agreed Order (Order No. DE 7882). Prior to the agreed order, the site was divided into two separate sites; the northern portion associated with the pre-1990 release in the loading rack area managed by BP and ExxonMobil and the southern portion associated with the November 2002 release from AST No. 2 managed by Phillips 66. The agreed order was set in place to combine the sites and coordinate assessment and remediation activities between the two responsible parties. The purpose of this quarterly remediation progress report is to present the results of and evaluate the performance of the interim remedial actions. Remediation activities were completed in accordance with the Interim Action Work Plans included as an appendix to the Agreed Order and the site-specific Health and Safety Plan (HASP).

Section 2.0 Description of Remediation Systems and Operational Status

Phillips 66 Remediation System

The Phillips 66 remediation system is a dual-phase extraction (DPE) system consisting of six extraction wells (RWx-2, LAIx-4, LAIx-5, LAIx-7, LAIx-8, and LAIx-9) from which both soil vapor and groundwater are extracted and three extraction wells (LAIx-6, HWx-1W, and HWx-1E) from which only groundwater is extracted. The locations of the extraction wells are presented on Figure 2.

Extracted groundwater is pumped from the wells to a groundwater treatment system consisting of an oil/water separator, air stripper, solids settling tank, particulate filters, and 2-stage liquid-phase granular activated carbon (GAC) system. The treated water effluent is discharged to the combined sanitary/stormwater system under King County Discharge Authorization Permit No. 4057-03. Air effluent from the air stripper is routed to a 3-stage vapor-phase GAC vessel system that is part of the soil vapor treatment system.

Extracted soil vapor is pulled from the wells via vacuum to a soil vapor treatment system consisting of an air-water separator and the 3-stage GAC vessel system. The treated air effluent

is discharged to the atmosphere under Puget Sound Clean Air Agency (PSCAA) discharge permit No. 9648. A process and instrumentation diagram is presented on Figure 3.

During the reporting period, the Phillips 66 remediation system ran for approximately 63 days. Adjusted for routine maintenance shutdowns, the system uptime was approximately 85 percent. The following system shutdowns occurred during the reporting period:

- October 17, 2013 – System down due to an air stripper sump high level alarm
- October 24, 2013 - System down due to a transfer tank high level alarm
- November 7, 2013 – System down due to a transfer tank high level alarm
- December 2, 2013 – System down due to freezing temperatures

ExxonMobil/BP Remediation System

The ExxonMobil/BP remediation system is a groundwater extraction (GWE) system consisting of two GWE wells (R-1 and R-2). The locations of the system wells are presented on Figure 2.

Extracted groundwater is pumped from the wells to a groundwater treatment system consisting of an oil-water separator and air stripper. The treated water effluent is discharged to the combined sanitary/stormwater system under King County Discharge Authorization Permit 264-05. Air effluent from the air stripper is discharged to the atmosphere under PSCAA discharge permit No. 3601. A process and instrumentation diagram is presented on Figure 4.

During the reporting period, the ExxonMobil/BP Remediation System ran for approximately 45 days. Adjusted for routine maintenance shutdowns, the system uptime was approximately 48.7 percent. The following system shutdowns occurred during the reporting period:

- October 11, 2013 – System down due to an air stripper transfer tank high level alarm
- October 17, 2013 – System down due to an air stripper transfer tank high level alarm
- October 24, 2013 – System down due to an air stripper transfer tank high level alarm
- November 15, 2013 – System down due to an air stripper transfer tank high level alarm
- November 22, 2013 - System down due to an air stripper transfer tank high level alarm
- December 2, 2013 – System was shut down due to freezing temperatures
- December 23, 2013 – System down due to a blower low pressure alarm
- January 1, 2014 – System was down due to an air stripper transfer tank high level alarm

Section 3.0 Fourth Quarter 2013 Remediation Activities

Phillips 66 Remediation System

Remediation activities for the Phillips 66 remediation system consist of equipment maintenance, performance monitoring, monthly compliance sampling, system shutdown response, and troubleshooting/repairs. Scheduled visits for routine O&M are made once a week. Performance monitoring and monthly compliance sampling was performed on October 3, 2013, November 1, 2013, and December 20, 2013. Hydraulic monitoring to assess containment of the contaminant plume was performed on November 25, 2013. A summary of the operational data collected for the Phillips 66 system is presented in Table 1.

The following equipment repairs and maintenance activities were completed:

- October 11, 2013 – Cleaned air stripper influent flow meter

ExxonMobil/BP Remediation System

Remediation activities for the ExxonMobil/BP remediation system consist of equipment maintenance, performance monitoring, monthly compliance sampling, system shutdown response, and troubleshooting/repairs. Scheduled visits for routine O&M are made once a week. Performance monitoring and monthly compliance sampling was performed on October 3, 2013, November 1, 2013, and December 20, 2013. Hydraulic monitoring to assess containment of the contaminant plume was performed on November 25, 2013. A summary of the operational data collected for the ExxonMobil/BP system is presented in Table 2.

The following equipment repairs and maintenance activities were completed:

- October 17. 2013 – Cleaned and inspected float switch on feed tank
- November 7, 2013 – Adjusted float switch in feed tank
- November 22, 2013– Adjusted float switch in feed tank

Section 4.0 Summary of Compliance Sampling

Phillips 66 Remediation System

The King County Discharge Authorization for the Phillips 66 system requires semi-annual compliance sampling. Samples were collected monthly during this period to monitor performance and verify compliance on October 3, 2013, November 1, 2013, and December 20, 2013. Groundwater samples were collected from the wellfield influent, air stripper effluent, midpoint between the two GAC vessels, and the treated water effluent. Samples were analyzed for total petroleum hydrocarbons quantified as gasoline (TPHg) per Ecology Method NWTPH-Gx, TPH quantified as diesel (TPHd) and TPH quantified as oil (TPHo) per Ecology Method NWTPH-Dx, benzene, toluene, ethylbenzene, total xylenes (BTEX) per EPA Method 8260, and fats, oils, and grease (FOG) per EPA Method 1664A. The point of compliance for the permit is after the last GAC vessel. All samples collected demonstrated compliance with the permit conditions. Laboratory analytical reports are presented in Appendix A. Water compliance sampling data is presented on Table 3.

The PSCAA air discharge permit for the Phillips 66 system requires monthly compliance sampling for TPHg and benzene. Compliance samples were collected on October 3, 2013, November 1, 2013, and December 20, 2013. Air samples were collected from the soil vapor extraction (SVE) wellfield influent, air stripper effluent, total vapor-phase GAC influent, midpoint between GAC vessels 1 and 2, midpoint between GAC vessels 2 and 3, and the treated vapor effluent. Samples were analyzed for TPHg and BTEX per EPA Method TO-14. All samples collected demonstrated compliance with permit conditions. Air compliance sampling data is presented on Table 4.

ExxonMobil/BP Remediation System

The King County Discharge Authorization for the ExxonMobil/BP system requires semi-annual compliance sampling. Samples were collected monthly this period to monitor performance and verify compliance on October 3, 2013, November 1, 2013, and December 20, 2013. Groundwater samples were collected from the well R-1 influent, well R-2 influent, total influent, and treated water effluent. Samples were analyzed for TPHg per Ecology Method NWTPH-Gx, TPHd and TPHo per Ecology Method NWTPH-Dx, BTEX per EPA Method 8260, and FOG per EPA Method 1664A (only in December). The point of compliance for the permit is at the treated water effluent. All samples collected demonstrated compliance with the permit conditions. Laboratory analytical reports are presented in Appendix A. Water compliance sampling data is presented on Table 5.

The PSCAA air discharge permit for the ExxonMobil/BP system requires monthly compliance sampling for TPHg and BTEX. Compliance samples were collected on October 3, 2013, November 1, 2013, and December 20, 2013. Air samples were collected from the air stripper effluent and analyzed for TPHg and BTEX per EPA Method TO-14. All samples collected demonstrated compliance with permit conditions. Air compliance sampling data is presented on Table 6.

Section 5.0 Summary of System Performance

Phillips 66 Remediation System

During the reporting period, the volume of groundwater extracted has increased from the previous reporting period and is consistent with historical volumes. The increase in groundwater extraction volumes can be attributed primarily to increased up time and a higher water table. Influent contaminant concentrations in extracted groundwater have decreased from previous reporting periods. Concentrations continue an overall downward trend. Influent concentrations will continue to be monitored to determine if this trend continues.

SVE well field influent concentrations have decreased from the previous reporting period, which is consistent with the downward trend in concentrations observed over the last year. Mass removal rates and total mass removed are presented on Table 7 and Figures 5 and 6.

During the reporting period, the Phillips 66 DPE system operated consistently with the exception of the downtimes noted in Section 2.0. The process volumes and mass removed for the reporting period are as follows:

Period	*SVE Hours*	*Gallons of Water extracted*	*Pounds of TPH Removed*
Prior to October 3, 2013	77,446.3	4,445,527	53,901.6
October 3, 2013 to January 7, 2014	1539.3	152,417	26.8
Since System Startup	78,985.6	4,597,944	53,928.4

ExxonMobil/BP Remediation System

During the reporting period, the volume of groundwater extracted has increased from the previous reporting period. The increase in the volume of water extracted is due to a lower

water table during the dry season and is consistent with historical volumes. Influent contaminant concentrations continue to be significantly lower than concentrations in monitoring wells surrounding the extraction wells. Based on influent concentrations, the current system does not appear to be effectively capturing areas of the plume with the highest concentrations. Contaminant removal rates for the ExxonMobil/BP system are consistent with historical removal rates. Mass removal rates and total mass removed are presented on Table 8 and Figures 7 and 8.

During the reporting period the ExxonMobil/BP groundwater extraction system operated consistently with the exception of the downtimes noted in Section 2.0. The process volumes and mass removed for the reporting period are as follows:

Period	***Gallons of Water extracted***	***Pounds of TPH Removed***
January 2007 to October 3, 2013	4,563,198	219.71
October 3, 2013 to January 7, 2014	179,640	6.14
Since January 2007	4,742,838	225.85

* Data prior to January 2007 not available

The primary purpose of the Phillips 66 and ExxonMobil/BP remediation systems is to remove contaminant mass from the subsurface and hydraulically contain the groundwater contaminant plume to prevent further migration. Hydraulic monitoring was performed during the groundwater sampling activities. Procedures for hydraulic monitoring are included in the Site Interim Compliance Monitoring Plan (CMP). Groundwater elevation contours in the area of the Phillips 66 system indicate radial flow from the middle of the tank farm area, which is consistent with historical flow patterns at the site. Groundwater elevation contours in the northern portion where the ExxonMobil/BP system is operating indicate a flow direction inward toward trench R-1 and west toward trench R-2, consistent with historical groundwater flow directions. Groundwater elevation contours are presented on Figure 9.

Section 6.0 Conclusions

Phillips 66 Remediation System

The Phillips 66 remediation system continues to operate consistent with historical performance. The current system size and configuration does not allow the SVE system to perform optimally. Isolating vacuum to higher concentration wells and reducing vacuum dilution would dramatically improve the performance of the SVE system. This, however, would require significant changes to the current system components. These system improvements will be addressed as part of the final remedial action.

Groundwater flow directions and gradients on the southern portion of the Site are consistent with historical groundwater flow directions. The GWE portion of the Phillips 66 system does not appear to have a significant effect on flow directions and gradients. Groundwater quality data in wells to the south (downgradient) of tank 2 indicate that despite apparent inadequate groundwater control, contaminant migration is not likely occurring.

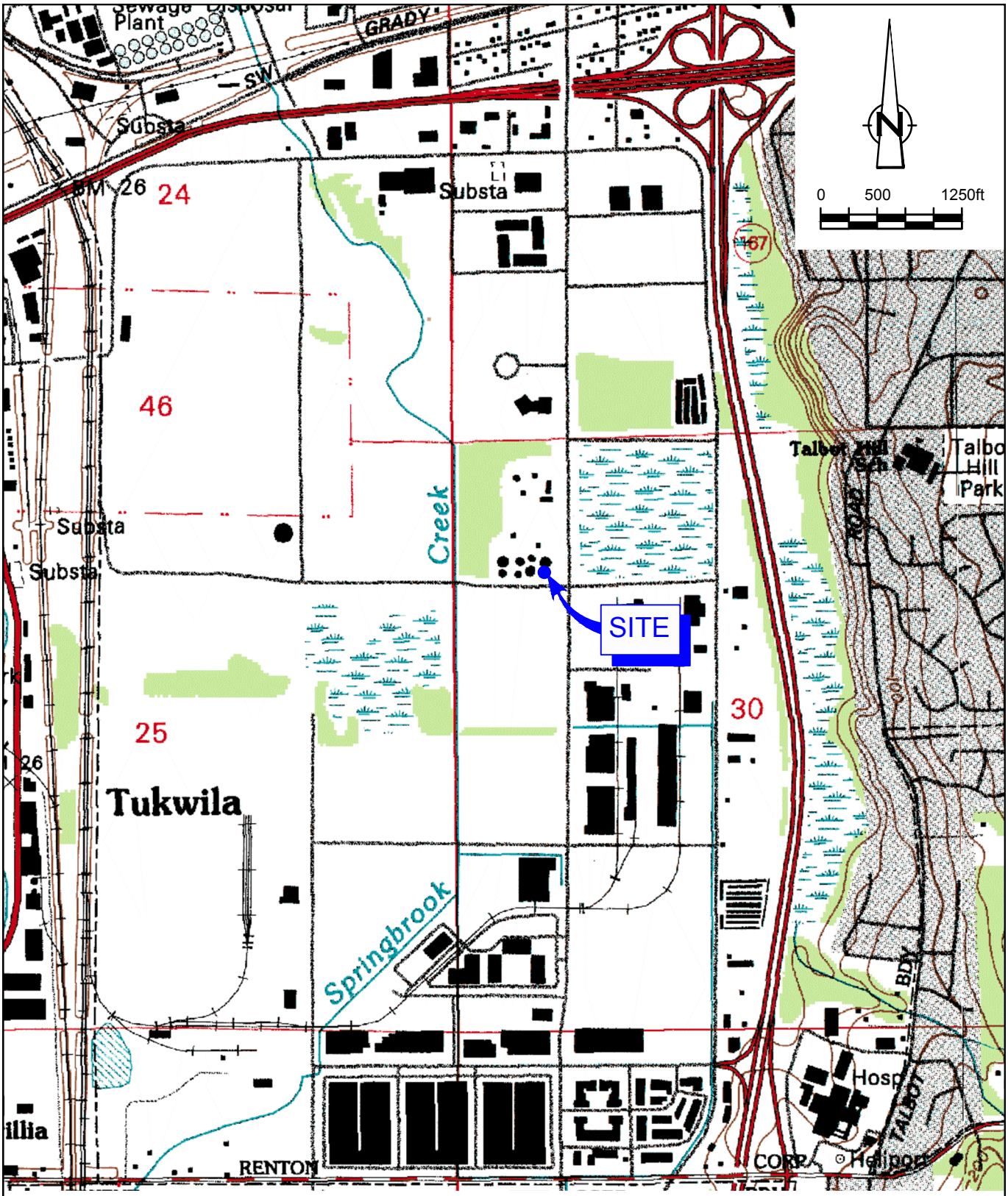
ExxonMobil/BP Remediation System

The ExxonMobil/BP system continues to operate consistent with historical performance. Groundwater elevation contours were consistent with historical groundwater flow directions. Based on the results of the recent remedial investigation, a significant portion of the contaminant plume to the north is outside of the influence of the current remediation system and will be addressed as part of the final remedial action.

The following activities will be performed during 1st Quarter 2014:

- O&M of the current remediation systems in accordance with the CMP
- Groundwater sampling and hydraulic monitoring in accordance with the CMP
- Activities in preparation of new system installation

Figures



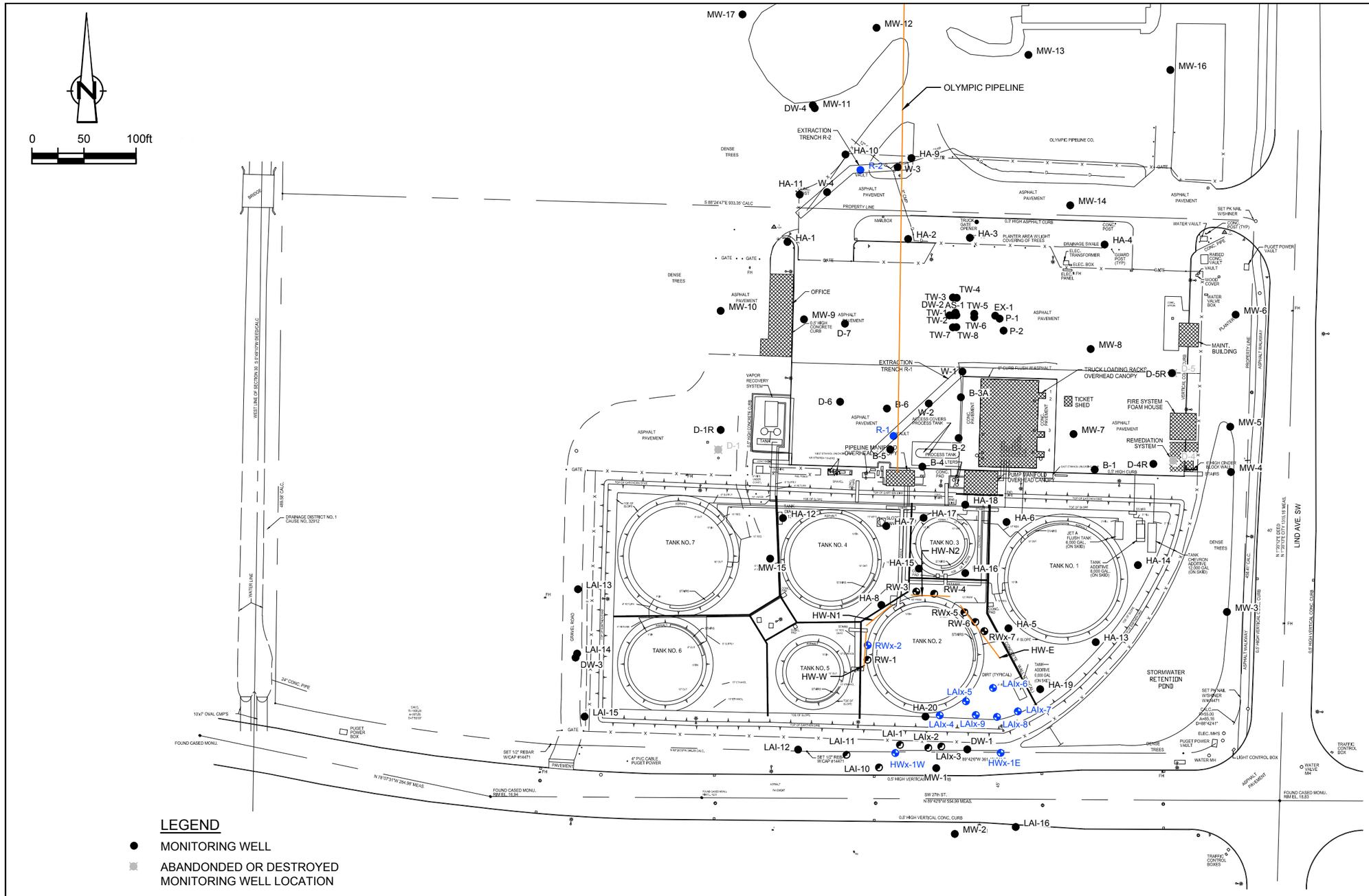
SOURCE: USGS QUADRANGLE MAP:
RENTON, WASHINGTON

figure 1

VICINITY MAP
PHILLIPS 66 RENTON TERMINAL
2423 LIND AVENUE SW
Renton, Washington

WASHINGTON

70496-2RM00(034)GN-WA001 MAR 31/2014



LEGEND

- MONITORING WELL
- ABANDONDED OR DESTROYED MONITORING WELL LOCATION
- 4" DIAMETER VERTICAL RECOVERY WELL (ACTIVELY PUMPING)
- 4" DIAMETER VERTICAL RECOVERY WELL (INACTIVE- NOT PUMPING)
- REMEDIATION WELL LOCATION

SOURCE: STATEWIDE LAND SURVEYING INC., DATED 1/26/12.

figure 2

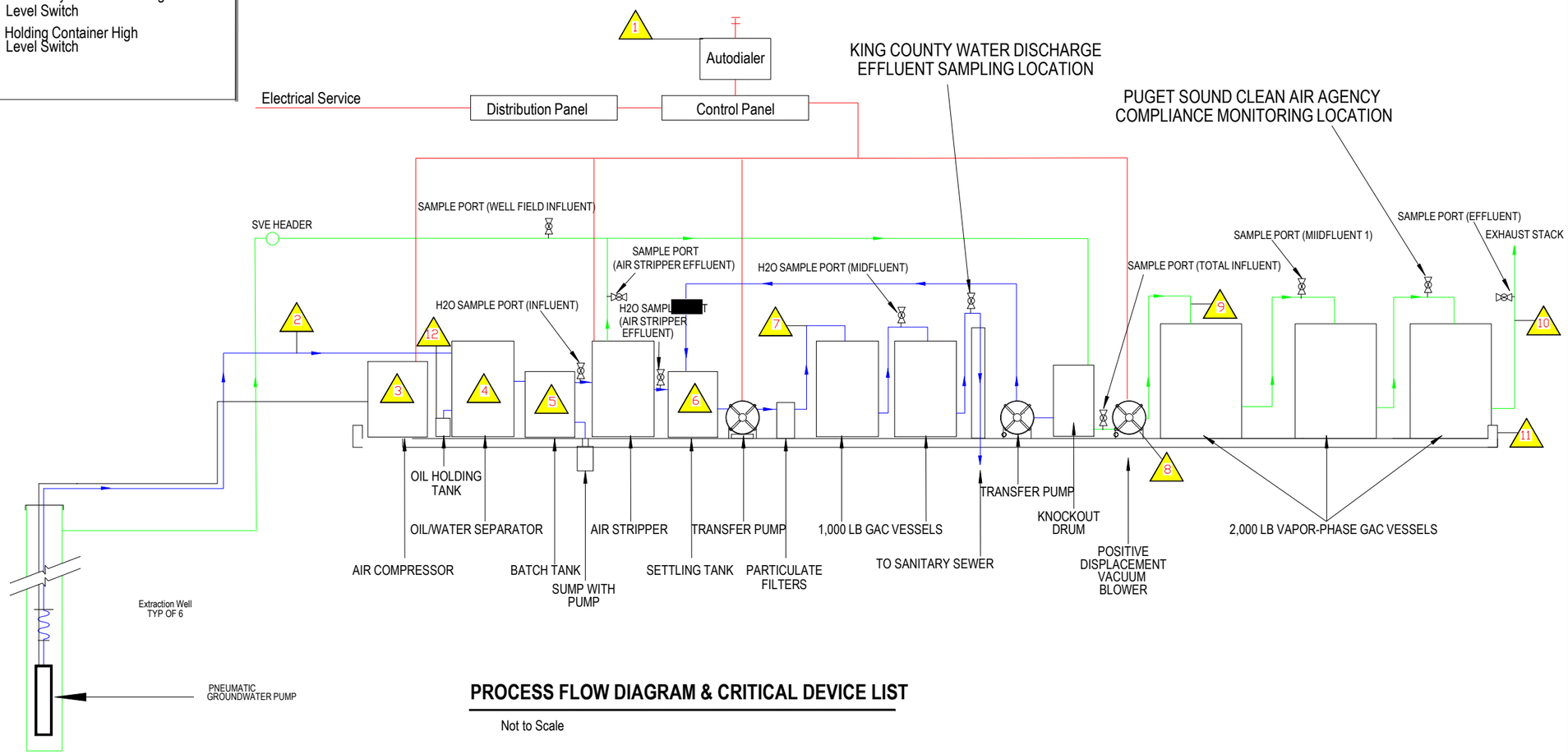
SITE PLAN
PHILLIPS 66 RENTON TERMINAL
2423 LIND AVENUE SW
Renton, Washington

CRITICAL DEVICES

1. Autodialer
2. Groundwater Flow Totalizer/ Meter
3. Air Compressor Pressure Gauge Relief Valve
4. Oil/ Water Separator High Level Switch
5. Batch Tank High Level Switch
6. Settling Tank High Level Switch
7. Liquid-Phase High Pressure Switch - Silt Filters
8. Automatic Shut Off Device
9. High Pressure Switch- Vapor- Phase Carbon
10. SVE Rotameter
11. Secondary Containment High Level Switch
12. Holding Container High Level Switch

EXPLANATION

- SVE Piping
- Electrical Power Wiring
- Groundwater Piping



PROCESS FLOW DIAGRAM & CRITICAL DEVICE LIST

Not to Scale

CLIENT

PHILLIPS 66 COMPANY

PROJECT

RENTON TERMINAL

RENTON, WASHINGTON

PROJECT # 070496

TITLE

DUAL PHASE EXTRACTION TREATMENT SYSTEM PROCESS FLOW DIAGRAM

DRAWING STATUS

NO	Revision	Date	Initial

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

Approved

CONESTOGA–ROVERS & ASSOCIATES

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Source Reference:

Designed By:	Date: 11/01/11	Drawing No. 3
Drafted By: VAM	Date: 11/01/11	
Reviewed By:	Date: 11/01/11	
Scale: NA		

04/04/11

T-210
EQUALIZATION TANK
650 GALLONS
POLYETHYLENE

V-220
OIL/WATER SEPARATOR
24 GPM
165 GAL OPERATING VOLUME

T-280
FREE PRODUCT STORAGE TANK
55 GALLONS
CARBON STEEL

P-290
FREE PRODUCT TRANSFER PUMP
UNKNOWN GPM
UNKNOWN FT DIS HEAD
0.75 HP

T-230
FEED TANK
650 GALLONS
POLYETHYLENE

P-240
FEED PUMP
UNKNOWN GPM
UNKNOWN FT DIS HEAD
1 HP

F-250A
BAG FILTER
25 MICRON
SIZE 2 FILTER

F-250B
BAG FILTER
25 MICRON
SIZE 2 FILTER

B-270
AIR STRIPPER BLOWER
488 SCFM ESTIMATED AT
0.7 PSIG DIS
2 HP

F-265
AIR FILTER
DP OF 0.008 IN H20 AT 600 SCFM

C-260
AIR STRIPPER
UNKNOWN GPM
PRESSURE RATING: UNKNOWN
BENZENE REMOVAL: UNKNOWN
MTBE REMOVAL: UNKNOWN
FIBERGLASS REINFORCED PLASTIC

T-300
FREE PRODUCT STORAGE TANK
1,000 GALLONS

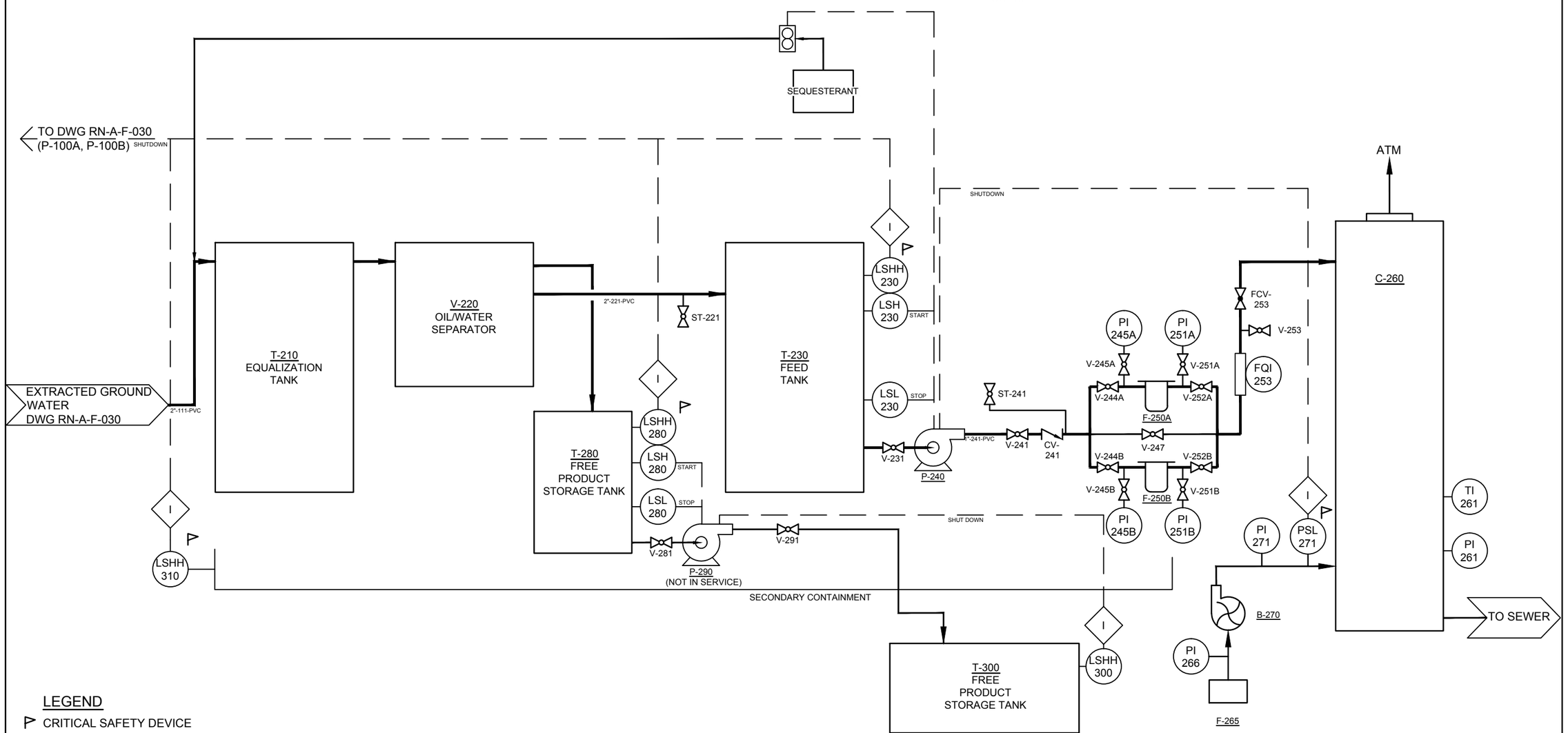

figure 4

EXXONMOBIL/BP SYSTEM - PROCESS AND INSTRUMENTATION DIAGRAM
PHILLIPS 66 RENTON TERMINAL
2423 LIND AVENUE SW
Renton, Washington

SOURCE: ACTON MICKELSON ENVIRONMENTAL, INC., GROUNDWATER REMEDIATION SYSTEM MECHANICAL FLOW DIAGRAM (2 OF2), SHEET 5 OF 13, DATED 8/07/08.

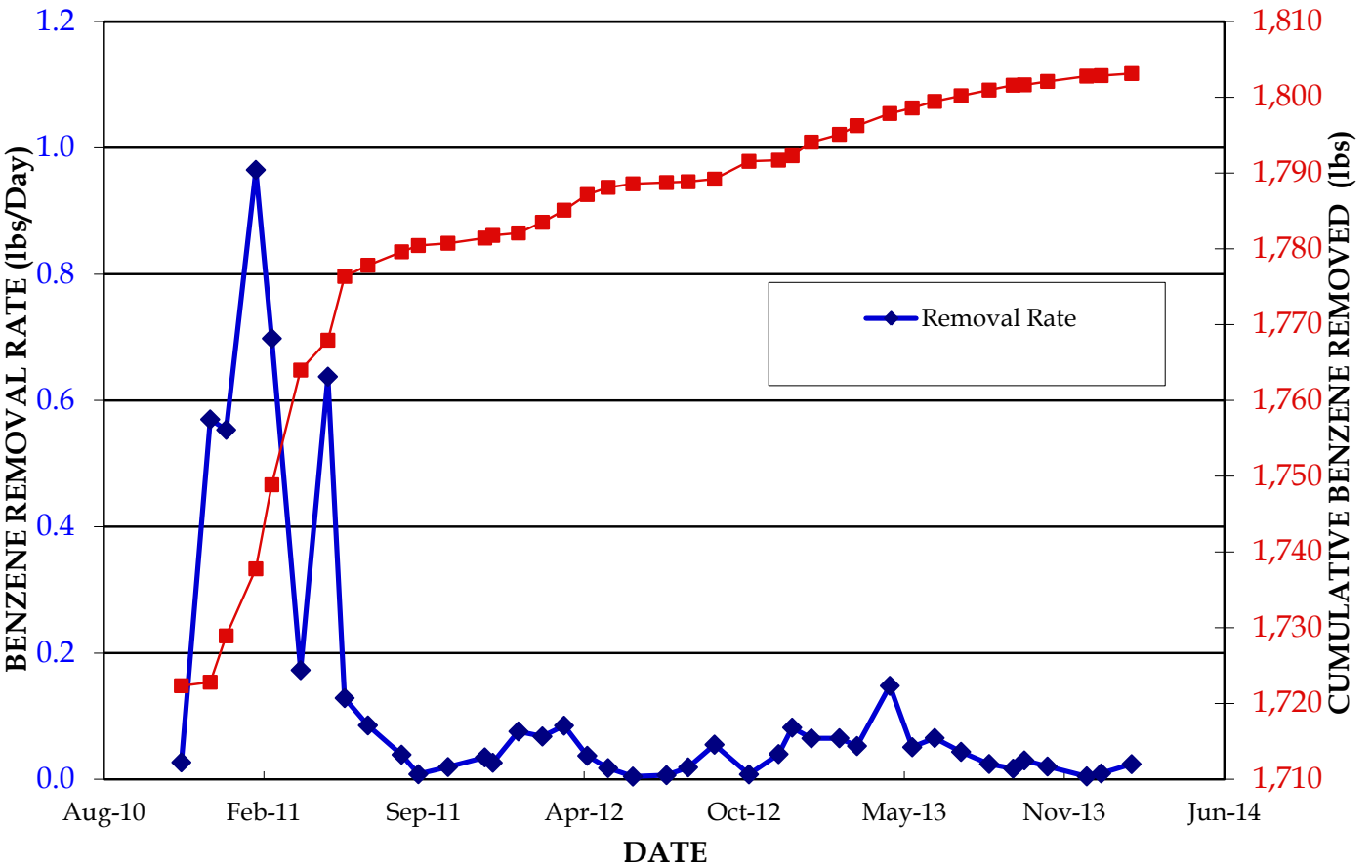

figure 5

PHILLIPS 66 SYSTEM - BENZENE MASS REMOVAL GRAPH

PHILLIPS 66 RENTON TERMINAL

Renton Washington

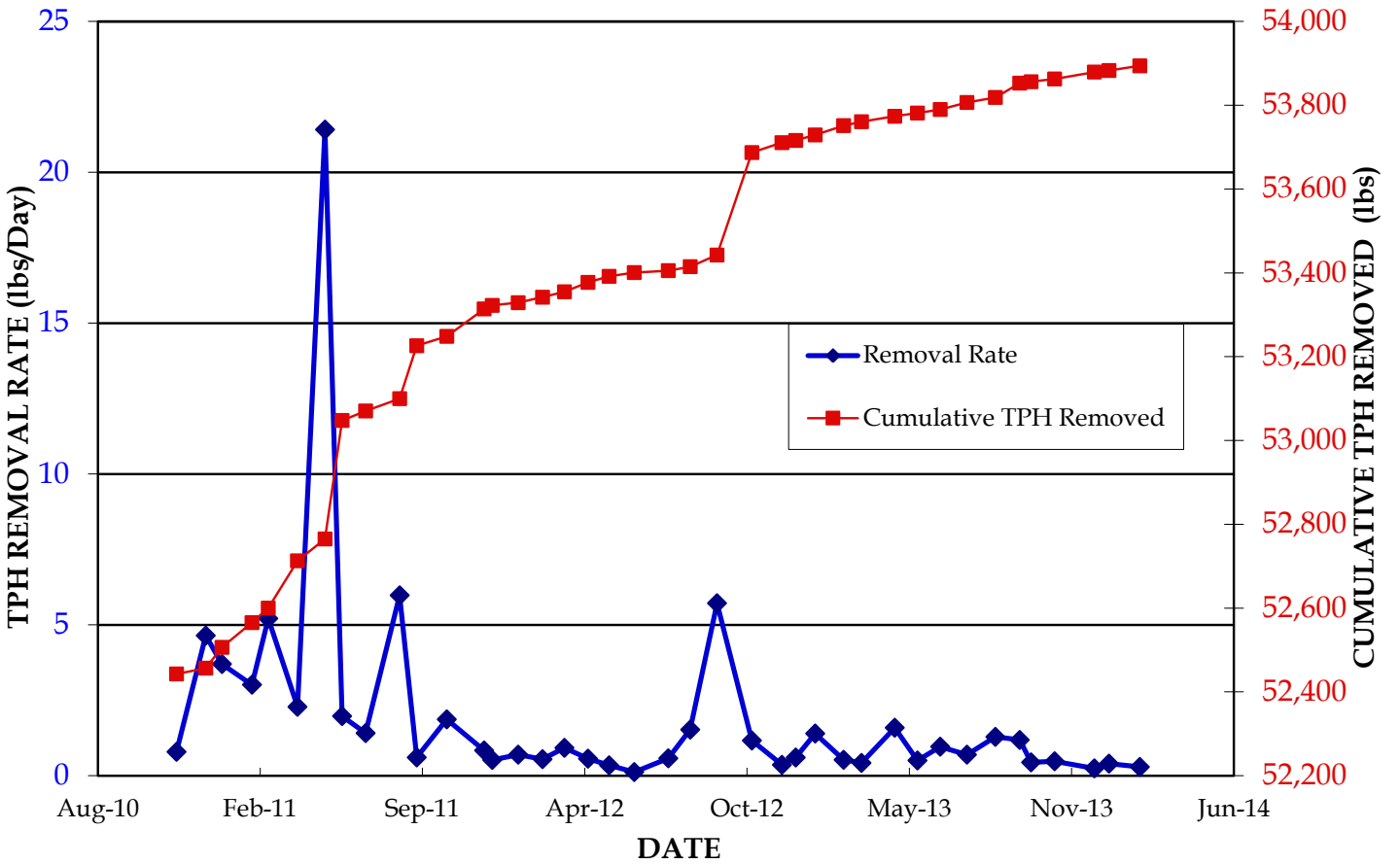

figure 6

PHILLIPS 66 SYSTEM - TPH MASS REMOVAL GRAPH

PHILLIPS 66 RENTON TERMINAL

Renton Washington

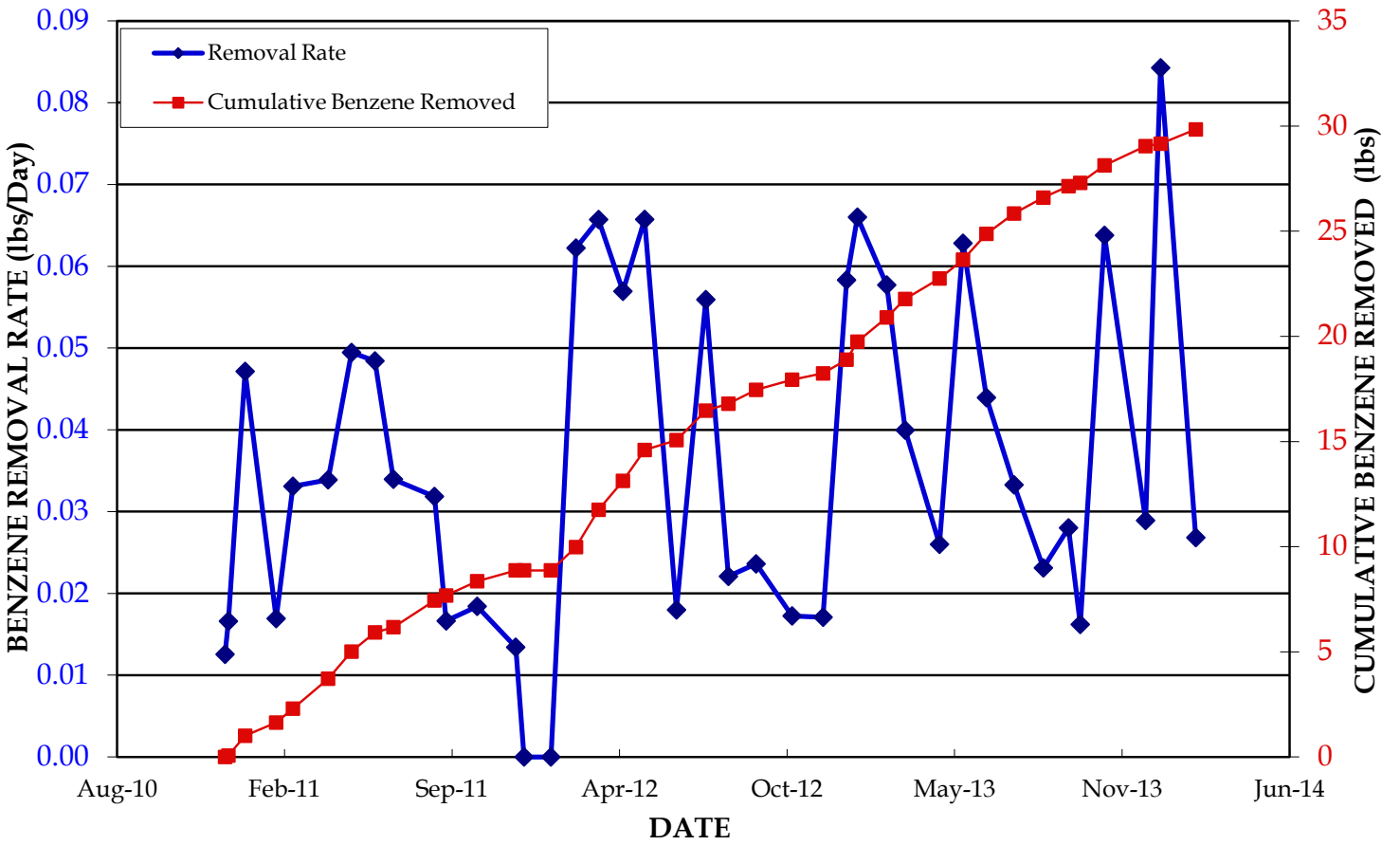

figure 7

EXXONMOBIL / BP SYSTEM - BENZENE MASS REMOVAL GRAPH

PHILLIPS 66 RENTON TERMINAL

Renton Washington

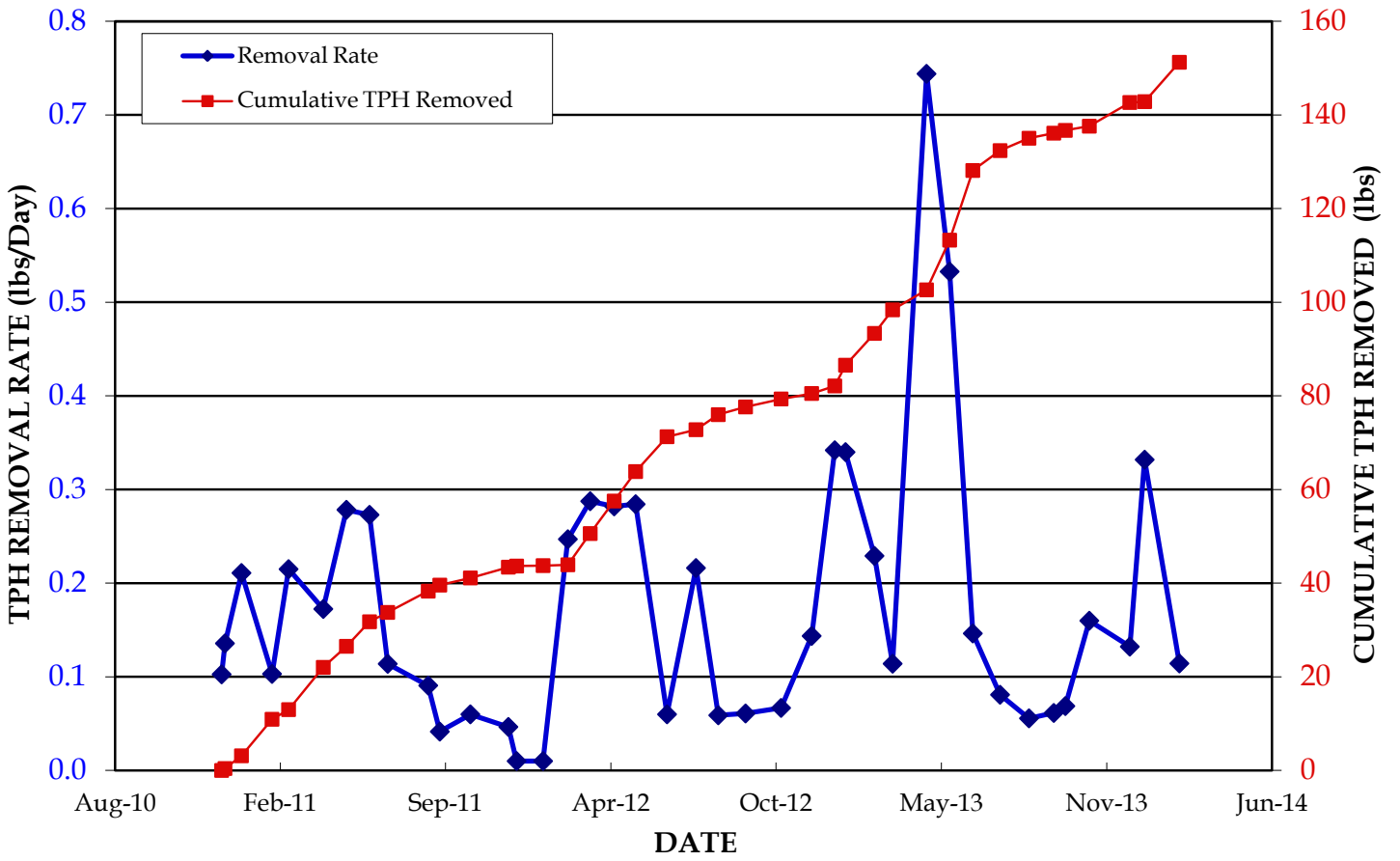

figure 8

EXXONMOBIL / BP SYSTEM - TPH MASS REMOVAL GRAPH

PHILLIPS 66 RENTON TERMINAL

Renton Washington

0 50 100ft

LEGEND

- MONITORING WELL
- ABANDONDED OR DESTROYED MONITORING WELL LOCATION
- 4" DIAMETER VERTICAL RECOVERY WELL (ACTIVELY PUMPING)
- 4" DIAMETER VERTICAL RECOVERY WELL (INACTIVE- NOT PUMPING)
- REMEDIATION WELL LOCATION

15.5 — GROUNDWATER ELEVATION CONTOUR, DASHED WHERE INFERRED

(15.68) GROUNDWATER ELEVATION

0.012 GROUNDWATER FLOW DIRECTION AND GRADIENT

NOTES:
1. GROUNDWATER ELEVATIONS ARE IN FEET.

SOURCE: STATEWIDE LAND SURVEYING INC., DATED 1/26/12.

figure 9

GROUNDWATER ELEVATION CONTOURS - SHALLOW WELLS (NOVEMBER 2013)
PHILLIPS 66 RENTON TERMINAL
2423 LIND AVENUE SW
Renton, Washington

70496-2RM00(034)GN-WA004 MAR 31/2014

Tables

TABLE 1

PHILLIPS 66 SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Soil Vapor Extraction System								*Groundwater Extraction System*		
Date	***Hour Meter (hours)***	***Total Vacuum (in. H_2O)***	***Total Influent Temperature (ºF)***	***Total Influent Flowrate (scfm)***	***Influent PID (ppmV)***	***C-1 PID (ppmV)***	***C-2 PID (ppmV)***	***Effluent PID (ppmV)***	***Hour Meter (hours)***	***Water Meter Reading (gallons)***	***Cumulative Volume of Water Treated (gallons)***
12/09/10	1,389.3	25	100	210	1.8	1.8	0.2	3.3	20,913.8	711,224	3,215,544
12/17/10	1,393.4	35	100	210	--	--	--	--	20,914.8	711,445	3,215,765
12/20/10	1,397.4	35	100	210	--	--	--	--	20,918.7	712,485	3,216,805
12/21/10	1,419.7	36	100	210	22.8	1.9	0.3	2.3	20,941.0	718,185	3,222,505
12/29/10	1,529.5	40	75	210	33.7	0.0	0.0	0.0	21,050.7	752,260	3,256,580
12/30/10	1,556.3	40	100	210	--	--	--	--	21,076.1	760,809	3,265,129
01/05/11	1,559.0	35	100	210	--	--	--	--	--	760,940	3,265,260
01/06/11	1,583.4	35	100	210	23.3	1.7	0.5	2.8	21,102.1	768,341	3,272,661
01/10/11	1,678.4	35	100	210	0.0	0.0	0.0	0.0	21,196.2	790,309	3,294,629
01/12/11	1,632.1	35	95	210	--	--	--	--	21,200.0	792,260	3,296,580
01/18/11	1,821.5	35	105	210	14.7	1.6	1.0	4.1	21,339.1	830,160	3,334,480
01/19/11	1,849.4	35	105	210	--	--	--	--	21,336.8	837,044	3,341,364
01/25/11	1,907.0	37	100	210	20.3	0.0	0.0	0.0	21,424.6	849,720	3,354,040
01/27/11	1,955.3	35	105	210	17.4	1.1	0.5	3.3	21,471.1	863,494	3,367,814
02/01/11	1,969.5	35	105	210	--	--	--	--	21,484.8	866,299	3,370,619
02/03/11	2,011.5	35	100	210	--	--	--	--	21,527.2	877,830	3,382,150
02/11/11	2,023.0	35	105	210	--	--	--	--	21,538.4	881,910	3,386,230
02/14/11	2,034.6	40	100	210	86.1	1.5	0.0	1.3	21,549.6	886,823	3,391,143
02/16/11	2,064.0	40	100	210	57.6	2.0	0.8	1.8	21,577.0	897,988	3,402,308
02/23/11	2,231.7	30	100	210	17.6	1.4	0.9	2.1	21,746.4	925,254	3,429,574
03/01/11	2,233.7	35	100	210	78.6	3.5	0.4	0.0	21,747.6	925,872	3,430,192
03/08/11	2,339.9	35	105	210	61.9	5.6	6.0	1.0	21,852.3	951,757	3,456,077
03/09/11	2,342.3	35	105	210	60	0.1	0.0	0.0	21,854.7	952,363	3,456,683
03/14/11	2,371.4	35	105	210	50	0.4	0.0	0.0	21,883.5	959,647	3,463,967
03/22/11	2,557.2	35	105	210	48	0.8	0.2	0.3	22,069.2	1,006,270	3,510,590
03/24/11	2,609.7	35	100	210	--	--	--	--	22,121.6	1,015,100	3,519,420
03/29/11	2,676.9	35	100	210	63.5	0.8	0.0	0.0	22,228.8	1,038,117	3,542,437
04/05/11	2,858.4	35	100	210	53	0.4	0.0	0.0	22,369.3	1,066,420	3,570,740
04/13/11	2860.7	35	100	210	0.0	0.0	0.0	0.0	22,370.8	1,066,420	3,570,740
04/15/11	2864.4	35	100	210	--	--	--	--	22,373.3	1,068,338	3,572,658
04/18/11	2897.9	35	100	210	38.3	0.0	0.0	0.0	22,406.5	1,077,180	3,581,500
04/19/11	--	--	--	--	--	--	--	--	--	--	--

TABLE 1

PHILLIPS 66 SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Soil Vapor Extraction System								*Groundwater Extraction System*		
Date	*Hour Meter*	*Total Vacuum*	*Total Influent Temperature*	*Total Influent Flowrate*	*Influent PID*	*C-1 PID*	*C-2 PID*	*Effluent PID*	*Hour Meter*	*Water Meter Reading*	*Cumulative Volume of Water Treated*
04/26/11	3063.0	35	120	210	69.3	0.0	0.0	0.0	22,571.8	1,103,148	3,607,468
05/03/11	3147.3	35	120	210	70	0.0	0.0	0.0	22,655.8	1,117,500	3,621,820
05/13/11	3386.7	35	125	210	--	--	--	--	22,895.2	1,135,172	3,639,492
05/16/11	3389.3	35	112	210	15	0.4	0.1	0.1	22,898.0	1,135,792	3,640,112
05/17/11	3409.9	35	113	210	11.1	0.2	0.0	0.0	22,918.6	1,140,353	3,644,673
05/24/11	3580.8	35	115	196	8.3	0.3	0.1	0.0	23,089.5	1,170,742	3,675,062
06/02/11	3607.6	35	120	196	--	--	--	--	23,116.2	1,176,106	3,680,426
06/07/11	3726.8	30	105	210	7.8	0.1	0.0	0.0	23,235.4	1,181,785	3,686,105
06/14/11	3894.2	35	110	210	9.3	0.0	0.0	0.0	23,401.2	1,192,630	3,696,950
06/22/11	3973.9	35	120	210	--	--	--	--	23,484.0	1,198,593	3,702,913
06/28/11	3994.4	35	120	196	16.5	0.0	0.0	0.0	23,504.5	1,201,716	3,706,036
07/06/11	4000.1	33	140	210	15.1	--	--	--	23,510.2	1,202,600	3,706,920
07/12/11	4000.5	20	110	100	13.2	--	--	--	23,514.2	1,203,070	3,707,390
07/14/11	4008.3	20	95	100	--	--	--	--	23,514.3	1,203,109	3,707,429
07/19/11	4123.7	30	110	98	33	0.0	0.0	0.0	23,629.8	1,207,790	3,712,110
07/26/11	4224.5	27	70	100	--	--	--	--	23,730.4	1,211,680	3,716,000
08/03/11	4233.9	23	100	100	48.4	6.6	0.3	0.4	23,741.8	1,212,390	3,716,710
08/11/11	4431.7	35	120	100	--	--	--	--	23,939.8	1,217,794	3,722,114
08/17/11	4499.8	33	110	100	36.3	0.1	0.0	0.0	24,010.5	1,219,880	3,724,200
08/24/11	4667.8	30	110	100	30	0.0	0.0	0.0	24,178.3	1,222,796	3,727,116
08/30/11	4820.0	29	110	100	45.0	0.0	0.0	0.0	24322.3	1,224,480.0	3,728,800
09/07/11	5006.5	35	120	100	41.0	0.4	0.0	0.0	24517.0	1,226,561.0	3,730,881
09/15/11	5196.1	32	120	100	39.4	0.0	0.0	0.0	24706.8	1,228,430.0	3,732,750
09/21/11	5342.0	28	120	100	38.1	0.0	0.0	0.0	24862.5	1,229,880.0	3,734,200
09/28/11	5507.8	28	110	100	4.3	0.0	0.0	0.0	25018.9	1,231,530.0	3,735,850
10/03/11	5629.8	28	105	100	64	0.1	0.2	0.0	25141.0	1,232,740.0	3,737,060
10/14/11	5892.8	30	100	100	69.9	0.1	0.1	0.0	25404.0	1,235,348.0	3,739,668
10/17/11	5966.5	29	110	100	25.0	0.0	0.0	0.0	25477.6	1,236,020.0	3,740,340
10/25/11	6157.4	35	100	100	80.0	--	--	--	25668.6	1,238,147.0	3,742,467
11/02/11	6347.9	35	95	100	--	--	--	--	25859.2	1,247,837.0	3,752,157
11/08/11	6492.0	30	100	100	17.9	0.6	0.3	0.2	26003.4	1,252,432.0	3,756,752
11/16/11	6682.7	35	90	100	20.6	0.0	0.0	0.0	26194.0	1,259,230.0	3,763,550
11/23/11	6732.1	32	90	200	5.2	0.0	0.0	0.0	26243.1	1,261,060.0	3,765,380
11/29/11	6733.7	33	80	200	6.4	0.0	0.0	0.0	26244.1	1,261,275.0	3,765,595

TABLE 1

PHILLIPS 66 SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Soil Vapor Extraction System								*Groundwater Extraction System*		
Date	*Hour Meter*	*Total Vacuum*	*Total Influent Temperature*	*Total Influent Flowrate*	*Influent PID*	*C-1 PID*	*C-2 PID*	*Effluent PID*	*Hour Meter*	*Water Meter Reading*	*Cumulative Volume of Water Treated*
12/09/11	6974.6	29	90	200	2.6	0.0	0.0	0.0	26485.0	1,284,500.0	3,788,820
12/14/11	7083.8	26	75	190	1.2	0.0	0.0	0.0	26590.9	1,290,910.0	3,795,230
12/21/11	7174.6	38	85	200	5.0	0.0	0.0	0.0	26681.6	1,298,390.0	3,802,710
12/29/11	7177.3	30	90	200	--	--	--	--	26684.2	1,298,690.0	3,803,010
01/04/12	7209.3	45	100	190	2.6	0.0	0.0	0.0	26716.2	1,302,370.0	3,806,690
01/10/12	7271.1	28	50	210	1.1	0.0	0.0	0.0	26778.2	1,310,770.0	3,815,090
01/17/12	7373.9	41	90	200	1.8	0.0	0.0	0.0	26881.0	1,319,880.0	3,824,200
01/24/12	7398.9	28	90	210	5.8	0.0	0.0	0.0	26905.9	1,323,120.0	3,827,440
01/31/12	7502.2	34	90	200	9.3	0.0	0.0	0.0	27009.0	1,337,860.0	3,842,180
02/09/12	7718.1	35	95	200	3.3	0.0	0.0	0.0	27225.0	1,362,440.0	3,866,760
02/16/12	7885.1	30	85	200	--	--	--	--	27391.9	1,378,194.0	3,882,514
02/21/12	8007.5	45	95	200	0.6	0.0	0.0	0.0	27514.3	1,391,524.0	3,895,844
03/02/12	8229.4	31	80	200	4.1	0.0	0.0	0.0	27736.1	1,413,780.0	3,918,100
03/07/12	8285.0	40	90	200	0.7	0.0	0.0	0.0	27791.7	1,420,688.0	3,925,008
03/15/12	8285.0	--	--	--	--	--	--	--	27791.7	1,420,688.0	3,925,008
03/20/12	8485.8	38	90	190	0.4	0.0	0.0	0.0	27992.4	1,439,440.0	3,943,760
03/27/12	8653.2	44	110	190	0.0	0.0	0.0	0.0	28159.8	1,458,610.0	3,962,930
04/05/12	8866.9	48	100	190	0.0	0.0	0.0	0.0	28373.8	1,476,720.0	3,981,040
04/12/12	9039.6	40	95	190	4.7	0.0	0.0	0.0	28546.6	1,490,172.0	3,994,492
04/20/12	9226.3	38	100	190	0.5	0.0	0.0	0.0	28733.3	1,508,710.0	4,013,030
04/26/12	9373.9	37	105	190	2.2	0.0	0.0	0.0	28880.9	1,521,208.0	4,025,528
05/01/12	9476.8	40	95	200	4.7	0.0	0.0	0.0	28983.8	1,531,500.0	4,035,820
05/11/12	9715.4	38	90	200	0.4	0.0	0.0	0.0	29222.3	1,550,120.0	4,054,440
05/17/12	9767.1	35	90	200	0.5	0.0	0.0	0.0	29274.1	1,556,050.0	4,060,370
05/24/12	9911.9	35	100	210	1.4	0.0	0.0	0.0	29419.1	1,564,702.0	4,069,022
06/01/12	10105.6	40	100	200	1.1	0.0	0.0	0.0	29612.8	1,571,790.0	4,076,110
06/08/12	10273.5	30	100	200	10.0	0.0	0.0	0.0	29780.9	1,580,170.0	4,084,490
06/18/12	10511.4	35	105	210	--	--	--	--	30018.8	1,580,225.0	4,084,545
06/29/12	10683.7	33	100	200	17.1	0.0	0.0	0.0	30191.1	1,580,500.0	4,084,820
07/03/12	10778.7	35	100	210	23.5	0.0	0.0	0.0	30286.1	1,587,800.0	4,092,120
07/13/12	11016.9	39	100	200	0.4	0.0	0.0	0.0	30524.4	1,596,090.0	4,100,410
07/18/12	11073.3	35	100	200	0.8	0.0	0.0	0.0	30580.8	1,599,550	4,103,870
07/24/12	11217.2	30	100	210	--	--	--	--	30724.7	1,604,590	4,108,910
08/01/12	11406.3	30	120	210	3.1	0.2	0.1	0.0	30913.0	1,610,297	4,114,617

TABLE 1

PHILLIPS 66 SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Soil Vapor Extraction System								*Groundwater Extraction System*		
Date	*Hour Meter*	*Total Vacuum*	*Total Influent Temperature*	*Total Influent Flowrate*	*Influent PID*	*C-1 PID*	*C-2 PID*	*Effluent PID*	*Hour Meter*	*Water Meter Reading*	*Cumulative Volume of Water Treated*
08/09/12	11406.3	30	120	210	3.1	0.2	0.1	0.0	30913.0	1,610,297	4,114,617
08/31/12	11574.9	30	100	210	0.1	0.0	0.0	0.0	31081.3	1,616,630	4,120,950
09/05/12	11700.3	30	100	200	0.1	0.0	0.0	0.0	31206.8	1,619,750	4,124,070
09/11/12	11842.5	30	100	200	4.9	0.0	0.0	0.0	31349.1	1,621,790	4,126,110
09/25/12	12174.8	30	110	210	26.3	2.8	0.8	0.3	31657.6	1,628,210	4,132,530
10/05/12	12414.7	30	100	200	18.8	3.3	0.2	0.6	31871.4	1,631,070	4,135,390
10/12/12	12581.4	25	100	200	37.7	3.8	0.6	0.4	32038.2	1,631,760	4,136,080
10/19/12	12746.5	30	110	210	25.5	6.1	0.1	0.1	32203.3	1,631,832	4,136,152
10/24/12	12868.7	--	--	210	21.4	0.3	0.3	0.0	32325.5	1,634,281	4,138,601
11/02/12	13082.2	30	100	210	4.4	2.4	1.4	0.0	32538.8	1,636,510	4,140,830
11/08/12	13226.7	28	115	200	3.5	3.6	1.1	0.0	32683.7	1,641,700	4,146,020
11/16/12	13352.1	25	75	210	2.9	2.6	1.4	0.0	32809.2	1,642,820	4,147,140
11/30/12	13353.6	40	105	210	1.3	0.0	0.0	0.0	32810.6	1,643,135	4,147,455
12/04/12	13448.9	35	100	200	--	--	--	--	32905.9	1,651,120	4,155,440
12/10/12	13595.7	35	100	200	--	--	--	--	33052.7	1,660,450	4,164,770
12/17/12	13706.1	33	90	200	0.6	1.6	0.0	0.0	33163.0	1,668,780	4,173,100
12/28/12	13969.2	35	95	210	2.1	0.0	0.0	0.0	33426.4	1,678,171	4,182,491
01/04/13	14084.2	35	90	210	8.1	0.0	0.0	0.0	33541.5	1,685,777	4,190,097
01/10/13	14229.2	35	100	200	12.3	0.0	0.0	0.0	33686.2	1,691,330	4,195,650
01/25/13	14234.0	35	105	210	0.2	0.0	0.0	0.0	33689.8	1,691,493	4,195,813
01/31/13	14376.5	40	90	210	0.2	0.0	0.0	0.0	33832.1	1,691,639	4,195,959
02/08/13	14567.6	28	100	200	12.4	0.0	0.0	0.0	34023.1	1,691,870	4,196,190
02/14/13	14611.9	30	100	210	1.9	0.0	0.0	0.0	34067.4	1,692,962	4,197,282
02/19/13	14641.3	30	100	210	0.6	0.0	0.0	0.0	34096.7	1,693,661	4,197,981
02/25/13	14773.7	38	100	200	0.4	0.0	0.0	0.0	34229.0	1,698,650	4,202,970
03/01/13	14867.0	36	100	200	--	--	--	--	34322.4	1,700,070	4,204,390
03/06/13	14986.6	35	100	210	0.4	0.0	0.0	0.0	34442.0	1,701,149	4,205,469
03/08/13	15035.2	35	100	210	1.5	0.0	0.0	0.0	34490.7	1,701,661	4,205,981
03/11/13	15106.1	35	100	210	0.8	0.0	0.0	0.0	34561.0	1,702,293	4,206,613
03/27/13	15489.7	35	105	200	1.3	0.0	0.0	0.0	34945.1	1,705,941	4,210,261
04/03/13	15517.7	35	105	210	--	--	--	--	34973.5	1,706,223	4,210,543
04/10/13	15595.0	42	100	200	1.4	0.6	0.0	0.0	35038.8	1,712,000	4,216,320
04/18/13	15767.0	--	--	--	7.0	0.0	0.0	0.0	35210.5	1,730,944	4,235,264
05/09/13	15865.4	35	115	210	14.3	0.00	0.00	0.00	35352.4	1,737,114	4,241,434

TABLE 1

PHILLIPS 66 SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Soil Vapor Extraction System								*Groundwater Extraction System*		
Date	***Hour Meter***	***Total Vacuum***	***Total Influent Temperature***	***Total Influent Flowrate***	***Influent PID***	***C-1 PID***	***C-2 PID***	***Effluent PID***	***Hour Meter***	***Water Meter Reading***	***Cumulative Volume of Water Treated***
05/16/13	15869.2	35	105	210	0.4	0.00	0.00	0.00	35356.2	1,738,866	4,243,186
05/21/13	15984.2	35	100	210	5.3	0.10	0.00	0.00	35471.2	1,765,951	4,270,271
05/30/13	16141.6	30	95	210	1.4	0.00	0.00	0.00	35629.3	1,797,991	4,302,311
06/04/13	16144.0	35	105	210	8.7	0.00	0.00	0.00	35631.5	1,798,804	4,303,124
06/13/13	16274.1	35	105	210	1.8	0.00	0.10	0.00	35761.6	1,822,664	4,326,984
06/21/13	16447.4	22	100	220	1.5	0.00	0.00	0.00	35765.8	1,823,430	4,327,750
06/28/13	16615.8	50	120	210	--	--	--	--	35838.3	1,835,191	4,339,511
07/02/13	16644.5	40	120	210	--	--	--	--	35866.7	1,839,189	4,343,509
07/10/13	16673.1	40	120	210	--	--	--	--	35895.2	136 a	4,347,761
07/16/13	16796.8	40	125	155	7.6	0.00	0.00	0.00	36018.9	14,570	4,362,195
07/23/13	16851.2	30	125	150	4.6	0.00	0.00	0.00	36068.0	18,097	4,365,722
07/30/13	17014.4	60	110	140	6.0	0.00	0.30	0.00	36231.3	33,212	4,380,837
08/08/13	17015.6	30	100	175	11.0	0.00	0.00	0.00	36232.5	33,444	4,381,069
08/12/13	17017.9	18	100	170	17.1	0.00	0.00	0.00	36234.7	33,636	4,381,261
08/20/13	17209.3	45	110	175	12.9	0.00	0.00	0.00	36426.2	49,760	4,397,385
08/26/13	17352.6	10	110	150	10.0	0.00	0.00	0.00	36569.5	54,346	4,401,971
09/05/13	17593.9	30	120	100	33.8	0.00	0.00	0.00	36810.8	61,491	4,409,116
09/09/13	17604.4	45	100	150	--	--	--	--	--	61,613	4,409,238
09/19/13	17845.6	35	100	160	31.0	1.20	0.00	0.00	37062.7	82,138	4,429,763
09/26/13	17856.8	35	100	160	31.5	0.00	0.00	0.00	37073.8	95,372	4,442,997
10/03/13	17912.8	35	100	160	23.9	0.00	0.00	0.00	37129.5	97,902	4,445,527
10/11/13	18104.2	35	90	160	3.5	0.00	0.00	0.00	37320.0	135,200	4,482,825
10/17/13	18212.1	35	90	160	4.7	0.00	0.00	0.00	37428.3	152,090	4,499,715
10/24/13	18216.2	35	80	175	3.6	0.00	0.00	0.00	37432.2	153,328	4,500,953
11/01/13	18273.3	45	100	150	2.7	0.00	0.00	0.00	37488.3	163,749	4,511,374
11/07/13	18416.0	35	90	170	2.4	0.00	0.00	0.00	37630.6	180,762	4,528,387
11/15/13	18603.5	35	90	170	1.2	0.00	0.10	0.10	37818.2	196,559	4,544,184
11/20/13	18728.1	45	110	150	5.4	0.00	0.00	0.00	37942.6	208,754	4,556,379
11/27/13	18883.5	40	90	160	1.6	0.30	0.20	0.00	38098.0	231,477	4,579,102
12/02/13	19003.5	35	80	170	--	--	--	--	38218.2	246,090	4,593,715
12/16/13	19003.5	--	--	--	--	--	--	--	38218.2	246,090	4,593,715
12/20/13	19097.4	30	75	170	0.5	0.00	0.00	0.00	38310.3	246,410	4,594,035
12/23/13	19171.3	24	70	170	0.5	0.00	0.00	0.00	38384.2	246,410	4,594,035
01/03/14	19435.3	35	75	170	0.8	0.10	0.00	0.00	38648.3	247,010	4,594,635

TABLE 1

PHILLIPS 66 SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Soil Vapor Extraction System								*Groundwater Extraction System*		
Date	***Hour Meter***	***Total Vacuum***	***Total Influent Temperature***	***Total Influent Flowrate***	***Influent PID***	***C-1 PID***	***C-2 PID***	***Effluent PID***	***Hour Meter***	***Water Meter Reading***	***Cumulative Volume of Water Treated***
01/07/14	19452.1	32	100	180	14.2	0.00	0.00	0.00	38665.1	250,319	4,597,944
01/17/14	19694.4	40	90	160	2.9	0.10	0.00	0.00	38907.4	286,563	4,634,188
01/20/14	19763.4	30	80	180	1.1	0.10	0.00	0.00	38976.5	295,629	4,643,254
01/31/14	19974.7	35	80	170	--	--	--	--	39185.2	323,067	4,670,692
02/14/14	20086.9	30	100	150	2.7	0.30	0.10	0.00	39395.5	342,869	4,690,494
02/26/14	20367.9	36	100	150	0.8	0.00	0.00	0.00	39576.4	400,227	4,747,852
02/28/14	20411.3	35	90	170	1.2	0.10	0.00	0.00	39597.3	403,816	4,751,441
03/03/14	20484.7	35	100	150	8.6	0.30	0.30	0.10	39670.6	415,225	4,762,850
03/11/14	20594.8	32	100	150	8.8	0.00	0.00	0.00	39780.7	436,795	4,784,420
03/21/14	20835.3	35	90	160	3.6	0.00	0.00	0.00	40021.2	437,833	4,785,458
03/27/14	20839.4	35	90	160	17.5	0.00	0.00	0.00	40025.3	438,764	4,786,389
04/02/14	20842.1	30	90	170	0.1	0.00	0.00	0.00	40028.0	439,398	4,787,023
04/10/14	21034.6	40	100	160	0.4	0.00	0.00	0.00	40220.5	468,211	4,815,836

TABLE 2

EXXONMOBIL/BP SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Groundwater Extraction Data								*Air Stripper Operational Data*			
Date	*R1 Hour Meter (hours)*	*R2 Hour Meter (hours)*	*Total Hour Meter (hours)*	*Air Stripper Hour Meter (hours)*	*R1 Totalizer Reading (gallons)*	*R2 Totalizer Reading (gallons)*	*Effluent Totalizer Reading (cf)*	*Volume of Water Treated (gallons)*	*Air Stripper Velocity (fpm)*	*Air Stripper Pressure (in. H_2O)*	*Air Stripper Flow Rate (scfm)*	*Effluent PID (ppmV)*
12/17/10	6,631.9	4,297.2	--	--	--	--	5,847	43,739	--	--	--	--
12/20/10	6,631.9	4,335.2	--	--	--	--	6,907	51,668	--	--	--	--
12/21/10	6,632.0	4,346.1	--	--	--	--	7,187	53,762	--	7.0	--	6.2
12/29/10	6,631.9	4,497.0	--	--	--	--	9,968	74,566	--	6.0	--	3.6
12/30/10	6,634.0	4,516.4	--	--	--	--	10,387	77,700	--	7.0	--	--
01/05/11	6,634.1	4,516.4	--	--	--	--	10,404	77,827	--	7.0	--	--
01/06/11	6,635.7	4,517.8	--	--	--	--	10,551	78,927	--	7.0	--	5.4
01/10/11	6,692.0	4,566.0	--	--	23,389	17,778	16,048	120,047	--	7.0	--	0.0
01/18/11	6,765.2	4,653.3	--	--	--	--	24,142	180,595	--	7.0	--	3.0
01/19/11	6,775.5	4,659.2	--	--	54,514	49,763	25,003	187,035	--	7.0	--	--
01/25/11	6,819.0	4,692.2	--	--	74,622	64,610	29,785	222,807	--	7.0	--	3.2
01/27/11	6,834.0	4,699.6	--	--	81,550	67,818	31,148	233,003	--	7.0	--	*3.2*
02/01/11	6,865.8	4,718.1	--	35.5	96,672	76,558	34,406	257,375	--	7.0	--	--
02/03/11	6,878.7	4,723.4	--	49.2	102,680	79,028	35,646	266,651	--	7.0	--	--
02/11/11	6,883.9	4,726.7	--	--	--	--	36,178	270,630	--	--	--	--
02/14/11	6,884.2	4,727.0	--	129.1	105,259	80,727	36,209	270,862	362	7.0	289.2	0.8
02/16/11	6,884.9	4,727.4	--	173.8	105,590	80,988	36,289	271,461	620	7.0	495.3	1.7
02/23/11	6,970.2	4,795.2	--	238.2	131,073	97,377	42,210	315,753	700	7.0	559.2	--
03/01/11	6,971.3	4,796.1	--	238.9	131,394	97,675	42,289	316,344	613	7.0	489.7	5
03/08/11	7,055.7	4,858.3	--	305.3	155,972	117,100	48,442	362,371	550	7.0	439.4	2
03/14/11	7,113.4	4,922.9	--	369.3	173,207	136,693	53,381	399,318	695	7.0	555.2	1
03/22/11	7,193.3	5,022.3	--	447.3	196,781	152,490	58,823	440,027	641	7.0	512.1	3
03/23/11	7,212.1	5,064.8	--	463.8	196,781	152,490	59,908	448,143	--	7.0	--	--
03/24/11	7,220.4	5,074.9	69.3	--	204,682	157,602	60,595	453,282	--	--	--	--
03/29/11	7,254.4	5,101.7	162.0	510.8	214,610	165,934	63,166	472,514	526	7.0	420.2	3
04/05/11	7,324.7	5,182.8	334.9	599.9	234,628	189,161	69,024	516,335	437	7.0	349.1	0.3
04/13/11	7,356.2	5,216.4	409.2	757.5	244,318	197,959	71,500	534,857	437	7	349.1	1.3
04/15/11	7,356.3	5,216.5	409.5	757.7	--	--	--	--	--	--	--	2.3
04/19/11	7,359.9	5,217.5	415.1	856.2	245,426	198,248	71,679	536,196	400	7	319.6	2.1
04/26/11	7,443.4	5,217.5	583.6	911.8	271,569	198,248	75,165	562,273	430	7	343.5	2.7
05/03/11	7,487.3	5,219.0	708.9	944.1	285,392	199,004	77,210	577,571	342	7	273.2	5.4
05/13/11	7,546.1	5,169.5	947.7	985.5	20,863	221,163	83,756	626,538	--	--	--	--

TABLE 2

EXXONMOBIL/BP SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Groundwater Extraction Data								*Air Stripper Operational Data*			
Date	*R1 Hour Meter*	*R2 Hour Meter*	*Total Hour Meter*	*Air Stripper Hour Meter*	*R1 Totalizer Reading*	*R2 Totalizer Reading*	*Effluent Totalizer Reading*	*Volume of Water Treated*	*Air Stripper Velocity*	*Air Stripper Pressure*	*Air Stripper Flow Rate*	*Effluent PID*
05/16/11	7,562.7	5,302.2	1,019.4	1,004.6	28,276	235,588	86,668	648,322	470	7	375.5	8
05/17/11	7,567.6	5,305.3	1,040.8	1,007.8	30,462	236,932	87,125	651,740	350	7	279.6	15
05/24/11	7,586.6	5,314.1	1,124.5	1,108.1	38,872	240,924	88,832	664,510	500	7	399.5	5
06/02/11	7,640.9	5,347.6	1,246.8	1,222.4	54,849	251,261	92,437	691,477	66.9	7	53.4	--
06/07/11	7,691.1	5,372.2	1,368.6	1,244.3	69,034	258,511	95,438	713,926	430	7	343.5	6
06/14/11	7,751.0	5,407.6	1,493.0	1,262.8	81,812	263,491	98,017	733,218	430	7	343.5	4.1
06/22/11	7,753.7	5,409.2	1,499.2	1,263.5	82,361	263,645	98,104	733,869	--	7	--	--
06/28/11	7,817.9	5,442.3	1,607.4	1,283.0	95,781	269,517	100,763	753,760	340	7	271.6	0
07/06/11	7,849.4	5,442.5	1,668.5	1,289.9	102,293	269,544	101,699	760,761	420	8	336.4	2.2
07/12/11	7,870.7	5,442.5	1,698.1	1,411.1	106,745	269,544	102,349	765,624	612	6	487.8	--
07/14/11	7,900.1	5,444.0	1,743.8	1,417.5	112,782	269,992	103,240	772,289	--	8	--	--
07/19/11	7,933.1	5,459.4	1,860.7	1,431.7	122,656	274,092	105,179	786,794	488	8	390.8	5.5
07/26/11	7,964.4	5,466.4	2,027.7	1,446.8	134,993	276,019	107,161	801,620	--	7	--	--
08/03/11	8,035.6	5,471.7	2,215.8	1,461.0	147,652	277,422	109,136	816,394	643	2	507.5	1.4
08/11/11	8,075.4	5,475.5	2,412.7	1,473.0	159,224	278,440	110,865	829,328	--	2	--	--
08/17/11	8,087.8	5,476.4	2,458.8	1,476.5	163,038	278,677	111,385	833,218	--	1.5	--	2.2
08/24/11	8,119.9	5,479.0	2,626.3	1,486.0	172,309	279,611	112,822	843,967	--	1.0	--	0.3
08/30/11	8,145.1	5,480.4	2,772.1	1,492.9	179,751	279,769	113,904	852,061	2.68	1	2.1	0.4
09/07/11	8,175.8	5,480.4	2,966.6	1,501.0	188,612	279,783	115,244	862,085	570	1	448.8	1.4
09/15/11	8,203.0	5,480.5	3,155.3	1,508.2	196,485	279,789	116,471	871,264	2.71	2	2.1	0.0
09/21/11	8,203.4	5,493.0	3,297.5	1,511.2	196,549	283,013	117,067	875,722	664	2	524.1	0.0
09/28/11	8,233.3	5,509.9	3,467.1	1,522.7	204,931	286,691	118,849	889,052	2.58	1	2.0	0.0
10/03/11	8,251.1	5,517.4	3,588.5	1,528.8	209,947	288,254	119,837	896,443	675	2	532.7	0.7
10/14/11	8,291.6	5,567.6	3,851.5	1,551.9	221,269	10,441	123,359	922,789	600	2	473.6	4.5
10/17/11	8,303.6	5,569.5	3,924.6	1,555.6	224,688	10,862	123,937	927,113	--	2	--	0.0
10/25/11	8,336.1	5,596.1	4,116.9	1,570.7	233,896	17,416	126,269	944,558	540	2	426.2	--
11/02/11	8,338.1	5,596.5	4,128.1	1,571.3	23,446	17,524	126,523	946,458	500	2	394.6	--
11/08/11	8,374.1	5,620.2	4,271.0	1,586.4	244,724	23,206	128,798	963,476	550	2	434.1	2.9
11/16/11	8,415.0	5,640.4	4,462.6	1,603.4	265,429	28,488	131,284	982,073	560	2.5	442.5	2.3
11/23/11	8,441.4	5,699.9	4,609.0	1,626.7	266,244	41,195	134,483	1,006,003	630	2	497.2	1.3
11/29/11	8,495.1	5,711.8	4,775.1	1,659.2	279,244	58,257	138,756	1,037,967	540	2	426.2	1.8
12/09/11	8,532.4	5,787.0	4,898.4	1,793.7	289,930	61,608	--	1,045,990	664	2	524.1	0.5
12/13/11	--	--	--	1,886.2	--	--	140,901	1,054,013	--	--	--	--
12/14/11	8,533.5	5,878.8	4,899.7	1,909.6	290,266	62,682	141,007	1,054,806	955	2	753.7	1.3

TABLE 2

EXXONMOBIL/BP SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Groundwater Extraction Data								*Air Stripper Operational Data*			
Date	*R1 Hour Meter*	*R2 Hour Meter*	*Total Hour Meter*	*Air Stripper Hour Meter*	*R1 Totalizer Reading*	*R2 Totalizer Reading*	*Effluent Totalizer Reading*	*Volume of Water Treated*	*Air Stripper Velocity*	*Air Stripper Pressure*	*Air Stripper Flow Rate*	*Effluent PID*
12/21/11	8,597.7	5,901.2	5,066.1	1,911.8	17,735	66,055	144,083	1,077,816	813	2	641.7	0.0
12/29/11	8,598.6	5,901.5	5,068.6	1,915.4	18,031	66,160	144,256	1,079,110	--	--	--	--
01/04/12	8,604.5	5,907.4	5,074.5	2,015.4	19,809	67,680	144,808	1,083,239	808	2	637.7	0.8
01/10/12	8,630.4	5,945.1	5,113.3	2,060.1	27,786	77,963	147,414	1,102,733	627	2	494.9	0.1
01/17/12	8,637.0	5,960.5	5,152.5	2,171.1	29,872	81,955	148,323	1,109,533	647	2	510.7	0.7
01/24/12	8,637.0	5,966.0	5,157.3	2,172.6	29,876	83,436	148,626	1,111,800	670	2	528.8	1.2
01/31/12	8,637.0	6,097.9	5,321.5	2,336.1	29,876	116,974	153,114	1,145,372	459	3	363.2	0.2
02/09/12	8,660.2	6,193.4	5,539.5	2,363.8	37,246	136,440	156,727	1,172,399	690	2	544.6	1.7
02/16/12	8,746.5	6,250.7	5,705.8	2,408.5	64,850	151,008	162,364	1,214,567	--	--	--	--
02/21/12	8,799.1	6,304.9	5,828.9	2,446.4	81,652	167,569	166,691	1,246,935	560	2	442.0	1.2
03/02/12	8,894.5	6,374.0	6,066.2	2,508.3	111,763	186,746	172,710	1,291,961	894	1	703.9	0.0
03/07/12	8,937.5	6,495.2	6,187.9	2,535.4	125,523	193,002	175,430	1,312,308	600	2	473.6	0.8
03/15/12	8,998.0	6,621.6	6,360.2	2,583.5	144,033	211,767	180,159	1,347,683	657	2	518.5	0.0
03/20/12	9,018.1	6,643.6	6,382.3	2,693.1	150,304	214,881	181,383	1,356,839	580	2	457.8	0.0
03/27/12	9,097.0	6,722.4	6,551.0	2,751.0	174,680	235,691	186,672	1,396,404	591	2	466.5	0.0
04/05/12	9,185.1	6,842.1	6,767.6	2,820.6	201,599	259,885	192,771	1,442,027	989	2	780.6	0.2
04/12/12	9,216.0	6,869.4	6,849.3	2,838.9	211,013	263,769	194,707	1,456,510	518	2	408.8	1.2
04/20/12	9,299.7	6,927.9	7,038.5	3,031.6	236,119	282,423	200,460	1,499,545	747	2	589.6	0.7
04/26/12	9,352.7	6,970.9	7,186.3	3,063.6	251,147	7,083	204,370	1,528,794	550	2	434.1	1.2
05/01/12	9,392.2	6,993.5	7,303.2	3,085.4	262,267	15,135	206,921	1,547,877	560	2	442.0	1.8
05/11/12	9,471.1	7,035.4	7,541.0	3,129.9	284,330	29,414	211,240	1,580,185	796	2	628.2	0.0
05/17/12	9,516.7	7,048.6	7,686.9	3,150.8	6,493	33,785	213,537	1,597,368	769	2	606.9	0.9
05/24/12	9,531.9	7,052.9	7,738.4	3,273.7	10,700	35,113	214,361	1,603,532	600	2	473.6	1.2
06/08/12	9,596.0	7,093.0	7,931.4	3,305.0	28,629	47,340	214,773	1,606,614	894	2	705.6	1.7
06/18/12	9,597.0	7,094.1	7,932.5	3,541.3	28,881	47,690	214,960	1,608,012	550	2	434.1	--
06/29/12	9,699.5	7,158.5	8,197.9	3,593.6	58,299	67,604	221,798	1,659,164	705	2	556.4	0.0
07/03/12	9,727.3	7,170.3	8,291.6	3,667.2	66,474	71,381	223,473	1,671,694	687	2	542.2	0.0
07/13/12	9,793.1	7,183.1	8,532.8	3,694.0	85,806	75,467	226,837	1,696,859	874	2	689.8	0.0
07/18/12	9,824.0	7,303.4	8,653.3	3,705.3	94,741	75,524	228,373	1,708,230	880	2	694.5	0.0
07/24/12	9,834.6	7,305.5	8,679.2	3,709.3	97,815	76,078	228,418	1,708,567	967	2	763.2	--
08/01/12	9,888.2	7,322.2	8,889.6	3,729.8	113,325	80,766	231,346	1,730,468	530	2	418.3	1.2
08/09/12	9,888.2	7,322.2	8,889.6	3,729.8	113,325	80,766	231,346	1,730,468	--	--	--	--
08/31/12	9,940.6	7,327.4	9,293.1	3,753.6	--	82,145	235,039	1,758,092	694	2	547.7	0.0
09/05/12	9,965.6	7,328.9	9,417.2	3,761.3	135,760	82,506	236,194	1,766,731	717	2	565.9	0.0

TABLE 2

EXXONMOBIL/BP SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Groundwater Extraction Data								*Air Stripper Operational Data*			
Date	*R1 Hour Meter*	*R2 Hour Meter*	*Total Hour Meter*	*Air Stripper Hour Meter*	*R1 Totalizer Reading*	*R2 Totalizer Reading*	*Effluent Totalizer Reading*	*Volume of Water Treated*	*Air Stripper Velocity*	*Air Stripper Pressure*	*Air Stripper Flow Rate*	*Effluent PID*
09/11/12	9,991.2	7,330.0	9,560.3	3,769.1	143,269	82,776	237,384	1,775,632	1042	2	822.4	0.2
09/25/12	10,041.9	7,330.4	9,895.6	3,784.4	158,051	82,888	239,742	1,793,270	622	2	490.9	0.0
10/05/12	10,005.2	7,330.4	9,971.0	3,787.2	151,101	82,890	240,290	1,797,369	784	2	618.8	0.0
10/12/12	10,061.6	7,330.4	10,017.9	3,909.3	163,846	82,894	240,867	1,801,685	944	2	745.1	19.8
10/19/12	10,076.4	7,371.8	10,110.6	3,919.1	168,169	88,780	242,320	1,812,554	550	2	434.1	3.3
10/24/12	10,096.8	7,373.0	10,232.0	3,925.5	174,126	89,038	243,285	1,819,772	580	2	457.8	3.4
11/2/12	10,135.6	7,373.0	10,445.0	3,937.8	186,174	89,058	244,471	1,828,643	575	2	453.8	1.5
11/8/12	10,149.9	7,412.5	10,501.7	3,973.6	190,730	98,736	246,946	1,847,156	826	2	651.9	0.8
11/16/12	10,198.1	7,412.4	10,652.5	4,032.6	205,855	98,768	249,122	1,863,433	878	2	693.0	0.6
11/30/12	10,199.0	7,412.4	10,653.5	4,033.0	206,159	98,787	249,376	1,865,332	600	2	473.6	1.8
12/4/12	10,270.1	7,412.5	10,748.3	4,056.4	228,989	98,799	252,510	1,888,775	964	2	760.8	--
12/10/12	10,270.6	7,412.9	10,749.0	4,056.6	229,074	98,878	252,643	1,889,770	729	2	575.4	--
12/17/12	10,386.2	7,579.9	10,919.5	4,121.9	265,921	123,537	260,627	1,949,490	783	2	618.0	0.0
12/28/12	10,388.1	7,582.3	10,921.9	4,122.9	266,422	123,992	260,865	1,951,270	615	2	485.4	0.8
1/4/13	10,513.1	7,687.6	11,088.4	4,171.1	2,865	141,740	266,508	1,993,480	550	2	434.1	1.1
1/10/13	10,638.5	7,810.2	11,233.3	4,218.5	28,493	160,776	272,294	2,036,759	865	2	682.7	0.2
1/25/13	10,639.4	7,811.3	11,235.0	4,219.0	28,702	--	272,522	2,038,465	650	2	513.0	1.2
1/31/13	10,639.7	7,811.6	11,377.9	4,219.1	28,721	160,989	272,541	2,038,607	550	2	434.1	--
2/8/13	10,808.3	7,928.7	11,569.3	4,273.5	63,335	184,755	280,135	2,095,410	733	2	578.5	1.7
2/14/13	10,898.7	7,963.8	11,712.5	4,298.8	81,610	191,547	283,410	2,119,907	600	2	473.6	1.6
2/19/13	10,967.0	7,989.2	11,831.9	4,318.1	94,704	196,083	285,856	2,138,203	585	2	461.7	0.3
2/25/13	11,041.5	8,037.5	11,978.0	4,342.7	108,695	204,307	288,302	2,156,499	580	3	458.9	1.4
3/1/13	11,085.2	8,090.1	12,070.7	--	117,037	208,877	290,549	2,173,307	--	3	--	--
3/6/13	11,144.0	8,187.9	12,190.8	4,380.7	12,954	216,868	292,846	2,190,488	600	3	474.7	2.7
3/8/13	11,167.4	8,234.7	12,239.7	4,389.4	132,316	219,220	293,746	2,197,220	660	3	522.2	0.9
3/11/13	11,203.2	8,253.0	12,310.3	4,404.2	138,410	225,140	295,097	2,207,326	550	3	435.2	1.8
3/27/13	11,342.3	8,328.9	12,607.0	4,468.8	163,975	247,408	300,955	2,251,143	521	3	412.2	3.0
4/3/13	11,441.0	8,353.0	12,778.0	4,501.0	181,465	253,598	304,054	2,274,324	550	3	435.2	--
4/10/13	11,525.8	8,448.5	12,943.9	4,547.6	196,546	276,232	308,417	2,306,959	567	3	448.6	3.4
4/18/13	11,648.2	8,528.5	13,138.8	4,596.2	218,990	1,119	313,150	2,342,362	580	3	458.9	3.0
5/9/13	11,849	8,630	13,412	4678.7	255,904	19,812	320,777	2,399,412	530	3	416.3	8.4
5/16/13	11,888	8,640	13,481	4791.6	263,982	22,022	322,238	2,410,340	650	3	510.5	1.6
5/21/13	11,948	8,671	13,598.3	4810.4	275,855	27,678	324,826	2,429,698	590	3	463.4	1.5
5/30/13	12,044	8,776	13,816.5	4850.6	4,181	45,098	329,917	2,467,779	--	3	--	1.6

TABLE 2

EXXONMOBIL/BP SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Groundwater Extraction Data								*Air Stripper Operational Data*			
Date	***R1 Hour Meter***	***R2 Hour Meter***	***Total Hour Meter***	***Air Stripper Hour Meter***	***R1 Totalizer Reading***	***R2 Totalizer Reading***	***Effluent Totalizer Reading***	***Volume of Water Treated***	***Air Stripper Velocity***	***Air Stripper Pressure***	***Air Stripper Flow Rate***	***Effluent PID***
6/4/13	12,093	8,791	13,933.9	4968.0	13,907	47,673	331,728	2,481,325	--	3	--	5.9
6/13/13	12,176	8,811	14,151.5	4990.0	30,558	51,206	334,672	2,503,347	--	3	--	2.9
6/21/13	12,241	8,826	14,340.8	5007.0	44,773	53,501	336,991	2,520,693	--	3	--	1.3
6/28/13	12,265	8,831	14,411.3	5111.3	49,755	54,369	337,765	2,526,482	--	3	--	--
7/2/13	12,309	8,865	14,508.5	5124.9	58,355	58,953	339,604	2,540,238	--	3	--	--
7/10/13	12,377	8,891	14,706.0	5141.6	71,882	61,260	341,886	2,557,307	--	3	450.0	--
7/16/13	12,421	8,904	14,847.8	5152.0	80,757	62,303	343,308	2,567,944	--	3	350.0	--
7/23/13	12,471	8,918	15,016.8	5163.2	90,569	63,201	344,930	2,580,076	--	3	400.0	1.9
7/30/13	12,515	8,931	15,180.3	5173.0	99,360	63,662	346,367	2,590,825	--	3	459	2.5
8/8/13	12,569	8,932	15,395.8	5184.7	110,207	64,062	348,093	2,603,736	--	3	382	6.4
8/12/13	12,579	8,932	15,440.6	5240.6	112,330	64,109	348,483	2,606,653	--	3	391	2.3
8/20/13	12,614	8,932	15,632.3	5251.1	121,330	64,159	350,068	2,618,509	--	3	402	9.9
8/26/13	12,635	8,932	15,775.5	5257.4	127,129	64,159	351,078	2,626,063	--	3	487	15.5
9/5/13	12,644	8,934	15,841.7	5438.0	129,747	65,489	351,884	2,632,092	--	3	383	14.2
9/9/13	12,649	8,937	15,854.2	5521.2	131,185	67,476	352,464	2,636,431	--	--	--	--
9/19/13	12,719	8,945	16,098.7	5542.7	146,421	72,720	355,656	2,660,307	--	4	401	4.4
9/26/13	12,755	8,954	16,236.0	5585.8	155,680	78,706	357,815	2,676,456	--	4	404	404
10/3/13	12,794	9,005	16,331.0	5677.9	165,304	87,370	360,351	2,695,425	--	4	--	0.0
10/11/13	12,800	9,019	16,345.1	5858.8	166,680	89,541	361,061	2,700,736	--	4	422	0.3
10/17/13	12,864	9,070	16,427.4	5942.9	180,933	96,710	364,146	2,723,812	--	4	394	1.6
10/24/13	12,887	9,078	16,474.2	6072.1	188,230	98,255	365,266	2,732,190	--	4	394	1.2
11/01/13	12,984	9,109	16,644.0	6129.6	208,611	103,550	369,232	2,761,855	--	4	--	0.8
11/7/2013	13,000	9,122	16,667.5	6255.7	212,369	105,442	370,091	2,768,281	--	4	391	0.8
11/15/2013	13,096	9,190	16,734.9	6397.5	223,120	113,624	372,877	2,789,120	--	4	395	1.0

TABLE 2

EXXONMOBIL/BP SYSTEM-SUMMARY OF OPERATIONAL PARAMETERS
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Groundwater Extraction Data								*Air Stripper Operational Data*			
Date	***R1 Hour Meter***	***R2 Hour Meter***	***Total Hour Meter***	***Air Stripper Hour Meter***	***R1 Totalizer Reading***	***R2 Totalizer Reading***	***Effluent Totalizer Reading***	***Volume of Water Treated***	***Air Stripper Velocity***	***Air Stripper Pressure***	***Air Stripper Flow Rate***	***Effluent PID***
11/22/2013	13,113	9,252	16,838.8	6494.7	238,687	125,520	376,827	2,818,666	--	3	--	1.4
11/27/2013	13,165	9,271	16,955.5	6513.8	251,048	129,242	379,294	2,837,119	--	3	--	1.1
12/2/2013	13,172	9,273	16,972.8	6621.9	252,533	129,633	379,690	2,840,081	--	--	--	--
12/16/2013	13,172	9,273	16,972.8	6621.9	252,533	129,633	379,690	2,840,081	--	--	--	--
12/20/2013	13,227	9,292	17,404.1	6638.8	265,790	134,115	382,327	2,859,806	--	4	380	2.3
12/23/2013	13,228	9,293	17,405.7	6639.0	266,002	134,275	382,404	2,860,382	--	5	55	0.0
1/3/2014	13,229	9,294	17,407.1	6639.8	266,267	134,536	382,670	2,862,372	--	4	380	1.5
1/7/2014	13,254	9,317	17,436.9	6719.8	272,727	140,736	384,367	2,875,065	--	3	345	3.0
1/17/2014	13,358	9,416	17,634.9	6816.9	7,765	164,248	390,943	2,924,254	--	5	310	0.7
1/20/2014	13,368	9,425	17,644.1	6881.4	10,071	164,672	391,331	2,927,156	--	3	303	2.0
1/31/2014	13,465	9,563	17,846.2	6976.6	34,022	170,854	395,347	2,957,196	--	5	380	--
2/14/2014	13,541	9,647	17,970.0	7021.3	52,725	190,069	398,099	2,977,781	--	5	316	0.0
2/18/2014	13,582	9,706	18,044.6	7049.5	62,729	203,041	401,151	3,000,609	--	5	380	0.0
2/26/2014	13,681	9,843	18,211.0	7139.1	86,448	223,290	407,032	3,044,599	--	5	283	0.0
2/28/2014	13,715	9,873	18,254.2	7156.6	94,691	227,864	408,667	3,056,829	--	5	380	0.0

Notes:

scfm	Standard cubic feet per minute
ºF	Degrees Fahrenheit
ppmV	Parts per million volume
--	Not collected

TABLE 3

PHILLIPS 66 SYSTEM-DISSOLVED PHASE ANALYTICAL DATA
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Total Influent							*Air Stripper Effluent*						
Date	*Benzene (µg/L)*	*Toluene (µg/L)*	*Ethyl-benzene (µg/L)*	*Total Xylenes (µg/L)*	*TPHg (µg/L)*	*TPHd (µg/L)*	*TPHo (µg/L)*	*Benzene (µg/L)*	*Toluene (µg/L)*	*Ethyl-benzene (µg/L)*	*Total Xylenes (µg/L)*	*TPHg (µg/L)*	*TPHd (µg/L)*	*TPHo (µg/L)*
12/21/10	4,000	6,500	330	6,100	45,000	<2500	240 J	67	120	5.2	101	730	350	36 J
01/10/11	3,620	5,630	328	6,950	42,000	1,540	407	49.3	65.9	4	76.3	328	169	<385
02/16/11	2,330	3,120	224	4,500	43,000	1,580	<385	325	548	26	431	5,240	337	<426
03/08/11	3,480	4,330	219	5,650	45,100	12,800	2,550	187	313	16.5	209	2,720	386	<379
04/19/11	6,300	408	7,420	6,080	58,000	1,800	<380	111	9.5	177	145	1,510	320	<380
05/17/11	5,910	517	9,110	6,790	78,000	1,300	<380	78.6	8.1	142	119	993	270	<380
06/14/11	6,870	586	10,100	6,780	66,700	1,400	<380	147	3.5	176	221	1,590	210	<380
07/06/11	9,510	731	12,300	7,910	59,000	1,200	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380
08/17/11	454	590	28.6	589	4,730	<390	170	<1.0	<1.0	<1.0	<3.0	<50.0	<380	<76
09/07/11	130	173	9.8	159	1,530	240	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380
10/14/11	102	89.9	3.2	95.5	693	150	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<77	<380
11/23/11	1,440	1,930	118	1,500	12,700	200	<390	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380
12/09/11	1,250	1,090	73.5	1,680	12,200	150	<380	11.3	7.4	<1.0	31.6	291	<82	<410
01/10/12	3,150	4,130	263	3,360	26,700	290	<380	2.9	2.8	<1.0	6.5	90	<76	<380
02/09/12	837	886	102	1,480	18,300	590	<380	2.0	1.4	1.6	5.3	69.9	140	<380
03/07/12	1,690	1,800	134	2,690	15,500	190	<380	10.7	9.5	<1.0	42.6	235	<76	<380
04/05/12	1,060	758	40.2	3,250	22,700	0.62	<380	<1.0	<1.0	<1.0	<3.0	<50.0	140	<390
05/01/12	1,300	993	46.3	3,160	20,900	1,300	<380	11.8	8.7	<1.0	32.9	279	150	<380
06/01/12	554	420	<10.0	1,070	4,520	300	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380
07/13/12	752	892	32.6	671	5,270	120	<390	<1.0	1.8	1	<3.0	<50.0	<77	<380
08/09/12	118	176	13.8	305	2,050	120	<380	<1.0	<1.0	<1.0	<3.0	<50.0	120	<410
09/11/12	86.8	77.7	4.9	90	710	<77	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380
10/24/12	459	320	9	888	5,590	430	<830	<1.0	<1.0	<1.0	<3.0	<50.0	<170	<830
11/30/12	1,860	2,710	155	2,080	17,100	1,900	230	<1.0	<1.0	<1.0	<3.0	<100	<110	<110
12/17/12	3,200	2,420	42	4,180	17,800	4,600	320	11.2	4.6	<1.0	94.8	455	780	490
01/10/13	2,560	2,410	52	3,050	11,100	14,400	27,500	<1.0	<1.0	<1.0	29.1	196	400	<100
02/14/13	2,550	2,500	75	2,480	17,300	3,400	<410	100	77.2	1.6	137	944	1,800	<420
03/08/13	408	342	<5.0	458	2,500	1,100	<430	<1.0	<1.0	<1.0	<3.0	<100	<430	<430
04/18/13	2,340	1,720	86	3,420	19,800	2,100	<400	155	75.2	2	311	1,510	1,900	<410
05/16/13	1,930	2,460	252	2,220	14,900	<390	<390	12.8	10.1	<1.0	14.5	124	<380	<380
06/13/13	2,500	1,970	107	3,090	15,200	640	<400	440	240	5.9	758	4,010	640	<390
07/16/13	828	449	<10.0	1730	8,040	690	<400	<1.0	<1.0	<1.0	23.2	154	500	<400
08/20/13	731	204	<10	1,630	7,140	1,100	<400	1.2	<1.0	<1.0	15.8	182	410	<390
09/19/13	396	274	13	296	1,880	490	<400	3.6	2	<1.0	<3.0	<100	<400	<400
10/03/13	182	68.0	8.9	179	1,200	410	<400	17.7	5.3	<1.0	29.9	209	<420	<420
11/01/13	678	245	20.3	698	3640	1100	<410	<1.0	<1.0	<1.0	<3.0	<100	620	<420
12/20/13	116	20.6	4.3	144	1290	1200	<400	<1.0	<1.0	<1.0	<3.0	<100	<400	<400
01/07/14	259	212	38.9	633	4,490	1,200	<400	47.3	35.2	2.4	56.5	375	590	<400
02/18/14	951	495	29.8	984	6,090	1,000	500	225	200	13	270	2,060	730	<430
03/27/14	1,840	1,680	132	3,810	29,500	1,600	620	<1.0	<1.0	<1.0	15.4	260	430	<400

	Carbon Midpoint							*Total Effluent*								
Date	*Benzene (µg/L)*	*Toluene (µg/L)*	*Ethyl-benzene (µg/L)*	*Total Xylenes (µg/L)*	*TPHg (µg/L)*	*TPHd (µg/L)*	*TPHo (µg/L)*	*Benzene (µg/L)*	*Toluene (µg/L)*	*Ethyl-benzene (µg/L)*	*Total Xylenes (µg/L)*	*TPHg (µg/L)*	*TPHd (µg/L)*	*TPHo (µg/L)*	*pH (S.U.)*	*FOG (µg/L)*
12/21/10	0.64 J	0.8 J	0.044 J	1.28 J	33 J	110 J	66 J	<2.0	0.36 J	0.016 J	0.10 J	<50	92 J	64 J	7.68	--
01/10/11	<1.0	<1.0	<1.0	<3.0	<50.0	< 76.9	< 385	<1.0	<1.0	<1.0	<3.0	<50	<77.7	<388	7.8	--
02/16/11	--	--	--	--	--	--	--	<1.0	<1.0	<1.0	<3.0	<50.0	<320	<381	7.5	--
03/08/11	--	--	--	--	--	--	--	<1.0	<1.0	<1.0	<3.0	<50.0	114	<388	7.7	--
04/19/11	<1.0	<1.0	<1.0	<3.0	<50.0	<.77	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<78	<390	--	--
05/17/11	<1.0	<1.0	<1.0	<3.0	<50.0	<75	380	<1.0	<1.0	<1.0	<3.0	<50.0	180	<400	--	--
06/14/11	<1.0	<1.0	<1.0	<3.0	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<78	<390	7.1	--
07/06/11	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<82	<410	--	--
08/17/11	<1.0	<1.0	<1.0	<3.0	<50.0	<380	<77	<1.0	<1.0	<1.0	<3.0	<50.0	<380	<76	--	--
09/07/11	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<50.0	170	<400	8.3	--
10/14/11	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<78	<390	--	--
11/23/11	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<50.0	<1.0	<1.0	<3.0	<50.0	<77	<380	--	--
12/09/11	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<50.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
01/10/12	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<50.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
02/09/12	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<75	<380	--	--
03/07/12	<1.0	<1.0	<1.0	<3.0	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<75	<380	--	--
04/05/12	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<80	<400	--	--
05/01/12	<1.0	<1.0	<1.0	<3.0	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<77	<380	--	--
06/01/12	<1.0	<1.0	<1.0	<3.0	<50.0	<93	<470	<1.0	<1.0	<1.0	<3.0	<50.0	<75	<380	--	--
07/13/12	<1.0	<1.0	<1.0	<3.0	<50.0	<79	<400	<1.0	<1.0	<1.0	<3.0	<50.0	<78	<390	--	--
08/09/12	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<77	<380	--	--
09/11/12	<1.0	<1.0	<1.0	<3.0	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
10/24/12	<1.0	<1.0	<1.0	<3.0	<50.0	<170	<850	<1.0	<1.0	<1.0	<3.0	<50.0	<160	<820	7.2	--
11/30/12	<1.0	<1.0	<1.0	<3.0	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<100	<100	400	--	--
12/17/12	<1.0	<1.0	<1.0	<3.0	<100	<100	440	<1.0	<1.0	<1.0	<3.0	<100	<100	400	--	--
01/10/13	<1.0	<1.0	<1.0	<3.0	<100	<100	<100	<1.0	<1.0	<1.0	<3.0	<100	<110	<110	--	--
02/14/13	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
03/08/13	<1.0	<1.0	<1.0	<3.0	<100	<410	<410	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
04/18/13	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
05/16/13	<1.0	<1.0	<1.0	<3.0	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
06/13/13	<1.0	<1.0	<1.0	<3.0	<100	<390	<390	<1.0	<1.0	<1.0	<3.0	<100	<390	<390	7.1	<6200
07/16/13	<1.0	<1.0	<1.0	<3.0	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	<100	<390	<390	--	--
08/20/13	<1.0	<1.0	<1.0	<3.0	<100	<380	<380	<1.0	<1.0	<1.0	<3.0	<100	<390	<390	--	--
09/19/13	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<100	<390	<390	--	--
10/03/13	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<100	<430	<430	--	--
11/01/13	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<100	<420	<420	--	--
12/20/13	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	7.4	<6,400
01/07/14	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
02/18/14	<1.0	<1.0	<1.0	<3.0	<100	<430	<430	29.9	20.9	1.1	56.7	<100	<400	<400	--	--
03/27/14	<1.0	<1.0	<1.0	<3.0	<100	<420	<420	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--

Notes:
BTEX Benzene, Toluene, Ethylbenzene, and Total Xylenes analyzed by EPA method 8260B
TPHg Total petroleum hydrocarbons as gasoline analyzed by Ecology method NWTPH-Gx
TPHd Total petroleum hydrocarbons as diesel analyzed by Ecology method NWTPH-Dx
TPHo Total petroleum hydrocarbons as heavy oil analyzed by Ecology method NWTPH-Dx
FOG Total petroleum hydrocarbos as fats, oils, and grease by EPA method 1664A
µg/L Micrograms per liter
-- Not analyzed
<X Not detected above reporting limit X
J Estimated Value

TABLE 4

PHILLIPS 66 SYSTEM-VAPOR PHASE ANALYTICAL DATA
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Soil Vapor Extraction Well Influent					Air Stripper Effluent					Total Influent				
Date	Benzene (ppmV)	Toluene (ppmV)	Ethyl-benzene (ppmV)	Total Xylenes (ppmV)	TPHg (ppmV)	Benzene (ppmV)	Toluene (ppmV)	Ethyl-benzene (ppmV)	Total Xylenes (ppmV)	TPHg (ppmV)	Benzene (ppmV)	Toluene (ppmV)	Ethyl-benzene (ppmV)	Total Xylenes (ppmV)	TPHg (ppmV)
11/15/10	3.1	6.1	0.18	1.18	33.6	3.8	5.2	<0.16	4.5	<11.2	0.13	0.41	0.02	0.242	2.6
12/21/10	0.53	1.46	0.09	0.67	14.79	11.61	14.63	0.48	6.35	65.43	5.65	7.45	0.25	3.35	31.29
01/10/11	0.21	0.56	0.023	0.212	2.6	4.6	6.7	< 0.76	3.15	< 53.10	5.7	7.7	0.24	2.89	18.0
02/16/11	10.0	50.9	< 2.2	20.8	244	9.2	14.8	0.48	3.6	11.8	14.3	13.4	0.65	8.4	18.9
03/08/11	3.5	12.0	< 1.1	4.7	134	13.5	25.7	0.77	7.2	56.4	8.9	14.5	< 0.54	3.88	< 37.6
04/13/11	0.60	4.1	0.43	4.4	18.7	--	--	--	--	--	<0.041	0.15	<.041	0.051	9.9
05/17/11	7.9	27.2	1.1	12.9	287	25.7	49.7	< 4.5	12.7	< 312	7.9	27.2	1.1	12.9	287
06/07/11	4.6	20	0.68	8.6	172	83.8	152	6.2	56.5	330	0.40	1.4	0.052	0.40	14.0
07/06/11	33.1	141	3.5	54.1	1,210	29.2	40.7	0.76	27.4	152	0.32	1.3	< 0.028	0.47	14.8
08/17/11	6.9	29.8	1.7	67	1,000	<0.00084	0.0011	<0.00084	0.0017	0.16	1.3	9.9	0.33	10.2	186
09/07/11	1.1	6.7	0.5	24.7	271	<0.0013	0.021	<0.0013	0.051	0.69	<0.27	0.44	<0.27	2.13	<18.8
10/14/11	10.4	40.1	1.5	52.5	933	0.083	0.28	0.0092	0.29	6.2	0.65	2.4	0.078	2.7	58.1
11/29/11	4.5	6.7	<0.27	4.6	352	0.014	0.048	0.0023	0.070	1.8	0.12	0.18	<0.0067	0.112	9.2
12/09/11	1.3	2.8	<0.28	<0.84	111	0.61	0.47	0.025	0.66	4.1	0.065	0.12	<0.017	<0.015	4.7
01/10/12	1.5	3.1	0.12	0.99	42.1	0.013	0.039	0.0014	0.022	0.32	0.047	0.076	<0.0039	0.027	1.1
02/09/12	0.11	0.22	<0.017	0.15	<1.2	3.1	2.1	<0.13	3.6	<9.4	0.87	0.64	0.035	1.24	2.5
03/07/12	0.90	1.9	0.051	0.323	9.7	5.1	4.6	0.19	5.2	19.7	0.90	1.9	0.051	0.323	9.7
04/05/12	0.019	0.066	<0.0042	0.051	1.0	<0.0067	0.014	<0.0067	0.016	0.60	0.33	0.3	<0.017	0.39	2.6
05/01/12	1.1	2.1	0.019	0.288	87.2	18.4	14.3	<0.54	13.8	77.4	0.02	0.0	<0.0042	<0.0126	0.95
06/08/12	2.7	5.4	<0.27	1.41	124	0.0014	0.006	<0.00084	0.003	0.84	0.02	0.0	0.002	0.0052	1.5
07/13/12	7.1	16.1	1	8.7	374	0.0029	0.016	0.0021	0.0206	0.75	0.02	0.3	0.019	0.071	8.4
08/09/12	10.8	24.3	1.8	20.6	753	0.004	0.02	0.003	0.04	1.4	0.30	1.0	0.054	0.67	22.5
09/11/12	7.5	57.5	1.4	37.2	588	< 0.0067	0.012	< 0.0067	< 0.0080	1.2	0.94	3.8	0.160	3.1	89.1
10/24/12	3.4	34.2	1.6	36.2	615	<0.045	0.09	<0.045	0.305	<3.2	0.1	0.68	0.051	0.61	17
11/30/12	1.2	0.27	0.24	2.29	37.5	4.1	4.5	0.14	2.12	5.8	0.21	0.28	0.018	0.253	<1.2
12/17/12	0.41	0.89	0.055	0.49	7.6	0.061	0.053	<0.015	0.061	<1.1	0.021	0.037	<0.0050	0.035	0.49
01/10/13	0.042	0.15	<0.017	0.29	7.1	<0.017	<0.017	<0.017	<0.051	<1.2	<0.017	<0.017	<0.017	<0.051	<1.2
02/14/13	0.058	0.1	0.014	0.09	1.9	0.0085	0.012	0.0019	0.0164	0.14	0.035	0.040	0.0025	0.0270	0.25
03/08/13	<0.017	0.2	<0.017	0.223	81.3	1.4	0.85	<0.023	1.03	5	0.70	0.41	<0.023	0.35	5.0
04/18/13	0.04	0.19	<0.028	0.27	9.1	14.9	10.3	<1.0	27.2	<70.3	1.5	0.85	<0.23	1.32	<15.8
05/16/13	3.5	5.6	0.33	1.6	24.4	27.3	26.8	3	17.9	<131	0.074	0.10	<0.023	<0.068	2.2
06/13/13	0.51	5.3	0.072	0.85	50	25.6	14.2	<1.8	19.8	<126	0.079	0.26	<0.019	<0.103	8.6
07/16/13	2.7	6.2	<0.27	7.1	263	2.6	0.61	<0.017	3.9	13.5	0.52	0.32	<0.017	0.83	9.8
08/20/13	1.8	4.7	<0.27	21.5	298	0.0024	0.0051	0.001	0.039	0.59	0.13	0.32	<0.019	1.27	19.4
09/19/13	2.6	7.3	<0.27	6.6	365	0.0015	0.0088	<0.00084	0.0198	0.42	0.16	0.45	<0.017	0.46	22.0
10/03/13	24.6	56.4	2.1	21.7	917	6	3.1	0.21	3.7	12.3	0.55	0.45	0.023	0.30	7.9
11/01/13	2.6	4.1	0.13	1.58	356	<0.018	0.18	<0.018	<0.054	<1.3	0.092	0.13	<0.019	0.044	7.6
12/20/13	2.6	3	<0.27	0.88	212	0.0021	0.0058	<0.00084	0.0072	0.47	0.038	0.039	<0.017	<0.051	3.4
01/07/14	5.4	7.4	<0.27	1.8	232	0.016	0.021	0.0022	0.0203	0.38	0.061	0.071	<0.017	<0.051	4.6
02/14/14	0.49	0.62	0.034	0.37	36.6	0.015	0.018	0.0018	0.0232	0.58	0.032	0.04	0.0021	0.023	2.3
03/27/14	0.46	0.54	0.04	0.43	2.0	60.4	51.6	2.0	64.2	134.0	3.7	2.30	<0.27	2.22	49.70

	Carbon Midpoint 1					Carbon Midpoint 2					Total Effluent				
Date	Benzene (ppmV)	Toluene (ppmV)	Ethyl-benzene (ppmV)	Total Xylenes (ppmV)	TPHg (ppmV)	Benzene (ppmV)	Toluene (ppmV)	Ethyl-benzene (ppmV)	Total Xylenes (ppmV)	TPHg (ppmV)	Benzene (ppmV)	Toluene (ppmV)	Ethyl-benzene (ppmV)	Total Xylenes (ppmV)	TPHg (ppmV)
11/15/10	0.018	0.033	<0.0015	0.0133	1.5	<0.017	<0.017	<0.017	<0.051	6.7	0.21	0.68	<0.017	<0.051	11.2
12/21/10	0.0056	0.06	0.004	0.03	2.53	< 0.0627	0.07	0.01	0.04	3.70	0.13	0.56	0.01	0.08	11.66
01/10/11	0.064	0.096	< 0.01	< 0.042	2.4	< 0.0014	0.0039	< 0.0014	< 0.042	0.33	0.051	0.23	< 0.018	< 0.054	3.5
02/16/11	1.6	< .07	< .07	< 4.97	< 4.9	< 0.017	0.058	< 0.017	0.125	< 1.2	< 0.072	0.29	< 0.072	< 0.212	< 5.0
03/08/11	< 0.0034	< 0.0034	< 0.0034	< 0.0101	< 0.24	< 0.00084	0.0014	< 0.00084	< 0.0017	< 0.00254	< 0.0056	0.0088	< 0.0056	< 0.0166	< 0.4
04/13/11	0.0047	0.042	0.0018	0.0047	2.2	<0.00084	0.00088	<0.00084	<0.00084	0.88	<0.00084	<0.00084	<0.00084	<0.00084	1.1
05/17/11	0.0024	0.013	< 0.0015	0.0107	0.53	< 0.0014	0.0023	< 0.0014	< 0.0014	0.17	0.019	0.054	0.0043	0.0304	0.26
06/07/11	< 0.00084	0.0012	< 0.00084	< 0.00084	< 0.059	0.0029	0.011	0.0012	0.0016	<0.059	< 0.00084	0.0057	< 0.00084	0.0026	0.12
07/06/11	< 0.00084	0.0037	< 0.00084	< 0.00254	< 0.059	< 0.00084	0.0015	< 0.00084	< 0.00254	< 0.059	< 0.0014	0.0015	< 0.0014	< 0.0028	<0.099
08/17/11	<0.00084	0.002	<0.00084	0.0029	0.2	0.006	0.007	0.0035	0.0132	1.1	0.0057	0.005	<0.00084	0.0127	0.56
09/07/11	<0.0014	0.016	<0.0014	<0.0041	0.1	<0.0013	0.025	0.0017	0.109	1.5	<0.0013	0.018	<0.0013	<0.0039	0.14
10/14/11	0.0061	0.028	<0.0014	0.036	1.2	<0.00087	0.0091	0.0018	0.092	3.3	<0.00084	0.0046	<0.00084	0.012	0.94
11/29/11	< 0.0014	0.0017	< 0.0014	< 0.0042	0.22	0.00091	0.0047	< 0.00084	0.0038	0.24	0.0014	0.0039	<0.00084	0.0035	0.21
12/09/11	< 0.00084	0.0081	< 0.00084	< 0.00254	0.29	0.0063	0.0074	< 0.00084	< 0.00254	0.38	<0.00084	0.0044	<0.00084	<0.00254	0.19
01/10/12	< 0.00084	0.0039	< 0.00084	< 0.00254	< 0.059	0.018	0.02	< 0.00084	< 0.00254	0.18	<0.00089	0.021	<0.00089	<0.00254	0.28
02/09/12	<0.00084	0.013	<0.00084	0.005	0.33	<0.00084	0.0046	<0.00084	< 0.00084	0.2	0.00088	0.012	<0.00084	0.0025	0.32
03/07/12	< 0.00084	0.0045	< 0.00084	< 0.00254	0.62	<0.00084	0.0033	< 0.00084	0.0137	0.74	<0.00084	0.0038	<0.00084	<0.00254	0.26
04/05/12	< 0.00084	0.011	< 0.00084	0.0027	0.17	<0.00840	0.00089	0.0012	< 0.0101	0.41	<0.00084	0.0012	<0.00084	< 0.00254	0.35
05/01/12	0.0035	0.012	0.0016	0.066	0.48	0.001	0.0041	< 0.00840	0.0057	0.37	<0.00084	0.0047	<0.00084	< 0.00254	0.53
06/08/12	< 0.00084	0.0053	< 0.00084	< 0.00254	0.41	<0.00084	0.005	< 0.00084	< 0.00254	0.40	<0.00084	0.005	<0.00084	< 0.00254	0.25
07/13/12	0.024	0.0028	< 0.00084	< 0.00254	1.30	0.0013	0.0034	< 0.00084	< 0.00254	1.00	0.001	0.0034	<0.00084	< 0.00254	0.93
08/09/12	0.0042	0.0073	0.0013	0.0059	1.40	0.0025	0.0025	< 0.00084	< 0.00254	0.72	0.00092	0.0015	<0.00084	< 0.00254	0.33
09/11/12	< 0.00084	0.0018	< 0.00084	< 0.00254	1.50	<0.00084	0.0021	< 0.00084	< 0.00254	1.60	<0.00084	0.0037	<0.00084	< 0.00254	0.71
10/24/12	0.0037	0.023	0.0037	0.0205	0.9	0.00094	0.009	0.0015	0.0164	0.76	<0.00084	0.0021	<0.00084	<0.00254	0.087
11/30/12	<0.0042	<0.0042	<0.0042	<0.0126	0.97	<0.00084	<0.00084	<0.00084	<0.00254	0.071	<0.00084	0.00095	<0.00084	<0.00254	0.091
12/17/12	0.032	0.056	0.0075	0.042	0.96	0.021	0.0091	<0.0010	0.0032	0.18	<0.00084	0.0012	<0.00084	<0.00254	0.11
01/10/13	<0.00084	0.0051	<0.00084	0.0025	<0.059	<0.017	<0.017	<0.017	<0.051	<1.2	<0.00084	<0.00084	<0.00084	<0.00254	<0.059
02/14/13	<0.00084	<0.00084	<0.00084	<0.00254	0.21	0.0099	0.0019	< 0.00094	<0.00284	0.34	<0.00084	0.0017	<0.00084	<0.00254	<0.059
03/08/13	<0.0013	<0.0013	<0.0013	<0.0039	0.24	< 0.00084	0.0014	< 0.00084	<0.00254	0.27	<0.00084	0.030	<0.00084	<0.00254	0.15
04/18/13	0.0028	0.0055	<0.0015	0.0055	0.16	<0.00084	0.00091	<0.00084	0.00096	0.2	<0.00087	0.0011	0.0011	0.0038	0.52
05/16/13	<0.00084	0.0014	<0.00084	<0.00254	0.27	< 0.00084	0.0012	< 0.00084	<0.00254	0.11	<0.00090	0.00094	<0.00090	<0.0027	<0.063
06/13/13	<0.00084	<0.00084	<0.00084	<0.00254	0.28	< 0.00084	< 0.00084	< 0.00084	<0.00254	0.34	< 0.00084	< 0.00084	< 0.00084	<0.00254	<0.059
07/16/13	<0.00084	0.0014	<0.00084	<0.00254	0.39	<0.00084	0.0014	<0.00084	<0.00254	0.39	<0.00087	0.0014	<0.00087	<0.00257	0.4
08/20/13	<0.00087	0.017	<0.00087	<0.00257	1.3	< 0.00094	0.0017	< 0.00094	<0.00284	0.60	< 0.00084	0.0032	< 0.00084	<0.00254	0.42
09/19/13	<0.00084	<0.00084	<0.00084	<0.00254	1.3	< 0.00084	< 0.00084	< 0.00084	<0.00254	0.66	< 0.00084	< 0.00084	< 0.00084	<0.00254	1.1
10/03/13	0.015	0.0095	<0.00094	0.0090	0.57	0.0011	< 0.00084	< 0.00084	<0.00254	0.49	< 0.00078	< 0.00078	< 0.00078	<0.00238	0.21
11/01/13	<0.019	<0.019	<0.019	<0.056	2.5	< 0.019	< 0.019	< 0.019	<0.058	2.1	< 0.019	< 0.019	< 0.019	<0.058	<1.4
12/20/13	<0.00084	<0.00084	<0.00084	<0.00254	0.57	< 0.00084	< 0.00084	< 0.00084	<0.00254	0.72	< 0.00084	< 0.00084	< 0.00084	<0.00254	0.67
01/07/14	<0.00084	<0.00084	<0.00084	<0.00254	0.67	< 0.00084	< 0.00084	< 0.00084	<0.00254	0.43	< 0.00084	< 0.00084	< 0.00084	<0.00254	0.48
02/14/14	<0.0016	0.0017	<0.0016	<0.0047	1.2	< 0.00084	0.001	0.0013	<0.00254	1.3	< 0.0029	< 0.0029	< 0.0029	<0.0088	1.1
03/27/14	<0.018	0.11	<0.018	0.06	1.30	0.00	0.01	0.00	0.01	0.22	0.00	0.00	0.00	0.01	0.10

Notes: Benzene, Toluene, Ethylbenzene, and Total Xylenes analyzed by EPA method TO 14
TPHg Total petroleum hydrocarbons as gasoline analyzed by EPA method TO 14
ppmV Parts per million by volume
-- Not analyzed
<X Not detected above reporting limit X
J Estimated Value

TABLE 5

EXXONMOBIL/BP SYSTEM-DISSOLVED PHASE ANALYTICAL DATA
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	R1 Influent							*R2 Influent*						
Date	***Benzene (µg/L)***	***Toluene (µg/L)***	***Ethyl-benzene (µg/L)***	***Total Xylenes (µg/L)***	***TPHg (µg/L)***	***TPHd (µg/L)***	***TPHo (µg/L)***	***Benzene (µg/L)***	***Toluene (µg/L)***	***Ethyl-benzene (µg/L)***	***Total Xylenes (µg/L)***	***TPHg (µg/L)***	***TPHd (µg/L)***	***TPHo (µg/L)***
12/21/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/10/11	1,750	37.2	547	138	4,750	871	<408	738	12.4	458	205	5,670	728	<388
02/16/11	548	25.9	381	98.3	4,830	563	<379	30	<1.0	58.9	25.5	1,430	281	<379
03/08/11	1,400	69.5	556	160	7,200	690	<377	500	4.8	247	145	4,820	331	<377
4/19/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/17/2011	1,940	191	811	214	7,620	940	<380	754	9.5	706	251	7,810	850	<380
6/14/2011	1,670	230	671	158	8,040	840	<380	1,080	9.8	752	167	9,450	730	<380
7/6/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/17/2011	1,920	36.2	465	66.8	6,110	1,600	<400	1,570	9	682	46	8,310	930	<400
9/7/2011	2,300	30.6	574	47	6,520	770	<380	976	6.5	517	15	5,830	600	<380
10/14/2011	2,090	26.1	409	37.1	4,940	770	<390	221	2.3	272	6.7	3,520	400	<380
11/22/2011	1,610	22.6	341	34.0	4,890	0.5	<0.39	45.7	1.1	35.9	4.4	565	<0.075	<0.38
12/9/2011	1,220	19.9	338	26.6	4,180	0.41	<0.38	301	2.3	514	4.5	5,760	0.36	<0.38
1/10/2012	2,070	28.2	750	41.5	4,090	480	<400	37.2	<1.0	55.3	4.0	629	78	<390
2/9/2012	2,050	34.4	854	72.6	6,150	430	<380	342	2.6	263	42.3	4,510	390	<380
3/7/2012	1,520	31.7	647	118	5,790	860	<380	--	--	--	--	--	--	--
4/5/2012	1,930	49.7	784	184	7,560	1,100	<380	631	3.9	408	52.7	5,320	630	<380
5/1/2012	1,880	56.6	714	132	6,270	940	<380	720	6	508	77	6,230	830	<380
6/1/2012	1,960	67.2	901	121	4,970	740	<380	17	<1.0	10	<3.0	215	--	--
7/13/2012	1,670	36.8	704	73	6,110	660	<390	882	6	712	22	8,290	840	<380
08/09/12	1,730	32.3	507	62.4	4,570	590	<390	745	5	632	15	6,010	590	<380
09/11/12	2,220	25.7	566	35.7	4,580	830	<380	977	5	501	6	5,590	690	<380
10/24/12	1,570	18.8	361	27.3	5,320	860	<820	420	4.2	87.7	4.9	1,380	<160	<820
11/30/12	855	20.0	406	<30.0	7,710	1800	410	11.7	<1.0	11.3	<3.0	660	210	<110
12/28/12	1,670	24.1	668	83.7	10,900	1700	420	9.2	<1.0	9.6	<3.0	315	<110	130
01/10/13	2,180	35.3	717	112	8,240	2600	<110	11.4	<1.0	8.5	<3.0	182	<100	<100
02/14/13	1,280	34.2	263	39.3	4,080	1,000	<410	660	<5.0	431	54.5	4,910	1,300	<420
03/08/13	2,110	94.0	656	81.4	4,860	1,700	<420	1.7	<1.0	<1.0	<3.0	<100	<410	<410
04/18/13	1,890	1,160	665	2,250	5,980	1,800	<420	858	3.8	483	18.4	4,950	1,300	<410
05/16/13	2,010	41.4	546	88.2	3,970	870	<390	924	<5.0	492	22.1	4,740	750	<420
06/13/13	1,940	36.4	542	76.2	4,550	850	<400	1,070	6	627	<15.0	6,100	1,100	<420
07/16/13	2190	24.6	482	51.2	4520	1200	<410	1050	<5.0	458	<15.0	5430	990	<400
08/20/13	2,300	23.1	415	34.4	4,310	1,100	<420	<5.0 a	<5.0 a	<5.0 a	<15.0 a	<100 a	590 a	<420 a
09/19/13	2210	21	384	<60	4030	960	<400	523	3.1	336	<3.0	3,220	580	<400
10/03/13	1,520	14.6	354	<30.0	3,810	960	<420	5.9	<1.0	1.7	<3.0	<100	<420	<420
11/01/13	2190	16.4	422	<30.0	3,230	1,100	<420	675	3.6	382	3.5	3,570	840	<400
12/20/13	1270	<20	362	<60	4,120	1,000	<400	663	<5.0	357	<15.0	3,880	950	<400
01/07/14	1800	17.7	523	<30	4,060	1,100	<400	129	<1.0	71.7	<3.0	878	<400	<400
2/18/2014	1820	20.4	486	35.2	5,250	1,000	<400	28.6	<1.0	25.1	<3.0	435	<410	430

	Total Influent							*Total Effluent*								
Date	***Benzene (µg/L)***	***Toluene (µg/L)***	***Ethyl-benzene (µg/L)***	***Total Xylenes (µg/L)***	***TPHg (µg/L)***	***TPHd (µg/L)***	***TPHo (µg/L)***	***Benzene (µg/L)***	***Toluene (µg/L)***	***Ethyl-benzene (µg/L)***	***Total Xylenes (µg/L)***	***TPHg (µg/L)***	***TPHd (µg/L)***	***TPHo (µg/L)***	***FOG (µg/L)***	***pH (S.U.)***
12/21/10	600	7.8	300	157	4,300	550	54 J	1.0 J	0.33 J	0.75 J	0.92 J	63	160	41 J	--	8.12
01/10/11	1,380	26.5	475	186	5,340	832	<377	5.2	<1.0	2.1	<3.0	<50.0	118	<381	--	7.6
02/16/11	446	11.9	99.5	58.2	2,280	436	<379	2.4	<1.0	<1.0	<3.0	53.8	159	<379	--	7.6
03/08/11	958	39.9	383	146	5,750	472	<377	3.2	<1.0	1.7	<3.0	62.1	<75.8	<379	--	7.9
4/19/2011	916	31.4	272	83.8	3,990	670	<380	5.1	<1.0	1.4	<3.0	134	290	<380	<4700	--
5/17/2011	1,370	116	662	189	6,870	840	<380	26.2	2.3	10.9	5	263	160	<380	--	--
6/14/2011	1,540	177	640	155	7,880	800	<380	25.2	2.9	9.5	4.1	252	120	<380	--	7.6
7/6/2011	1,080	66.4	118	61.2	3,060	560	<380	21.8	<1.0	1.3	<3.0	163	80	<380	<4800	--
8/17/2011	1,830	26.8	141	51.7	4,730	480	<380	5.4	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
9/7/2011	1,560	13.4	6.4	35	3,380	510	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	8.4
10/14/2011	1,340	16.3	218	23.8	3,720	640	<380	3.5	<1.0	<1.0	<3.0	<50.0	100	<380	--	--
11/22/2011	537	7.4	109	<15.0	1,670	190	<380	1.6	<1.0	<1.0	<3.0	<50.0	<75	<380	--	--
12/9/2011	132	1.8	435	5.7	4,290	190	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
1/10/2012	968	20.2	374	33.0	3,270	260	<390	6.9	<1.0	3.3	<3.0	<50.0	<77	<380	<5000	7.7
2/9/2012	1,900	25.5	754	67.7	7,000	540	<380	16.8	<1.0	7.1	<3.0	75.7	120	<380	--	--
3/7/2012	1,520	31.7	647	118	5,790	860	<380	2.7	<1.0	1.4	<3.0	<50.0	<76	<380	--	--
4/5/2012	1,270	28	500	113	5,630	660	<380	1.3	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
5/1/2012	1,660	40.8	682	108	5,980	1,200	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
6/1/2012	960	37.7	421	69.1	2,780	420	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
7/13/2012	1,860	32.5	547	67.1	6,410	780	<380	1.1	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
08/09/12	1,170	13.3	154	11.5	2,760	360	<400	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
09/11/12	1,750	15.8	123	26	3,920	590	<380	<1.0	<1.0	<1.0	<3.0	<50.0	<76	<380	--	--
10/24/12	1310	14.7	254	22.8	4,380	690	<820	<1.0	<1.0	<1.0	<3.0	<50.0	<160	<820	<5200	7.60
11/30/12	789	11.4	174	<30.0	5,510	1000	120	1.3	<1.0	<1.0	<3.0	<100	180	<110	--	--
12/28/12	909	14.0	315	47.0	4,970	<110	360	<1.0	<1.0	<1.0	<3.0	<100	960	310	--	--
01/10/13	1,200	19.8	392	63.7	4,880	1300	<110	<1.0	<1.0	<1.0	<3.0	<100	<100	<100	--	--
02/14/13	1,660	45.9	508	80.4	4,790	1,800	<410	2.0	<1.0	<1.0	<3.0	<100	<410	<410	<5100	7.40
03/08/13	1,360	58.0	400	51.8	2,940	940	<430	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
04/18/13	804	1670	270	1,060	18,100	4,900	<400	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
05/16/13	1,580	148	232	1,500	11,900	1,500	<420	1.4	<1.0	<1.0	3.4	<100	<420	<420	--	--
06/13/13	1,580	26.1	129	112	4,160	1,100	<390	<1.0	<1.0	<1.0	<3.0	<100	<390	<390	<6300	7.3
07/16/13	1790	10	39.6	38.4	2840	1100	410	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
08/20/13	1,790	<10	<10	<30	3,170	730	<410	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
09/19/13	1,560	<10	28.8	<30	2,210	750	460	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
10/03/13	535	5.5	113	<15.0	1,430	440	<400	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
11/01/13	1500	12.7	330	19.1	2,940	820	<410	<1.0	<1.0	<1.0	<3.0	<100	<400	<400	--	--
12/20/13	1120	<20	329	<60	3,720	1,000	<400	1.8	<1.0	<1.0	<3.0	<100	<400	<400	<6300	7.7
01/07/14	904	<10	274	<30	2,300	800	460	3	<1.0	1.2	<3.0	<100	<400	<400		
2/18/2014	648	7.8	196	15.2	2,160	600	<410	2.3	<1.0	<1.0	<3.0	<100	<400	<400		

Notes:

BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes analyzed by EPA method 8260B
TPHg	Total petroleum hydrocarbons as gasoline analyzed by Ecology method NWTPH-Gx
TPHd	Total petroleum hydrocarbons as diesel analyzed by Ecology method NWTPH-Dx
TPHo	Total petroleum hydrocarbons as heavy oil analyzed by Ecology method NWTPH-Dx
FOG	Total petroleum hydrocarbos as fats, oils, and grease by EPA method 1664A
µg/L	Micrograms per liter
--	Not analyzed
<X	Not detected above reporting limit X
J	Estimated Value
a	Lab re-analyzed sample at 5x dilution to confirm results. Confirmed non-detectable concentrations for all analyses except Benzene. Anomalous data point based on historical concentrations.

TABLE 6

EXXONMOBIL/BP SYSTEM-VAPOR PHASE ANALYTICAL DATA
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Air Stripper Effluent				
Date	***Benzene (ppmV)***	***Toluene (ppmV)***	***Ethyl-benzene (ppmV)***	***Total Xylenes (ppmV)***	***TPHg (ppmV)***
12/21/10	0.47	0.09	0.16	0.01	<14
01/10/11	0.83	0.023	0.24	0.107	3.5
02/16/11	0.32	0.28	<0.067	<0.197	<4.7
03/08/11	0.69	<0.067	0.17	<0.197	<4.7
04/13/11	0.47	<0.041	<0.041	<0.041	7.8
05/17/11	3.2	<0.28	0.94	<0.28	<19.5
06/07/11	2.6	0.27	0.57	0.021	5.4
7/6/2011	0.27	0.11	0.013	0.051	2.0
8/24/2011	0.88	0.01	0.00089	0.0281	1.5
9/7/2011	0.46	<0.017	<0.017	<0.052	<1.2
10/14/2011	0.76	0.012	0.055	0.0275	2.4
11/29/2011	0.14	< 0.017	0.019	< 0.051	< 1.2
12/9/2011	< 0.0014	0.0075	< 0.0014	< 0.0042	0.27
1/10/2012	0.013	0.0053	0.0029	0.0035	0.17
2/9/2012	0.18	0.015	0.05	0.0077	0.83
3/7/2012	0.38	0.011	0.11	0.0273	1.8
4/5/2012	0.58	0.067	0.15	0.1970	4.7
5/1/2012	0.86	0.036	0.29	0.0680	3.6
6/1/2012	0.44	0.015	0.10	0.0067	0.7
7/13/2012	0.79	0.007	0.08	0.1970	6.0
8/9/2012	0.11	0.010	<0.0067	<0.0197	0.79
9/11/2012	0.56	0.021	<0.017	0.023	5.0
10/24/2012	<0.0450	0.090	<0.0450	0.305	< 3.2
11/30/2012	0.21	0.28	0.140	0.253	< 1.2
12/17/2012	<0.0042	<0.0042	<0.0042	<0.0126	<0.29
1/10/2013	0.054	0.0020	0.018	0.0102	0.16
2/14/2013	<0.0036	0.0048	<0.0036	<0.0109	<0.25
3/8/2013	<0.0084	0.030	<0.0084	<0.00254	0.15
4/18/2013	0.83	0.31	0.21	0.62	3.7
5/16/2013	0.51	<0.017	<0.017	0.30	2.2
6/13/2013	0.55	0.0066	0.012	0.031	2.5
7/16/2013	0.74	<0.017	<0.017	<0.051	4.1
8/26/2013	0.85	<0.045	<0.045	<0.135	<3.1
9/19/2013	0.85	<0.017	<0.017	<0.051	2.7
10/3/2013	0.23	<0.017	0.027	<0.051	<1.2
11/1/2013	0.97	0.45	0.16	<0.051	3
12/20/13	1.6	<0.017	0.25	<0.051	4.1
1/7/2014	0.81	<0.034	0.12	<0.101	4.8
2/18/2014	0.0038	0.0019	<0.00084	<0.003	0.17

TABLE 6

EXXONMOBIL/BP SYSTEM-VAPOR PHASE ANALYTICAL DATA
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Air Stripper Effluent				
Date	***Benzene***	***Toluene***	***Ethyl-benzene***	***Total Xylenes***	***TPHg***

Notes:

BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes analyzed by EPA method TO 14
TPHg	Total petroleum hydrocarbons as gasoline analyzed by EPA method TO 14
ppmV	Parts per million by volume
--	Not analyzed
<X	Not detected above reporting limit X
J	Estimated Value

TABLE 7

PHILLIPS 66 SYSTEM-MASS REMOVAL SUMMARY
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

	Soil Vapor Extraction System						*Groundwater Extraction System*										*Uncaptured Emissions*		
Date	*Hour Meter (hours)*	*Total Flowrate (scfm)*	*Total Influent TPHg Concentration (ppmV)*	*Total Influent Benzene Concentration (ppmV)*	*TPHg Removal Rate (lbs/day)*	*Benzene Removal Rate (lbs/day)*	*Hour Meter (hours)*	*Volume of Water Treated (gallons)*	*Total Influent TPH Concentration (µg/L)*	*Total Influent Benzene Concentration (µg/L)*	*TPH Removal Rate (lbs/day)*	*Benzene Removal Rate (lbs/day)*	*Total TPH Removal Rate (lbs/day)*	*Total Benzene Removal Rate (lbs/day)*	*Cumulative TPH Removed (lbs)*	*Cumulative Benzene Removed (lbs)*	*Effluent TPHg Concentration (ppmV)*	*Effluent Emissions Rate (lbs/day)*	*Cumulative Uncaptured Emissions (lbs)*
11/15/10	999.8	210	2.6	0.13	0.2	0.01	20,524.6	3,176,060	27,645	845	0.62	0.02	0.79	0.03	52,442.9	1,722.4	11.2	0.8	
12/21/10	1,419.7	210	31.14	5.62	2.1	0.3	20,941.0	3,222,505	45,000	4,000	2.55	0.23	4.65	0.57	52,456.7	1,722.8	11.7	0.8	13.7
01/10/11	1,678.4	210	18.00	5.7	1.2	0.3	21,196.2	3,294,629	43,947	3,620	2.49	0.21	3.70	0.55	52,506.4	1,728.9	3.5	0.2	16.3
02/16/11	2,064.0	210	18.9	14.3	1.3	0.9	21,577.0	3,402,308	44,580	2,330	1.74	0.09	3.02	0.97	52,565.4	1,737.8	< 5	0.0	16.3
03/08/11	2,339.9	210	<37.6	8.9	2.5	0.5	21,852.3	3,456,077	60,450	3,480	2.68	0.15	5.21	0.70	52,600.1	1,748.9	< 0.4	0.0	16.3
04/13/11	2,860.7	210	9.9	<0.041	0.7	0.003	22,370.8	3,570,740	59,800	6,300	1.62	0.17	2.28	0.17	52,712.9	1,764.0	1.1	0.1	17.9
05/17/11	3,409.9	210	287	7.9	19.3	0.5	22,918.6	3,644,673	79,300	5,910	2.08	0.15	21.41	0.64	52,765.1	1,767.9	0.26	0.018	18.3
06/07/11	3,726.8	210	14.0	0.40	0.9	0.02	23,235.4	3,686,105	68,100	6,870	1.03	0.10	1.98	0.13	53,047.8	1,776.4	0.12	0.008	18.4
07/06/11	4,001.1	210	14.8	0.32	1.0	0.02	23,510.2	3,706,920	60,200	9,510	0.42	0.07	1.41	0.09	53,070.4	1,777.8	< 0.099	0.0	18.4
08/17/11	4499.8	100	186	1.3	6.0	0.04	24,010.50	3,724,200	4,900	454	0.01	0.00	5.98	0.04	53,099.8	1,779.6	0.56	0.018	18.8
09/07/11	5006.5	100	18.8	<0.27	0.6	0.01	24,517.00	3,730,881	1,770	130	0.00	0.00	0.61	0.01	53,226.1	1,780.4	0.14	0.004	18.9
10/14/11	5892.8	100	58.1	0.65	1.9	0.02	25,404.00	3,739,668	843	102	0.01	0.00	1.87	0.02	53,248.5	1,780.7	0.94	0.030	20.0
11/29/11	6733.7	200	9.2	0.12	0.6	0.01	26244.1	3,765,595	12,900	1,440	0.25	0.03	0.84	0.03	53,314.0	1,781.4	0.21	0.013	20.5
12/09/11	6974.6	200	4.7	0.065	0.3	0.004	26485.0	3,788,820	12,350	1,250	0.22	0.02	0.52	0.03	53,322.4	1,781.8	0.19	0.012	20.6
01/10/12	7271.1	210	1.1	0.047	0.1	0.003	26778.2	3,815,090	26,990	3,150	0.63	0.07	0.70	0.08	53,328.8	1,782.1	0.28	0.019	20.8
02/09/12	7718.1	200	2.5	0.87	0.2	0.051	27,225.00	3,866,760	18,890	837	0.39	0.02	0.55	0.07	53,341.9	1,783.5	0.32	0.021	21.2
03/07/12	8285.0	200	9.7	0.90	0.6	0.052	27,791.70	3,925,008	15,690	1,690	0.30	0.03	0.92	0.08	53,354.8	1,785.1	0.26	0.017	21.6
04/05/12	8866.9	190	2.6	0.33	0.2	0.018	28,373.80	3,981,040	22,701	1,060	0.41	0.02	0.57	0.04	53,377.3	1,787.2	0.35	0.021	22.1
05/01/12	9476.8	200	0.95	0.02	0.1	0.001	28,983.80	4,035,820	22,200	1,300	0.28	0.02	0.35	0.02	53,391.7	1,788.1	0.53	0.034	23.0
06/01/12	10105.6	200	1.5	0.02	0.1	0.001	29,612.80	4,076,110	4,820	554	0.03	0.00	0.12	0.00	53,400.7	1,788.6	0.25	0.016	23.4
07/13/12	11016.9	200	8.4	0.02	0.5	0.001	30,524.40	4,100,410	5,390	752	0.04	0.01	0.58	0.01	53,405.4	1,788.8	0.93	0.060	25.7
08/09/12	11406.3	210	22.5	0.3	1.5	0.018	30913.00	4,114,617	2,170	118	0.01	0.00	1.53	0.02	53,414.8	1,788.9	0.33	0.022	26.0
09/11/12	11842.5	200	89.1	0.9	5.7	0.055	31349.10	4,126,110	710	87	0.00	0.00	5.72	0.05	53,442.5	1,789.2	0.71	0.046	26.8
10/24/12	12868.7	210	17.0	<0.1	1.15	0.0061	32325.50	4,138,601	6,020	459	0.02	0.00	1.17	0.01	53,687.0	1,791.6	0.087	0.006	27.1
11/30/12	13353.6	210	<1.2	0.2	0.1	0.013	32810.60	4,147,455	19,230	1,860	0.28	0.03	0.36	0.04	53,710.6	1,791.7	0.091	0.006	27.2
12/17/12	13706.1	200	0.5	0.0	0.03	0.001	33163.00	4,173,100	22,720	3,200	0.57	0.081	0.60	0.08	53,715.9	1,792.3	0.11	0.007	27.3
01/10/13	14229.2	200	<1.2	<0.017	0.1	0.001	33686.20	4,195,650	53,000	2,560	1.32	0.064	1.40	0.06	53,729.1	1,794.1	<0.059	0.004	27.4
02/14/13	14611.9	210	0.25	0.035	0.0	0.002	34067.40	4,197,282	20,700	2,550	0.51	0.063	0.53	0.07	53,751.3	1,795.1	<0.059	0.004	27.5
03/08/13	15035.2	210	5	0.7	0.3	0.043	34490.70	4,205,981	3,600	408	0.09	0.010	0.42	0.05	53,760.7	1,796.3	0.15	0.010	27.7
04/18/13	15767.0	210	<15.8	1.5	1.1	0.092	35210.50	4,235,264	21,900	2,340	0.53	0.056	1.59	0.15	53,773.6	1,797.9	0.52	0.035	28.7
05/16/13	15869.2	210	2.2	0.074	0.1	0.005	35356.20	4,243,186	14,900	1,930	0.36	0.046	0.51	0.05	53,781.3	1,798.6	<0.063	0.004	28.7
06/13/13	16274.1	210	8.6	0.079	0.6	0.005	35761.60	4,326,984	15,840	2,500	0.38	0.061	0.96	0.07	53,789.9	1,799.5	<0.059	0.004	28.8
07/16/13	16796.8	155	9.8	0.52	0.5	0.023	36018.90	4,362,195	8,730	828	0.21	0.020	0.70	0.04	53,806.6	1,800.2	0.4	0.020	29.2
08/20/13	17209.3	175	19.4	0.13	1.1	0.007	36426.20	4,397,385	8,240	731	0.20	0.018	1.29	0.02	53,818.6	1,801.0	0.42	0.024	29.6
09/19/13	17845.6	160	22	0.16	1.1	0.007	37062.70	4,429,763	2,370	396	0.06	0.009	1.19	0.02	53,852.7	1,801.6	1.1	0.056	31.1
10/03/13	17912.8	160	7.9	0.55	0.4	0.026	37129.50	4,445,527	1,610	182	0.04	0.004	0.44	0.03	53,856.0	1,801.6	0.21	0.011	31.2
11/01/13	18273.3	150	7.6	0.092	0.4	0.004	37488.30	4,511,374	4,740	678	0.11	0.016	0.48	0.02	53,862.7	1,802.1	<1.4	0.067	32.2
12/20/13	19097.4	170	3.4	0.038	0.2	0.002	38310.30	4,594,035	2,490	116	0.06	0.003	0.25	0.00	53,879.2	1,802.8	0.67	0.037	33.4
01/07/14	19452.1	180	4.6	0.061	0.3	0.003	38665.10	4,597,944	5,690	259	0.14	0.006	0.40	0.01	53,882.8	1,802.9	0.48	0.028	33.8
02/14/14	20086.9	150	2.3	0.032	0.1	0.001	39395.50	4,690,494	7,590	951	0.18	0.023	0.29	0.02	53,894.0	1,803.1	1.1	0.053	35.2
03/27/14	20839.4	160	49.7	3.7	2.6	0.172	40025.3	4,786,389	31720	1840.0	0.76	0.044	3.31	0.22	53,902.2	1,803.8	0.1	0.005	35.4

Notes:

Benzene, Toluene, Ethylbenzene, and Total Xylenes analyzed by EPA method TO 14

TPHg Total petroleum hydrocarbons as gasoline

TPH Total petroleum hydrocarbons as the sum of TPHg, TPHd, and TPHo

scfm Standard cubic feet per minute

ppmV Parts per million by volume

lbs/day Pounds per day

µg/L Micrograms per liter

-- Data not available

<X Not detected above reporting limit X. Report limit used in mass removal calculations

J Estimated Value

Soil Vapor Removal rate = C (ppmv) x Q (cfm) x (1lb-mole/386ft3) x MW (lb/lb-mole) x 60 min/hr x 24 hr/day x 10-6

Where: C = concentration, Q = flow, MW= molecular weight (86 lb/lb-mole for TPHg and 78 lb/lb-mole for benzene)

Groundwater Removal Rate = C (µg/L) x 2.204E-9 µg/lb x (1 liter/0.264 gallons) x V (gallons) x (1/T (days))

Where: C = concentration, V = volume of water treated, T= time between sampling events

TABLE 8

EXXONMOBIL/BP SYSTEM-MASS REMOVAL SUMMARY
PHILLIPS 66 RENTON TERMINAL
RENTON, WASHINGTON

Date	*Hour Meter (hours)*	*Volume of Water Treated (gallons)*	*Total Influent TPH Concentration (µg/L)*	*Total Influent Benzene Concentration (µg/L)*	*TPH Removal Rate (lbs/day)*	*Benzene Removal Rate (lbs/day)*	*Cumulative TPH Removed (lbs)*	*Cumulative Benzene Removed (lbs)*
12/17/10	--	43,739	--	--	0.10	0.01	0.00	0.00
12/21/10	--	53,762	4,904	600	0.14	0.02	0.41	0.07
01/10/11	--	120,047	6,172	1,380	0.21	0.05	3.12	1.01
02/16/11	--	271,461	2,716	446	0.10	0.02	10.93	1.64
03/08/11	--	362,371	6,222	958	0.21	0.03	12.99	2.30
04/19/11	415.1	536,196	4,660	916	0.17	0.03	22.02	3.72
05/17/11	1,040.8	651,740	7,710	1,370	0.28	0.05	26.51	5.01
06/14/11	1,493.0	733,218	8,680	1,540	0.27	0.05	31.75	5.92
07/06/11	1,668.5	760,761	3,620	1,080	0.11	0.03	33.75	6.17
08/24/11	2,626.3	843,967	5,210	1,830	0.09	0.03	38.29	7.44
09/07/11	2,966.6	862,085	3,890	1,560	0.04	0.02	39.58	7.68
10/14/11	3,851.5	922,789	4,360	1,340	0.06	0.02	41.11	8.36
11/29/11	4,775.1	1,037,967	1,860	537	0.05	0.01	43.41	8.87
12/09/11	4,898.4	--	4,480	132	0.01	0.00	43.65	8.87
01/10/12	5,113.3	1,102,733	3,530	968	0.01	0.00	43.74	8.87
02/09/12	5,539.5	1,172,399	7,540	1,900	0.25	0.06	43.92	9.98
03/07/12	6,187.9	1,312,308	6,650	1,520	0.29	0.07	50.59	11.75
04/05/12	6,767.6	1,442,027	6,290	1,270	0.28	0.06	57.54	13.13
05/01/12	7,303.2	1,547,877	7,180	1,660	0.28	0.07	63.83	14.60
06/08/12	7,931.4	1,606,614	3,200	960	0.06	0.02	71.27	15.07
07/13/12	8,532.8	1,696,859	7,190	1,860	0.22	0.06	72.77	16.47
08/09/12	8,889.6	1,730,468	3,120	1,170	0.06	0.02	75.99	16.80
09/11/12	9,560.3	1,775,632	4,510	1,750	0.06	0.02	77.63	17.46
10/24/12	10,232.0	1,819,772	5,070	1,310	0.07	0.02	79.33	17.94
11/30/12	10,653.5	1,865,332	6,630	789	0.14	0.02	80.51	18.24
12/28/12	10,921.9	1,951,270	5,330	909	0.34	0.06	82.11	18.89
01/10/13	11,233.3	2,036,759	6,180	1,200	0.34	0.07	86.55	19.75
02/14/13	11,712.5	2,119,907	6,590	1,660	0.23	0.06	93.34	20.90
03/08/13	12,239.7	2,197,220	3,880	1,360	0.11	0.04	98.37	21.78
04/18/13	13,138.8	2,342,362	23,000	804	0.74	0.03	102.64	22.75
05/16/13	13,481.4	2,410,340	13,400	1,580	0.53	0.06	113.26	23.65
06/13/13	14,151.5	2,503,347	5,260	1,580	0.15	0.04	128.13	24.87
07/16/13	14,847.8	2,567,944	4,350	1,790	0.08	0.03	132.37	25.84
08/20/13	15,632.3	2,618,509	4,310	1,790	0.06	0.02	135.02	26.60
09/19/13	16,098.7	2,660,307	3,420	1,560	0.06	0.03	136.10	27.14
10/3/2013	16,331.0	2,695,425	2,270	535	0.07	0.02	136.69	27.30
11/1/2013	16,644.0	2,761,855	3,760	1,500	0.16	0.06	137.59	28.13
12/20/13	17,404.1	2,859,806	5,120	1,120	0.13	0.03	142.65	29.04
1/7/2014	17,436.9	2,875,065	3,560	904	0.33	0.08	142.83	29.16
2/18/2014	18,044.6	3,000,609	2,760	648	0.11	0.03	151.24	29.84

Notes:

BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes analyzed by EPA method TO 14
TPHg	Total petroleum hydrocarbons as gasoline
TPH	Total petroleum hydrocarbons as the sum of TPHg, TPHd, and TPHo
scfm	Standard cubic feet per minute
ppmV	Parts per million by volume
lbs/day	Pounds per day
µg/L	Micrograms per liter
--	Data not available
<X	Not detected above reporting limit X. Report limit used in mass removal calculations
J	Estimated Value

Soil Vapor Removal rate = C (ppmv) x Q (cfm) x (1lb-mole/386ft3) x MW (lb/lb-mole) x 60 min/hr x 24 hr/day x 10-6

Where: C = concentration, Q = flow, MW= molecular weight (86 lb/lb-mole for TPHg and 78 lb/lb-mole for benzene)

Groundwater Removal Rate = C (µg/L) x 2.204E-9 µg/lb x (1 liter/0.264 gallons) x V (gallons) x (1/T (days))

Where: C = concentration, V = volume of water treated, T= time between sampling events

Appendix A

Laboratory Analytical Reports

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

October 28, 2013

Edwin Turner
CRA_Conoco Phillips
20818 44th Ave. W
Lynnwood, WA 98036

RE: Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Dear Edwin Turner:
Enclosed are the analytical results for sample(s) received by the laboratory between October 03, 2013 and October 04, 2013. 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, REV-1 10/28/13. Updated units for air results to ppmv. Updated 8260 list from Full list to BTEX only.

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

Sincerely,

Jennifer Gross

jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Yu Chen, CRA_Conoco Phillips
Jeffrey Cloud, Conestoga-Rovers Association
Matt Davis, CRA_Conoco Phillips
Kelsey Whittaker, CRA

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

CERTIFICATIONS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

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

SAMPLE SUMMARY

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10244525001	**GW-100313-NH-TOTAL INF**	Water	10/03/13 08:30	10/03/13 13:30
10244525002	**GW-100313-NH-AS EFF**	Water	10/03/13 08:45	10/03/13 13:30
10244525003	**GW-100313-NH-MID CARBON**	Water	10/03/13 09:00	10/03/13 13:30
10244525004	**GW-100313-NH-TOTAL EFF**	Water	10/03/13 09:15	10/03/13 13:30
10244525005	**GW-100313-NH-BP R1 INF**	Water	10/03/13 10:00	10/03/13 13:30
10244525006	**GW-100313-NH-BP R2 INF**	Water	10/03/13 10:10	10/03/13 13:30
10244525007	**GW-100313-NH-BP TOTAL INF**	Water	10/03/13 10:20	10/03/13 13:30
10244525008	**GW-100313-NH-BP TOTAL EFF**	Water	10/03/13 10:30	10/03/13 13:30
10244525009	**TRIP BLANK**	Water	10/03/13 00:00	10/03/13 13:30
10244525010	**a-100313-NH-SVE-INF**	Air	10/03/13 09:25	10/04/13 08:49
10244525011	**a-100313-NH-AS-EFF**	Air	10/03/13 09:30	10/04/13 08:49
10244525012	**a-100313-NH-TOTAL-INF**	Air	10/03/13 09:35	10/04/13 08:49
10244525013	**a-100313-NH-MID CARBON 1**	Air	10/03/13 09:40	10/04/13 08:49
10244525014	**a-100313-NH-MID CARBON 2**	Air	10/03/13 09:45	10/04/13 08:49
10244525015	**a-100313-NH-TOTAL EFF**	Air	10/03/13 09:50	10/04/13 08:49
10244525016	**a-100313-NH-BP AS EFF**	Air	10/03/13 10:45	10/04/13 08:49

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10244525001	**GW-100313-NH-TOTAL INF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	LPM	7	PASI-M
10244525002	**GW-100313-NH-AS EFF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	EB2	7	PASI-M
10244525003	**GW-100313-NH-MID CARBON**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	EB2	7	PASI-M
10244525004	**GW-100313-NH-TOTAL EFF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10244525005	**GW-100313-NH-BP R1 INF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10244525006	**GW-100313-NH-BP R2 INF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10244525007	**GW-100313-NH-BP TOTAL INF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	LPM	7	PASI-M
10244525008	**GW-100313-NH-BP TOTAL EFF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10244525009	**TRIP BLANK**	NWTPH-Gx/8021	MJH	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10244525010	**a-100313-NH-SVE-INF**	TO-14M Ambient Air	CJR	6	PASI-M
10244525011	**a-100313-NH-AS-EFF**	TO-14M Ambient Air	CJR	6	PASI-M
10244525012	**a-100313-NH-TOTAL-INF**	TO-14M Ambient Air	CJR	6	PASI-M
10244525013	**a-100313-NH-MID CARBON 1**	TO-14M Ambient Air	CJR	6	PASI-M
10244525014	**a-100313-NH-MID CARBON 2**	TO-14M Ambient Air	CJR	6	PASI-M
10244525015	**a-100313-NH-TOTAL EFF**	TO-14M Ambient Air	CJR	6	PASI-M
10244525016	**a-100313-NH-BP AS EFF**	TO-14M Ambient Air	CJR	6	PASI-M

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Sample: GW-100313-NH-TOTAL INF **Lab ID: 10244525001** Collected: 10/03/13 08:30 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.41**	mg/L	0.40	1	10/16/13 13:09	10/18/13 09:13	68334-30-5	D6
Motor Oil Range SG	ND	mg/L	0.40	1	10/16/13 13:09	10/18/13 09:13	64742-65-0	
Surrogates								
o-Terphenyl (S)	72	%	30-125	1	10/16/13 13:09	10/18/13 09:13	84-15-1	
n-Triacontane (S)	81	%	30-125	1	10/16/13 13:09	10/18/13 09:13	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**1200**	ug/L	100	1		10/14/13 23:13		
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%	75-125	1		10/14/13 23:13	98-08-8	
8260 VOC	Analytical Method: EPA 8260							
Benzene	**182**	ug/L	1.0	1		10/17/13 21:15	71-43-2	
Ethylbenzene	**8.9**	ug/L	1.0	1		10/17/13 21:15	100-41-4	
Toluene	**68.0**	ug/L	1.0	1		10/17/13 21:15	108-88-3	
Xylene (Total)	**179**	ug/L	3.0	1		10/17/13 21:15	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%	75-125	1		10/17/13 21:15	17060-07-0	
Toluene-d8 (S)	102	%	75-125	1		10/17/13 21:15	2037-26-5	
4-Bromofluorobenzene (S)	104	%	75-125	1		10/17/13 21:15	460-00-4	

Sample: GW-100313-NH-AS EFF **Lab ID: 10244525002** Collected: 10/03/13 08:45 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.42	1	10/16/13 13:09	10/18/13 09:58	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.42	1	10/16/13 13:09	10/18/13 09:58	64742-65-0	
Surrogates								
o-Terphenyl (S)	74	%	30-125	1	10/16/13 13:09	10/18/13 09:58	84-15-1	
n-Triacontane (S)	85	%	30-125	1	10/16/13 13:09	10/18/13 09:58	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**209**	ug/L	100	1		10/14/13 16:52		
Surrogates								
a,a,a-Trifluorotoluene (S)	94	%	75-125	1		10/14/13 16:52	98-08-8	
8260 VOC	Analytical Method: EPA 8260							
Benzene	**17.7**	ug/L	1.0	1		10/15/13 18:01	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/15/13 18:01	100-41-4	
Toluene	**5.3**	ug/L	1.0	1		10/15/13 18:01	108-88-3	
Xylene (Total)	**29.9**	ug/L	3.0	1		10/15/13 18:01	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%	75-125	1		10/15/13 18:01	17060-07-0	
Toluene-d8 (S)	101	%	75-125	1		10/15/13 18:01	2037-26-5	
4-Bromofluorobenzene (S)	101	%	75-125	1		10/15/13 18:01	460-00-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Sample: GW-100313-NH-MID CARBON **Lab ID: 10244525003** Collected: 10/03/13 09:00 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	10/16/13 13:09	10/18/13 10:20	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	10/16/13 13:09	10/18/13 10:20	64742-65-0	
Surrogates								
o-Terphenyl (S)	73	%	30-125	1	10/16/13 13:09	10/18/13 10:20	84-15-1	
n-Triacontane (S)	84	%	30-125	1	10/16/13 13:09	10/18/13 10:20	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		10/14/13 17:12		
Surrogates								
a,a,a-Trifluorotoluene (S)	94	%	75-125	1		10/14/13 17:12	98-08-8	
8260 VOC	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/15/13 17:46	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/15/13 17:46	100-41-4	
Toluene	ND	ug/L	1.0	1		10/15/13 17:46	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/15/13 17:46	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	105	%	75-125	1		10/15/13 17:46	17060-07-0	
Toluene-d8 (S)	102	%	75-125	1		10/15/13 17:46	2037-26-5	
4-Bromofluorobenzene (S)	102	%	75-125	1		10/15/13 17:46	460-00-4	

Sample: GW-100313-NH-TOTAL EFF **Lab ID: 10244525004** Collected: 10/03/13 09:15 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.43	1	10/16/13 13:09	10/18/13 10:43	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.43	1	10/16/13 13:09	10/18/13 10:43	64742-65-0	
Surrogates								
o-Terphenyl (S)	67	%	30-125	1	10/16/13 13:09	10/18/13 10:43	84-15-1	
n-Triacontane (S)	70	%	30-125	1	10/16/13 13:09	10/18/13 10:43	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		10/14/13 17:32		
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%	75-125	1		10/14/13 17:32	98-08-8	
8260 VOC	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/15/13 22:50	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/15/13 22:50	100-41-4	
Toluene	ND	ug/L	1.0	1		10/15/13 22:50	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/15/13 22:50	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	107	%	75-125	1		10/15/13 22:50	17060-07-0	
Toluene-d8 (S)	101	%	75-125	1		10/15/13 22:50	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Sample: GW-100313-NH-TOTAL EFF **Lab ID: 10244525004** Collected: 10/03/13 09:15 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Surrogates								
4-Bromofluorobenzene (S)	103	%	75-125	1		10/15/13 22:50	460-00-4	

Sample: GW-100313-NH-BP R1 INF **Lab ID: 10244525005** Collected: 10/03/13 10:00 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.96**	mg/L	0.42	1	10/16/13 13:09	10/18/13 11:05	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.42	1	10/16/13 13:09	10/18/13 11:05	64742-65-0	
Surrogates								
o-Terphenyl (S)	73	%	30-125	1	10/16/13 13:09	10/18/13 11:05	84-15-1	
n-Triacontane (S)	83	%	30-125	1	10/16/13 13:09	10/18/13 11:05	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**3810**	ug/L	100	1		10/14/13 17:52		
Surrogates								
a,a,a-Trifluorotoluene (S)	138	%	75-125	1		10/14/13 17:52	98-08-8	2M,S0
8260 VOC	Analytical Method: EPA 8260							
Benzene	**1520**	ug/L	10.0	10		10/16/13 01:52	71-43-2	
Ethylbenzene	**354**	ug/L	10.0	10		10/16/13 01:52	100-41-4	
Toluene	**14.6**	ug/L	10.0	10		10/16/13 01:52	108-88-3	
Xylene (Total)	ND	ug/L	30.0	10		10/16/13 01:52	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	105	%	75-125	10		10/16/13 01:52	17060-07-0	
Toluene-d8 (S)	102	%	75-125	10		10/16/13 01:52	2037-26-5	
4-Bromofluorobenzene (S)	102	%	75-125	10		10/16/13 01:52	460-00-4	

Sample: GW-100313-NH-BP R2 INF **Lab ID: 10244525006** Collected: 10/03/13 10:10 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.42	1	10/16/13 13:09	10/18/13 11:27	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.42	1	10/16/13 13:09	10/18/13 11:27	64742-65-0	
Surrogates								
o-Terphenyl (S)	68	%	30-125	1	10/16/13 13:09	10/18/13 11:27	84-15-1	
n-Triacontane (S)	78	%	30-125	1	10/16/13 13:09	10/18/13 11:27	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		10/14/13 18:13		
Surrogates								
a,a,a-Trifluorotoluene (S)	97	%	75-125	1		10/14/13 18:13	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Sample: GW-100313-NH-BP R2 INF **Lab ID: 10244525006** Collected: 10/03/13 10:10 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 VOC	Analytical Method: EPA 8260							
Benzene	**5.9**	ug/L	1.0	1		10/15/13 23:05	71-43-2	
Ethylbenzene	**1.7**	ug/L	1.0	1		10/15/13 23:05	100-41-4	
Toluene	ND	ug/L	1.0	1		10/15/13 23:05	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/15/13 23:05	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%	75-125	1		10/15/13 23:05	17060-07-0	
Toluene-d8 (S)	101	%	75-125	1		10/15/13 23:05	2037-26-5	
4-Bromofluorobenzene (S)	102	%	75-125	1		10/15/13 23:05	460-00-4	

Sample: GW-100313-NH-BP TOTAL INF **Lab ID: 10244525007** Collected: 10/03/13 10:20 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.44**	mg/L	0.40	1	10/16/13 13:09	10/18/13 12:34	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	10/16/13 13:09	10/18/13 12:34	64742-65-0	
Surrogates								
o-Terphenyl (S)	72	%	30-125	1	10/16/13 13:09	10/18/13 12:34	84-15-1	
n-Triacontane (S)	83	%	30-125	1	10/16/13 13:09	10/18/13 12:34	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**1430**	ug/L	100	1		10/14/13 18:33		
Surrogates								
a,a,a-Trifluorotoluene (S)	109	%	75-125	1		10/14/13 18:33	98-08-8	
8260 VOC	Analytical Method: EPA 8260							
Benzene	**535**	ug/L	5.0	5		10/16/13 22:07	71-43-2	
Ethylbenzene	**113**	ug/L	5.0	5		10/16/13 22:07	100-41-4	
Toluene	**5.5**	ug/L	5.0	5		10/16/13 22:07	108-88-3	
Xylene (Total)	ND	ug/L	15.0	5		10/16/13 22:07	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	75-125	5		10/16/13 22:07	17060-07-0	
Toluene-d8 (S)	98	%	75-125	5		10/16/13 22:07	2037-26-5	
4-Bromofluorobenzene (S)	98	%	75-125	5		10/16/13 22:07	460-00-4	

Sample: GW-100313-NH-BP TOTAL EFF **Lab ID: 10244525008** Collected: 10/03/13 10:30 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	10/16/13 13:09	10/18/13 12:56	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	10/16/13 13:09	10/18/13 12:56	64742-65-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Sample: GW-100313-NH-BP TOTAL EFF **Lab ID: 10244525008** Collected: 10/03/13 10:30 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Surrogates								
o-Terphenyl (S)	71	%	30-125	1	10/16/13 13:09	10/18/13 12:56	84-15-1	
n-Triacontane (S)	82	%	30-125	1	10/16/13 13:09	10/18/13 12:56	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		10/14/13 18:53		
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%	75-125	1		10/14/13 18:53	98-08-8	
8260 VOC	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/15/13 23:20	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/15/13 23:20	100-41-4	
Toluene	ND	ug/L	1.0	1		10/15/13 23:20	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/15/13 23:20	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%	75-125	1		10/15/13 23:20	17060-07-0	
Toluene-d8 (S)	102	%	75-125	1		10/15/13 23:20	2037-26-5	
4-Bromofluorobenzene (S)	104	%	75-125	1		10/15/13 23:20	460-00-4	

Sample: TRIP BLANK **Lab ID: 10244525009** Collected: 10/03/13 00:00 Received: 10/03/13 13:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		10/09/13 21:24		
Surrogates								
a,a,a-Trifluorotoluene (S)	100	%	75-125	1		10/09/13 21:24	98-08-8	
8260 VOC	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/15/13 21:04	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/15/13 21:04	100-41-4	
Toluene	ND	ug/L	1.0	1		10/15/13 21:04	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/15/13 21:04	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%	75-125	1		10/15/13 21:04	17060-07-0	
Toluene-d8 (S)	102	%	75-125	1		10/15/13 21:04	2037-26-5	
4-Bromofluorobenzene (S)	103	%	75-125	1		10/15/13 21:04	460-00-4	

Sample: a-100313-NH-SVE-INF **Lab ID: 10244525010** Collected: 10/03/13 09:25 Received: 10/04/13 08:49 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**24.6**	ppmv	1.1	2150.4		10/17/13 10:48	71-43-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Sample: a-100313-NH-SVE-INF **Lab ID: 10244525010** Collected: 10/03/13 09:25 Received: 10/04/13 08:49 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Ethylbenzene	**2.1**	ppmv	1.1	2150.4		10/17/13 10:48	100-41-4	
THC as Gas	**917**	ppmv	75.3	2150.4		10/17/13 10:48		
Toluene	**56.4**	ppmv	1.1	2150.4		10/17/13 10:48	108-88-3	
m&p-Xylene	**14.7**	ppmv	2.2	2150.4		10/17/13 10:48	179601-23-1	
o-Xylene	**7.0**	ppmv	1.1	2150.4		10/17/13 10:48	95-47-6	

Sample: a-100313-NH-AS-EFF **Lab ID: 10244525011** Collected: 10/03/13 09:30 Received: 10/04/13 08:49 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**6.0**	ppmv	0.13	268.8		10/17/13 10:24	71-43-2	
Ethylbenzene	**0.21**	ppmv	0.13	268.8		10/17/13 10:24	100-41-4	
THC as Gas	**12.3**	ppmv	9.4	268.8		10/17/13 10:24		
Toluene	**3.1**	ppmv	0.13	268.8		10/17/13 10:24	108-88-3	
m&p-Xylene	**2.6**	ppmv	0.27	268.8		10/17/13 10:24	179601-23-1	
o-Xylene	**1.1**	ppmv	0.13	268.8		10/17/13 10:24	95-47-6	

Sample: a-100313-NH-TOTAL-INF **Lab ID: 10244525012** Collected: 10/03/13 09:35 Received: 10/04/13 08:49 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.55**	ppmv	0.016	31.4		10/17/13 09:59	71-43-2	
Ethylbenzene	**0.023**	ppmv	0.016	31.4		10/17/13 09:59	100-41-4	
THC as Gas	**7.9**	ppmv	1.1	31.4		10/17/13 09:59		
Toluene	**0.45**	ppmv	0.016	31.4		10/17/13 09:59	108-88-3	
m&p-Xylene	**0.21**	ppmv	0.031	31.4		10/17/13 09:59	179601-23-1	
o-Xylene	**0.093**	ppmv	0.016	31.4		10/17/13 09:59	95-47-6	

Sample: a-100313-NH-MID CARBON 1 **Lab ID: 10244525013** Collected: 10/03/13 09:40 Received: 10/04/13 08:49 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.015**	ppmv	0.00094	1.87		10/16/13 23:27	71-43-2	
Ethylbenzene	ND	ppmv	0.00094	1.87		10/16/13 23:27	100-41-4	
THC as Gas	**0.57**	ppmv	0.065	1.87		10/16/13 23:27		
Toluene	**0.0095**	ppmv	0.00094	1.87		10/16/13 23:27	108-88-3	
m&p-Xylene	**0.0064**	ppmv	0.0019	1.87		10/16/13 23:27	179601-23-1	
o-Xylene	**0.0026**	ppmv	0.00094	1.87		10/16/13 23:27	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Sample: a-100313-NH-MID CARBON 2 **Lab ID: 10244525014** Collected: 10/03/13 09:45 Received: 10/04/13 08:49 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.0011**	ppmv	0.00084	1.68		10/17/13 00:55	71-43-2	
Ethylbenzene	ND	ppmv	0.00084	1.68		10/17/13 00:55	100-41-4	
THC as Gas	**0.49**	ppmv	0.059	1.68		10/17/13 00:55		
Toluene	ND	ppmv	0.00084	1.68		10/17/13 00:55	108-88-3	
m&p-Xylene	ND	ppmv	0.0017	1.68		10/17/13 00:55	179601-23-1	
o-Xylene	ND	ppmv	0.00084	1.68		10/17/13 00:55	95-47-6	

Sample: a-100313-NH-TOTAL EFF **Lab ID: 10244525015** Collected: 10/03/13 09:50 Received: 10/04/13 08:49 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.00078	1.57		10/17/13 00:25	71-43-2	
Ethylbenzene	ND	ppmv	0.00078	1.57		10/17/13 00:25	100-41-4	
THC as Gas	**0.21**	ppmv	0.055	1.57		10/17/13 00:25		
Toluene	ND	ppmv	0.00078	1.57		10/17/13 00:25	108-88-3	
m&p-Xylene	ND	ppmv	0.0016	1.57		10/17/13 00:25	179601-23-1	
o-Xylene	ND	ppmv	0.00078	1.57		10/17/13 00:25	95-47-6	

Sample: a-100313-NH-BP AS EFF **Lab ID: 10244525016** Collected: 10/03/13 10:45 Received: 10/04/13 08:49 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.23**	ppmv	0.017	33.6		10/16/13 22:28	71-43-2	
Ethylbenzene	**0.027**	ppmv	0.017	33.6		10/16/13 22:28	100-41-4	
THC as Gas	ND	ppmv	1.2	33.6		10/16/13 22:28		
Toluene	ND	ppmv	0.017	33.6		10/16/13 22:28	108-88-3	
m&p-Xylene	ND	ppmv	0.034	33.6		10/16/13 22:28	179601-23-1	
o-Xylene	ND	ppmv	0.017	33.6		10/16/13 22:28	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

QC Batch: AIR/18491 Analysis Method: TO-14M Ambient Air
QC Batch Method: TO-14M Ambient Air Analysis Description: TO14 MSV AIR - AMBIENT
Associated Lab Samples: 10244525010, 10244525011, 10244525012, 10244525013, 10244525014, 10244525015, 10244525016

METHOD BLANK: 1553854 Matrix: Air
Associated Lab Samples: 10244525010, 10244525011, 10244525012, 10244525013, 10244525014, 10244525015, 10244525016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ppmv	ND	0.00050	10/16/13 16:42	
Ethylbenzene	ppmv	ND	0.00050	10/16/13 16:42	
m&p-Xylene	ppmv	ND	0.0010	10/16/13 16:42	
o-Xylene	ppmv	ND	0.00050	10/16/13 16:42	
THC as Gas	ppmv	ND	0.035	10/16/13 16:42	
Toluene	ppmv	ND	0.00050	10/16/13 16:42	

LABORATORY CONTROL SAMPLE: 1553855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ppmv	.01	0.0099	99	72-136	
Ethylbenzene	ppmv	.01	0.010	102	74-136	
m&p-Xylene	ppmv	.01	0.010	104	72-135	
o-Xylene	ppmv	.01	0.010	101	74-135	
THC as Gas	ppmv	.72	0.74	103	63-141	
Toluene	ppmv	.01	0.0098	98	71-134	

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

QC Batch: GCV/11364 Analysis Method: NWTPH-Gx/8021
QC Batch Method: NWTPH-Gx/8021 Analysis Description: NWTPH-Gx/8021B Water
Associated Lab Samples: 10244525009

METHOD BLANK: 1547874 Matrix: Water
Associated Lab Samples: 10244525009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	10/09/13 21:04	
a,a,a-Trifluorotoluene (S)	%	100	75-125	10/09/13 21:04	

LABORATORY CONTROL SAMPLE & LCSD: 1547875 1547876

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	1070	1040	107	104	75-126	3	20	
a,a,a-Trifluorotoluene (S)	%				108	106	75-125			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1547877 1547878

Parameter	Units	10244556003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH as Gas	ug/L	ND	1000	1000	990	1020	96	99	75-137	3	30	
a,a,a-Trifluorotoluene (S)	%						122	102	75-125			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

QC Batch: GCV/11372 Analysis Method: NWTPH-Gx/8021
QC Batch Method: NWTPH-Gx/8021 Analysis Description: NWTPH-Gx/8021B Water
Associated Lab Samples: 10244525001, 10244525002, 10244525003, 10244525004, 10244525005, 10244525006, 10244525007, 10244525008

METHOD BLANK: 1550731 Matrix: Water
Associated Lab Samples: 10244525001, 10244525002, 10244525003, 10244525004, 10244525005, 10244525006, 10244525007, 10244525008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	10/14/13 12:51	
a,a,a-Trifluorotoluene (S)	%	95	75-125	10/14/13 12:51	

LABORATORY CONTROL SAMPLE & LCSD: 1550732 1550733

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	1060	1060	106	106	75-126	.08	20	
a,a,a-Trifluorotoluene (S)	%				102	102	75-125			

MATRIX SPIKE SAMPLE: 1552375

Parameter	Units	10244493004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH as Gas	ug/L	ND	1000	1030	100	75-137	
a,a,a-Trifluorotoluene (S)	%				110	75-125	

SAMPLE DUPLICATE: 1552376

Parameter	Units	10244493005 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	ND	ND		30	
a,a,a-Trifluorotoluene (S)	%	94	94	.8		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

QC Batch: MSV/25290 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W
Associated Lab Samples: 10244525002, 10244525003

METHOD BLANK: 1552189 Matrix: Water
Associated Lab Samples: 10244525002, 10244525003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/15/13 13:28	
Ethylbenzene	ug/L	ND	1.0	10/15/13 13:28	
Toluene	ug/L	ND	1.0	10/15/13 13:28	
Xylene (Total)	ug/L	ND	3.0	10/15/13 13:28	
1,2-Dichloroethane-d4 (S)	%	104	75-125	10/15/13 13:28	
4-Bromofluorobenzene (S)	%	103	75-125	10/15/13 13:28	
Toluene-d8 (S)	%	101	75-125	10/15/13 13:28	

LABORATORY CONTROL SAMPLE: 1552190

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.2	91	75-125	
Ethylbenzene	ug/L	20	18.2	91	75-125	
Toluene	ug/L	20	17.3	87	75-125	
Xylene (Total)	ug/L	60	54.7	91	75-125	
1,2-Dichloroethane-d4 (S)	%			107	75-125	
4-Bromofluorobenzene (S)	%			104	75-125	
Toluene-d8 (S)	%			103	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1552191 1552192

Parameter	Units	10244415007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	636	20	20	620	628	-79	-42	70-135	1	30	E,M1
Ethylbenzene	ug/L	78.7	20	20	85.8	86.9	36	41	75-125	1	30	M1
Toluene	ug/L	1.2	20	20	20.6	21.4	97	101	75-125	4	30	
Xylene (Total)	ug/L	56.0	60	60	108	110	87	90	75-125	2	30	
1,2-Dichloroethane-d4 (S)	%						108	108	75-125			
4-Bromofluorobenzene (S)	%						103	104	75-125			
Toluene-d8 (S)	%						101	103	75-125			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

QC Batch: MSV/25303 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W
Associated Lab Samples: 10244525004, 10244525005, 10244525006, 10244525008, 10244525009

METHOD BLANK: 1552649 Matrix: Water
Associated Lab Samples: 10244525004, 10244525005, 10244525006, 10244525008, 10244525009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/15/13 20:49	
Ethylbenzene	ug/L	ND	1.0	10/15/13 20:49	
Toluene	ug/L	ND	1.0	10/15/13 20:49	
Xylene (Total)	ug/L	ND	3.0	10/15/13 20:49	
1,2-Dichloroethane-d4 (S)	%	107	75-125	10/15/13 20:49	
4-Bromofluorobenzene (S)	%	105	75-125	10/15/13 20:49	
Toluene-d8 (S)	%	101	75-125	10/15/13 20:49	

LABORATORY CONTROL SAMPLE: 1552650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.7	99	75-125	
Ethylbenzene	ug/L	20	20.0	100	75-125	
Toluene	ug/L	20	19.0	95	75-125	
Xylene (Total)	ug/L	60	60.1	100	75-125	
1,2-Dichloroethane-d4 (S)	%			108	75-125	
4-Bromofluorobenzene (S)	%			103	75-125	
Toluene-d8 (S)	%			104	75-125	

MATRIX SPIKE SAMPLE: 1552972

Parameter	Units	10244697005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	20	20.2	101	70-135	
Ethylbenzene	ug/L	ND	20	20.5	102	75-125	
Toluene	ug/L	ND	20	19.2	96	75-125	
Xylene (Total)	ug/L	ND	60	60.5	101	75-125	
1,2-Dichloroethane-d4 (S)	%				107	75-125	
4-Bromofluorobenzene (S)	%				104	75-125	
Toluene-d8 (S)	%				104	75-125	

SAMPLE DUPLICATE: 1552973

Parameter	Units	10244697006 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	107	105	2		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

SAMPLE DUPLICATE: 1552973

Parameter	Units	10244697006 Result	Dup Result	RPD	Max RPD	Qualifiers
4-Bromofluorobenzene (S)	%	103	105	2		
Toluene-d8 (S)	%	101	102	.6		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

QC Batch: MSV/25309 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W
Associated Lab Samples: 10244525007

METHOD BLANK: 1553530 Matrix: Water
Associated Lab Samples: 10244525007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/16/13 14:58	
Ethylbenzene	ug/L	ND	1.0	10/16/13 14:58	
Toluene	ug/L	ND	1.0	10/16/13 14:58	
Xylene (Total)	ug/L	ND	3.0	10/16/13 14:58	
1,2-Dichloroethane-d4 (S)	%	96	75-125	10/16/13 14:58	
4-Bromofluorobenzene (S)	%	100	75-125	10/16/13 14:58	
Toluene-d8 (S)	%	98	75-125	10/16/13 14:58	

LABORATORY CONTROL SAMPLE: 1553531

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.4	97	75-125	
Ethylbenzene	ug/L	20	18.8	94	75-125	
Toluene	ug/L	20	19.9	99	75-125	
Xylene (Total)	ug/L	60	59.8	100	75-125	
1,2-Dichloroethane-d4 (S)	%			96	75-125	
4-Bromofluorobenzene (S)	%			100	75-125	
Toluene-d8 (S)	%			99	75-125	

MATRIX SPIKE SAMPLE: 1554765

Parameter	Units	10244925001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	20	20.3	101	70-135	
Ethylbenzene	ug/L	ND	20	20.1	100	75-125	
Toluene	ug/L	ND	20	20.5	102	75-125	
Xylene (Total)	ug/L	ND	60	63.5	106	75-125	
1,2-Dichloroethane-d4 (S)	%				98	75-125	
4-Bromofluorobenzene (S)	%				98	75-125	
Toluene-d8 (S)	%				99	75-125	

SAMPLE DUPLICATE: 1554769

Parameter	Units	10244916004 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	.87J		30	
Ethylbenzene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	98	96	2		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

SAMPLE DUPLICATE: 1554769

Parameter	Units	10244916004 Result	Dup Result	RPD	Max RPD	Qualifiers
4-Bromofluorobenzene (S)	%	98	99	.7		
Toluene-d8 (S)	%	98	97	1		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

QC Batch: MSV/25331 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 465 W
Associated Lab Samples: 10244525001

METHOD BLANK: 1554799 Matrix: Water
Associated Lab Samples: 10244525001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/17/13 18:28	
Ethylbenzene	ug/L	ND	1.0	10/17/13 18:28	
Toluene	ug/L	ND	1.0	10/17/13 18:28	
Xylene (Total)	ug/L	ND	3.0	10/17/13 18:28	
1,2-Dichloroethane-d4 (S)	%	111	75-125	10/17/13 18:28	
4-Bromofluorobenzene (S)	%	103	75-125	10/17/13 18:28	
Toluene-d8 (S)	%	102	75-125	10/17/13 18:28	

LABORATORY CONTROL SAMPLE: 1554800

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.8	104	75-125	
Ethylbenzene	ug/L	20	20.1	100	75-125	
Toluene	ug/L	20	19.4	97	75-125	
Xylene (Total)	ug/L	60	59.9	100	75-125	
1,2-Dichloroethane-d4 (S)	%			113	75-125	
4-Bromofluorobenzene (S)	%			104	75-125	
Toluene-d8 (S)	%			103	75-125	

MATRIX SPIKE SAMPLE: 1555945

Parameter	Units	10244926001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	8.2	20	33.7	128	70-135	
Ethylbenzene	ug/L	8.8	20	32.8	120	75-125	
Toluene	ug/L	ND	20	24.3	118	75-125	
Xylene (Total)	ug/L	ND	60	74.8	121	75-125	
1,2-Dichloroethane-d4 (S)	%				113	75-125	1M
4-Bromofluorobenzene (S)	%				105	75-125	
Toluene-d8 (S)	%				104	75-125	

SAMPLE DUPLICATE: 1555946

Parameter	Units	10244926002 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	1.9	2.0	.5	30	
Ethylbenzene	ug/L	1.2	1.0	12	30	
Toluene	ug/L	ND	.44J		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	113	112	.6		1M

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

SAMPLE DUPLICATE: 1555946

Parameter	Units	10244926002 Result	Dup Result	RPD	Max RPD	Qualifiers
4-Bromofluorobenzene (S)	%	104	105	.5		
Toluene-d8 (S)	%	101	102	.6		

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QUALITY CONTROL DATA

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

QC Batch: OEXT/23350 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3510 Analysis Description: NWTPH-Dx GCS LV SG
Associated Lab Samples: 10244525001, 10244525002, 10244525003, 10244525004, 10244525005, 10244525006, 10244525007, 10244525008

METHOD BLANK: 1553816 Matrix: Water
Associated Lab Samples: 10244525001, 10244525002, 10244525003, 10244525004, 10244525005, 10244525006, 10244525007, 10244525008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range SG	mg/L	ND	0.40	10/18/13 08:06	
Motor Oil Range SG	mg/L	ND	0.40	10/18/13 08:06	
n-Triacontane (S)	%	78	30-125	10/18/13 08:06	
o-Terphenyl (S)	%	62	30-125	10/18/13 08:06	

LABORATORY CONTROL SAMPLE & LCSD: 1553817 1553818

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	2	1.5	1.6	77	79	50-150	1	20	
Motor Oil Range SG	mg/L	2	1.6	1.6	78	79	50-150	2	20	
n-Triacontane (S)	%				82	78	30-125			
o-Terphenyl (S)	%				78	78	30-125			

SAMPLE DUPLICATE: 1553446

Parameter	Units	10245389002 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	ND	.15J		30	
Motor Oil Range SG	mg/L	ND	ND		30	
n-Triacontane (S)	%	82	71	15		
o-Terphenyl (S)	%	72	67	6		

SAMPLE DUPLICATE: 1553819

Parameter	Units	10244525001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	0.41	0.77	60	30	D6
Motor Oil Range SG	mg/L	ND	.12J		30	
n-Triacontane (S)	%	81	90	16		
o-Terphenyl (S)	%	72	76	12		

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

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.

PRL - Pace Reporting 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.

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TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

SAMPLE QUALIFIERS

Sample: 10244525010

[1]	This result is reported from a serial dilution

Sample: 10244525011

[1]	This result is reported from a serial dilution

ANALYTE QUALIFIERS

1M	Post-analysis pH measurement indicates insufficient VOA sample preservation. Therefore, analysis was conducted outside the recognized method holding time.
2M	Surrogate recovery outside laboratory control limits due to matrix interferences.
D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
S0	Surrogate recovery outside laboratory control limits.

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METHOD CROSS REFERENCE TABLE

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Parameter	Matrix	Analytical Method	Preparation Method
8260 VOC	Water	SW-846 8260B/5030B	N/A

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: P66 Renton 070496-2RM00 REV-1
Pace Project No.: 10244525

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10244525010	**a-100313-NH-SVE-INF**	TO-14M Ambient Air	AIR/18491		
10244525011	**a-100313-NH-AS-EFF**	TO-14M Ambient Air	AIR/18491		
10244525012	**a-100313-NH-TOTAL-INF**	TO-14M Ambient Air	AIR/18491		
10244525013	**a-100313-NH-MID CARBON 1**	TO-14M Ambient Air	AIR/18491		
10244525014	**a-100313-NH-MID CARBON 2**	TO-14M Ambient Air	AIR/18491		
10244525015	**a-100313-NH-TOTAL EFF**	TO-14M Ambient Air	AIR/18491		
10244525016	**a-100313-NH-BP AS EFF**	TO-14M Ambient Air	AIR/18491		
10244525001	**GW-100313-NH-TOTAL INF**	EPA 3510	OEXT/23350	NWTPH-Dx	GCSV/12249
10244525002	**GW-100313-NH-AS EFF**	EPA 3510	OEXT/23350	NWTPH-Dx	GCSV/12249
10244525003	**GW-100313-NH-MID CARBON**	EPA 3510	OEXT/23350	NWTPH-Dx	GCSV/12249
10244525004	**GW-100313-NH-TOTAL EFF**	EPA 3510	OEXT/23350	NWTPH-Dx	GCSV/12249
10244525005	**GW-100313-NH-BP R1 INF**	EPA 3510	OEXT/23350	NWTPH-Dx	GCSV/12249
10244525006	**GW-100313-NH-BP R2 INF**	EPA 3510	OEXT/23350	NWTPH-Dx	GCSV/12249
10244525007	**GW-100313-NH-BP TOTAL INF**	EPA 3510	OEXT/23350	NWTPH-Dx	GCSV/12249
10244525008	**GW-100313-NH-BP TOTAL EFF**	EPA 3510	OEXT/23350	NWTPH-Dx	GCSV/12249
10244525001	**GW-100313-NH-TOTAL INF**	NWTPH-Gx/8021	GCV/11372		
10244525002	**GW-100313-NH-AS EFF**	NWTPH-Gx/8021	GCV/11372		
10244525003	**GW-100313-NH-MID CARBON**	NWTPH-Gx/8021	GCV/11372		
10244525004	**GW-100313-NH-TOTAL EFF**	NWTPH-Gx/8021	GCV/11372		
10244525005	**GW-100313-NH-BP R1 INF**	NWTPH-Gx/8021	GCV/11372		
10244525006	**GW-100313-NH-BP R2 INF**	NWTPH-Gx/8021	GCV/11372		
10244525007	**GW-100313-NH-BP TOTAL INF**	NWTPH-Gx/8021	GCV/11372		
10244525008	**GW-100313-NH-BP TOTAL EFF**	NWTPH-Gx/8021	GCV/11372		
10244525009	**TRIP BLANK**	NWTPH-Gx/8021	GCV/11364		
10244525001	**GW-100313-NH-TOTAL INF**	EPA 8260	MSV/25331		
10244525002	**GW-100313-NH-AS EFF**	EPA 8260	MSV/25290		
10244525003	**GW-100313-NH-MID CARBON**	EPA 8260	MSV/25290		
10244525004	**GW-100313-NH-TOTAL EFF**	EPA 8260	MSV/25303		
10244525005	**GW-100313-NH-BP R1 INF**	EPA 8260	MSV/25303		
10244525006	**GW-100313-NH-BP R2 INF**	EPA 8260	MSV/25303		
10244525007	**GW-100313-NH-BP TOTAL INF**	EPA 8260	MSV/25309		
10244525008	**GW-100313-NH-BP TOTAL EFF**	EPA 8260	MSV/25303		
10244525009	**TRIP BLANK**	EPA 8260	MSV/25303		

CHAIN OF CUSTODY RECORD

CONESTOGA-ROVERS & ASSOCIATES (CRA)

COC NO.: 38703

PAGE 1 OF 1

Address: 1117 TACOMA AVE. SOUTH TACOMA, WA. 98402

Phone: 253.573.1218 Fax: 253.573.1663

10244525 (See Reverse Side for Instructions)

Project No/ Phase/Task Code: 070496 - 2RM00	Laboratory Name: PACE	Lab Location: SEATTLE	SSOW ID:
Project Name: P66 - RENTON TERMINAL	Lab Contact: J. GROSS	Lab Quote No:	Cooler No:
Project Location: RENTON, WA.			Carrier:
Chemistry Contact: M. DAVIS / J. CLOWD			Airbill No:
Sampler(s): N. HINSPERGER			Date Shipped:

SAMPLE TYPE / CONTAINER QUANTITY & PRESERVATION / ANALYSIS REQUESTED (See Back of COC for Definitions)

Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	NWTPH Gx	NWTPH DX	VOC's 8260	TPHg	BTEX TO-14	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
1	GW-100313-NH-TOTAL INF	10/03/13	8:30										X	8	X	X	X				001
2	GW-100313-NH-AS EFF	↓	8:45										X	8	X	X	X				002
3	GW-100313-NH-MID CARBON	↓	9:00										X	8	X	X	X				003
4	GW-100313-NH-TOTAL EFF	↓	9:15										X	8	X	X	X				004
5	A-100313-NH-SVE INF	↓	9:25											1				X	X		010
6	A-100313-NH-AS EFF	↓	9:30											1				X	X		011
7	A-100313-NH-TOTAL INF	↓	9:35											1				X	X		012
8	A-100313-NH-MID CARBON 1	↓	9:40											1				X	X		013
9	A-100313-NH-MID CARBON 2	↓	9:45											1				X	X		014
10	A-100313-NH-TOTAL EFF	↓	9:50											1				X	X		015
11	GW-100313-NH-BP R1 INF	↓	10:00										X	8	X	X	X				005
12	GW-100313-NH-BP R2 INF	↓	10:10										X	8	X	X	X				006
13	GW-100313-NH-BP TOTAL INF	↓	10:20										X	8	X	X	X				007
14	GW-100313-NH-BP TOTAL EFF	↓	10:30										X	8	X	X	X				008
15	A-100313-NH-BP AS EFF	↓	10:45											1				X	X		016

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: STANDARD

Total Number of Containers: 71

All Samples in Cooler must be on COC

Notes/ Special Requirements:

	RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1.	[signature]	CRA	10/03/13	12:00	[signature]	PACE	~~10-3-13~~ 10-3-13	1330
2.					[signature] / PACE	10-4-13		849
3.						Temp # 3.3		

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

T-2356

CRA Form: COC-10

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 19Sep2013 Page 1 of 1
	Document No.: F-MN-L-213-rev.07	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt **Client Name:** CRA **Project #:** WO#:10244525

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

Tracking Number: 5779 5330 4967 4978

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No Seals Intact? ☒ Yes ☐ No **Optional:** Proj. Due Date: Proj. Name:

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

Thermom. Used: ☐ 80512447 ☒ 888A912167504 ☐ 72337080 ☐ 888A9132521491 Type of Ice: ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 2.4,2.0 Cooler Temp Corrected (°C): 2.3,5.9 Biological Tissue Frozen? ☐ Yes ☐ No

Temp should be above freezing to 6°C Correction Factor: -.1 Date and Initials of Person Examining Contents: 10-4-13/AT

				Comments:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11.
Sample Labels Match COC?	☐ Yes	☒ No	☐ N/A	12. Missing Samples 5-10 & 15
-Includes Date/Time/ID/Analysis Matrix: WT				
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	☐ Yes	☐ No	☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12) Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	☐ Yes	☐ No	☒ N/A	Initial when completed: Lot # of added preservative:
	☒ Yes	☐ No		
Headspace in VOA Vials (>6mm)?	☐ Yes	☒ No	☐ N/A	14.
Trip Blank Present?	☒ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☒ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased): 062413-3				

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Date: 10-4-13

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

Pace Analytical	Document Name: Air Sample Condition Upon Receipt	Document Revised: 19Sep2013 Page 1 of 1
	Document No.: F-MN-A-106-rev.08	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt

Client Name: Pace-WA

Project #: WO# : 10244525

10244525

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [ ] Pace [ ] Other:

Tracking Number: 5779 5330 4189

Custody Seal on Cooler/Box Present? [X] Yes [ ] No Seals Intact? [X] Yes [ ] No

Optional: Proj. Due Date: Proj. Name:

Packing Material: [ ] Bubble Wrap [ ] Bubble Bags [X] Foam [ ] None [ ] Other:

Temp. (TO17 and TO13 samples only) (°C): _____ Corrected Temp (°C): AMB

Thermom. Used: [ ] 888A912167504 [ ] 72337080 [ ] 888A9132521491 [ ] 80512447

Temp should be above freezing to 6°C Correction Factor: _____

Date & Initials of Person Examining Contents: 10/6/13 AS

				Comments:
Chain of Custody Present?	[X] Yes	[ ] No	[ ] N/A	1.
Chain of Custody Filled Out?	[X] Yes	[ ] No	[ ] N/A	2.
Chain of Custody Relinquished?	[X] Yes	[ ] No	[ ] N/A	3.
Sampler Name and/or Signature on COC?	[X] Yes	[ ] No	[ ] N/A	4.
Samples Arrived within Hold Time?	[X] Yes	[ ] No	[ ] N/A	5.
Short Hold Time Analysis (<72 hr)?	[ ] Yes	[X] No	[ ] N/A	6.
Rush Turn Around Time Requested?	[ ] Yes	[X] No	[ ] N/A	7.
Sufficient Volume?	[X] Yes	[ ] No	[ ] N/A	8.
Correct Containers Used?	[X] Yes	[ ] No	[ ] N/A	9.
-Pace Containers Used?	[X] Yes	[ ] No	[ ] N/A	
Containers Intact?	[X] Yes	[ ] No	[ ] N/A	10.
Media:				11.
Sample Labels Match COC?	[X] Yes	[ ] No	[ ] N/A	12.

Samples Received: 7 Cans

Canisters		Flow Controllers		Stand Alone G	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
BP ASS EFF	2419				
SVE INF	1369				
AS EFF	919				
TOTAL INF	1173				
MID CARBON 1	1411				
MID CARBON 2	1317				
TOTAL EFF	907				

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? [ ] Yes [ ] No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: JENNY GROSS Date: 10/10/13

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

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

November 15, 2013

Edwin Turner
CRA_Conoco Phillips
20818 44th Ave. W
Lynnwood, WA 98036

RE: Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Dear Edwin Turner:
Enclosed are the analytical results for sample(s) received by the laboratory on November 02, 2013. 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,

Jennifer Gross

jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Yu Chen, CRA_Conoco Phillips
Jeffrey Cloud, Conestoga-Rovers Association
Matt Davis, CRA_Conoco Phillips
Kelsey Whittaker, CRA

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Dept of Environmental Management #40770
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
EPA Region 5 #WD-15J
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

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

SAMPLE SUMMARY

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10248020001	**GW-110113-NH-TOTAL INF**	Water	11/01/13 11:00	11/02/13 08:37
10248020002	**GW-110113-NH-AS EFF**	Water	11/01/13 11:20	11/02/13 08:37
10248020003	**GW-110113-NH-MID CARBON**	Water	11/01/13 11:35	11/02/13 08:37
10248020004	**GW-110113-NH-TOTAL EFF**	Water	11/01/13 11:50	11/02/13 08:37
10248020005	**A-110113-NH-SVE INF**	Air	11/01/13 12:40	11/02/13 08:37
10248020006	**A-110113-NH-AS EFF**	Air	11/01/13 12:45	11/02/13 08:37
10248020007	**A-110113-NH-TOTAL INF**	Air	11/01/13 12:50	11/02/13 08:37
10248020008	**A-110113-NH-MID CARBON 1**	Air	11/01/13 12:55	11/02/13 08:37
10248020009	**A-110113-NH-MID CARBON 2**	Air	11/01/13 13:00	11/02/13 08:37
10248020010	**A-110113-NH-TOTAL EFF**	Air	11/01/13 13:05	11/02/13 08:37
10248020011	**GW-110113-NH-BP R1 INF**	Water	11/01/13 13:30	11/02/13 08:37
10248020012	**GW-110113-NH-BP R2 INF**	Water	11/01/13 13:45	11/02/13 08:37
10248020013	**GW-110113-NH-BP TOTAL INF**	Water	11/01/13 14:00	11/02/13 08:37
10248020014	**GW-110113-NH-BP TOTAL EFF**	Water	11/01/13 14:25	11/02/13 08:37
10248020015	**A-110113-NH-BP AS EFF**	Air	11/01/13 14:35	11/02/13 08:37
10248020016	**TRIP (HCL) BLANK**	Water	11/01/13 00:00	11/02/13 08:37

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10248020001	**GW-110113-NH-TOTAL INF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10248020002	**GW-110113-NH-AS EFF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	EB2	7	PASI-M
10248020003	**GW-110113-NH-MID CARBON**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10248020004	**GW-110113-NH-TOTAL EFF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10248020005	**A-110113-NH-SVE INF**	TO-14M Ambient Air	AH2, DR1	6	PASI-M
10248020006	**A-110113-NH-AS EFF**	TO-14M Ambient Air	AH2	6	PASI-M
10248020007	**A-110113-NH-TOTAL INF**	TO-14M Ambient Air	AH2	6	PASI-M
10248020008	**A-110113-NH-MID CARBON 1**	TO-14M Ambient Air	AH2	6	PASI-M
10248020009	**A-110113-NH-MID CARBON 2**	TO-14M Ambient Air	AH2	6	PASI-M
10248020010	**A-110113-NH-TOTAL EFF**	TO-14M Ambient Air	AH2	6	PASI-M
10248020011	**GW-110113-NH-BP R1 INF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10248020012	**GW-110113-NH-BP R2 INF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10248020013	**GW-110113-NH-BP TOTAL INF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10248020014	**GW-110113-NH-BP TOTAL EFF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10248020015	**A-110113-NH-BP AS EFF**	TO-14M Ambient Air	AH2	6	PASI-M
10248020016	**TRIP (HCL) BLANK**	NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M

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

ANALYTICAL RESULTS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Sample: GW-110113-NH-TOTAL INF **Lab ID: 10248020001** Collected: 11/01/13 11:00 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**1.1**	mg/L	0.41	1	11/05/13 11:18	11/07/13 14:01	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.41	1	11/05/13 11:18	11/07/13 14:01	64742-65-0	
Surrogates								
o-Terphenyl (S)	91	%	30-125	1	11/05/13 11:18	11/07/13 14:01	84-15-1	
n-Triacontane (S)	103	%	30-125	1	11/05/13 11:18	11/07/13 14:01	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**3640**	ug/L	500	5		11/11/13 20:38		
Surrogates								
a,a,a-Trifluorotoluene (S)	87	%	75-125	5		11/11/13 20:38	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**678**	ug/L	5.0	5		11/06/13 22:30	71-43-2	
Ethylbenzene	**20.3**	ug/L	1.0	1		11/04/13 18:06	100-41-4	
Toluene	**245**	ug/L	5.0	5		11/06/13 22:30	108-88-3	
Xylene (Total)	**698**	ug/L	15.0	5		11/06/13 22:30	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	75-125	1		11/04/13 18:06	17060-07-0	
Toluene-d8 (S)	91	%	75-125	1		11/04/13 18:06	2037-26-5	
4-Bromofluorobenzene (S)	97	%	75-125	1		11/04/13 18:06	460-00-4	

Sample: GW-110113-NH-AS EFF **Lab ID: 10248020002** Collected: 11/01/13 11:20 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.62**	mg/L	0.42	1	11/05/13 11:18	11/07/13 14:24	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.42	1	11/05/13 11:18	11/07/13 14:24	64742-65-0	
Surrogates								
o-Terphenyl (S)	93	%	30-125	1	11/05/13 11:18	11/07/13 14:24	84-15-1	
n-Triacontane (S)	106	%	30-125	1	11/05/13 11:18	11/07/13 14:24	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		11/11/13 14:37		
Surrogates								
a,a,a-Trifluorotoluene (S)	84	%	75-125	1		11/11/13 14:37	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/08/13 12:59	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		11/08/13 12:59	100-41-4	
Toluene	ND	ug/L	1.0	1		11/08/13 12:59	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		11/08/13 12:59	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%	75-125	1		11/08/13 12:59	17060-07-0	
Toluene-d8 (S)	101	%	75-125	1		11/08/13 12:59	2037-26-5	
4-Bromofluorobenzene (S)	105	%	75-125	1		11/08/13 12:59	460-00-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Sample: GW-110113-NH-MID CARBON **Lab ID: 10248020003** Collected: 11/01/13 11:35 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	11/05/13 11:18	11/07/13 14:46	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	11/05/13 11:18	11/07/13 14:46	64742-65-0	
Surrogates								
o-Terphenyl (S)	93	%	30-125	1	11/05/13 11:18	11/07/13 14:46	84-15-1	
n-Triacontane (S)	108	%	30-125	1	11/05/13 11:18	11/07/13 14:46	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		11/11/13 14:17		
Surrogates								
a,a,a-Trifluorotoluene (S)	87	%	75-125	1		11/11/13 14:17	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/04/13 18:49	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		11/04/13 18:49	100-41-4	
Toluene	ND	ug/L	1.0	1		11/04/13 18:49	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		11/04/13 18:49	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	75-125	1		11/04/13 18:49	17060-07-0	
Toluene-d8 (S)	92	%	75-125	1		11/04/13 18:49	2037-26-5	
4-Bromofluorobenzene (S)	97	%	75-125	1		11/04/13 18:49	460-00-4	

Sample: GW-110113-NH-TOTAL EFF **Lab ID: 10248020004** Collected: 11/01/13 11:50 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.42	1	11/05/13 11:18	11/07/13 15:09	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.42	1	11/05/13 11:18	11/07/13 15:09	64742-65-0	
Surrogates								
o-Terphenyl (S)	93	%	30-125	1	11/05/13 11:18	11/07/13 15:09	84-15-1	
n-Triacontane (S)	110	%	30-125	1	11/05/13 11:18	11/07/13 15:09	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		11/11/13 15:17		
Surrogates								
a,a,a-Trifluorotoluene (S)	86	%	75-125	1		11/11/13 15:17	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/04/13 19:11	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		11/04/13 19:11	100-41-4	
Toluene	ND	ug/L	1.0	1		11/04/13 19:11	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		11/04/13 19:11	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	75-125	1		11/04/13 19:11	17060-07-0	
Toluene-d8 (S)	93	%	75-125	1		11/04/13 19:11	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Sample: GW-110113-NH-TOTAL EFF **Lab ID: 10248020004** Collected: 11/01/13 11:50 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Surrogates								
4-Bromofluorobenzene (S)	98	%	75-125	1		11/04/13 19:11	460-00-4	

Sample: A-110113-NH-SVE INF **Lab ID: 10248020005** Collected: 11/01/13 12:40 Received: 11/02/13 08:37 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**2.6**	ppmv	0.27	537.6		11/10/13 19:48	71-43-2	
Ethylbenzene	**0.13**	ppmv	0.017	33.6		11/10/13 03:48	100-41-4	
THC as Gas	**356**	ppmv	18.8	537.6		11/10/13 19:48		
Toluene	**4.1**	ppmv	0.27	537.6		11/10/13 19:48	108-88-3	
m&p-Xylene	**1.0**	ppmv	0.034	33.6		11/10/13 03:48	179601-23-1	
o-Xylene	**0.58**	ppmv	0.017	33.6		11/10/13 03:48	95-47-6	

Sample: A-110113-NH-AS EFF **Lab ID: 10248020006** Collected: 11/01/13 12:45 Received: 11/02/13 08:37 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.018	36		11/10/13 01:04	71-43-2	A4
Ethylbenzene	ND	ppmv	0.018	36		11/10/13 01:04	100-41-4	
THC as Gas	ND	ppmv	1.3	36		11/10/13 01:04		
Toluene	**0.18**	ppmv	0.018	36		11/10/13 01:04	108-88-3	
m&p-Xylene	ND	ppmv	0.036	36		11/10/13 01:04	179601-23-1	
o-Xylene	ND	ppmv	0.018	36		11/10/13 01:04	95-47-6	

Sample: A-110113-NH-TOTAL INF **Lab ID: 10248020007** Collected: 11/01/13 12:50 Received: 11/02/13 08:37 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.092**	ppmv	0.019	37.4		11/10/13 02:53	71-43-2	A4
Ethylbenzene	ND	ppmv	0.019	37.4		11/10/13 02:53	100-41-4	
THC as Gas	**7.6**	ppmv	1.3	37.4		11/10/13 02:53		
Toluene	**0.13**	ppmv	0.019	37.4		11/10/13 02:53	108-88-3	
m&p-Xylene	**0.044**	ppmv	0.037	37.4		11/10/13 02:53	179601-23-1	
o-Xylene	ND	ppmv	0.019	37.4		11/10/13 02:53	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Sample: A-110113-NH-MID CARBON 1 **Lab ID: 10248020008** Collected: 11/01/13 12:55 Received: 11/02/13 08:37 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.019	37.4		11/10/13 01:31	71-43-2	A4
Ethylbenzene	ND	ppmv	0.019	37.4		11/10/13 01:31	100-41-4	
THC as Gas	**2.5**	ppmv	1.3	37.4		11/10/13 01:31		
Toluene	ND	ppmv	0.019	37.4		11/10/13 01:31	108-88-3	
m&p-Xylene	ND	ppmv	0.037	37.4		11/10/13 01:31	179601-23-1	
o-Xylene	ND	ppmv	0.019	37.4		11/10/13 01:31	95-47-6	

Sample: A-110113-NH-MID CARBON 2 **Lab ID: 10248020009** Collected: 11/01/13 13:00 Received: 11/02/13 08:37 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.019	38.8		11/10/13 02:26	71-43-2	A4
Ethylbenzene	ND	ppmv	0.019	38.8		11/10/13 02:26	100-41-4	
THC as Gas	**2.1**	ppmv	1.4	38.8		11/10/13 02:26		
Toluene	ND	ppmv	0.019	38.8		11/10/13 02:26	108-88-3	
m&p-Xylene	ND	ppmv	0.039	38.8		11/10/13 02:26	179601-23-1	
o-Xylene	ND	ppmv	0.019	38.8		11/10/13 02:26	95-47-6	

Sample: A-110113-NH-TOTAL EFF **Lab ID: 10248020010** Collected: 11/01/13 13:05 Received: 11/02/13 08:37 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.019	38.8		11/10/13 01:59	71-43-2	A4
Ethylbenzene	ND	ppmv	0.019	38.8		11/10/13 01:59	100-41-4	
THC as Gas	ND	ppmv	1.4	38.8		11/10/13 01:59		
Toluene	ND	ppmv	0.019	38.8		11/10/13 01:59	108-88-3	
m&p-Xylene	ND	ppmv	0.039	38.8		11/10/13 01:59	179601-23-1	
o-Xylene	ND	ppmv	0.019	38.8		11/10/13 01:59	95-47-6	

Sample: GW-110113-NH-BP R1 INF **Lab ID: 10248020011** Collected: 11/01/13 13:30 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**1.1**	mg/L	0.42	1	11/05/13 11:18	11/07/13 15:31	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.42	1	11/05/13 11:18	11/07/13 15:31	64742-65-0	
Surrogates								
o-Terphenyl (S)	97	%	30-125	1	11/05/13 11:18	11/07/13 15:31	84-15-1	
n-Triacontane (S)	114	%	30-125	1	11/05/13 11:18	11/07/13 15:31	638-68-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Sample: GW-110113-NH-BP R1 INF **Lab ID: 10248020011** Collected: 11/01/13 13:30 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**3230**	ug/L	200	2		11/11/13 18:58		
Surrogates								
a,a,a-Trifluorotoluene (S)	104	%	75-125	2		11/11/13 18:58	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**2190**	ug/L	10.0	10		11/04/13 22:03	71-43-2	
Ethylbenzene	**422**	ug/L	10.0	10		11/04/13 22:03	100-41-4	
Toluene	**16.4**	ug/L	10.0	10		11/04/13 22:03	108-88-3	
Xylene (Total)	ND	ug/L	30.0	10		11/04/13 22:03	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	75-125	10		11/04/13 22:03	17060-07-0	
Toluene-d8 (S)	92	%	75-125	10		11/04/13 22:03	2037-26-5	
4-Bromofluorobenzene (S)	98	%	75-125	10		11/04/13 22:03	460-00-4	

Sample: GW-110113-NH-BP R2 INF **Lab ID: 10248020012** Collected: 11/01/13 13:45 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.84**	mg/L	0.40	1	11/05/13 11:18	11/07/13 16:38	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	11/05/13 11:18	11/07/13 16:38	64742-65-0	
Surrogates								
o-Terphenyl (S)	89	%	30-125	1	11/05/13 11:18	11/07/13 16:38	84-15-1	
n-Triacontane (S)	106	%	30-125	1	11/05/13 11:18	11/07/13 16:38	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**3570**	ug/L	200	2		11/11/13 19:18		
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%	75-125	2		11/11/13 19:18	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**675**	ug/L	5.0	5		11/06/13 22:46	71-43-2	
Ethylbenzene	**382**	ug/L	5.0	5		11/06/13 22:46	100-41-4	
Toluene	**3.6**	ug/L	1.0	1		11/04/13 19:32	108-88-3	
Xylene (Total)	**3.5**	ug/L	3.0	1		11/04/13 19:32	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	105	%	75-125	1		11/04/13 19:32	17060-07-0	
Toluene-d8 (S)	92	%	75-125	1		11/04/13 19:32	2037-26-5	
4-Bromofluorobenzene (S)	96	%	75-125	1		11/04/13 19:32	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Sample: GW-110113-NH-BP TOTAL INF **Lab ID: 10248020013** Collected: 11/01/13 14:00 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.82**	mg/L	0.41	1	11/05/13 11:18	11/07/13 17:01	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.41	1	11/05/13 11:18	11/07/13 17:01	64742-65-0	
Surrogates								
o-Terphenyl (S)	70	%	30-125	1	11/05/13 11:18	11/07/13 17:01	84-15-1	
n-Triacontane (S)	86	%	30-125	1	11/05/13 11:18	11/07/13 17:01	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**2940**	ug/L	200	2		11/11/13 20:18		
Surrogates								
a,a,a-Trifluorotoluene (S)	108	%	75-125	2		11/11/13 20:18	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**1500**	ug/L	10.0	10		11/06/13 23:01	71-43-2	
Ethylbenzene	**330**	ug/L	5.0	5		11/04/13 21:42	100-41-4	
Toluene	**12.7**	ug/L	5.0	5		11/04/13 21:42	108-88-3	
Xylene (Total)	**19.1**	ug/L	15.0	5		11/04/13 21:42	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	75-125	5		11/04/13 21:42	17060-07-0	
Toluene-d8 (S)	91	%	75-125	5		11/04/13 21:42	2037-26-5	
4-Bromofluorobenzene (S)	97	%	75-125	5		11/04/13 21:42	460-00-4	

Sample: GW-110113-NH-BP TOTAL EFF **Lab ID: 10248020014** Collected: 11/01/13 14:25 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.43	1	11/05/13 11:18	11/07/13 17:23	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.43	1	11/05/13 11:18	11/07/13 17:23	64742-65-0	
Surrogates								
o-Terphenyl (S)	71	%	30-125	1	11/05/13 11:18	11/07/13 17:23	84-15-1	
n-Triacontane (S)	82	%	30-125	1	11/05/13 11:18	11/07/13 17:23	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		11/11/13 18:38		
Surrogates								
a,a,a-Trifluorotoluene (S)	89	%	75-125	1		11/11/13 18:38	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/05/13 15:40	71-43-2	L1
Ethylbenzene	ND	ug/L	1.0	1		11/05/13 15:40	100-41-4	
Toluene	ND	ug/L	1.0	1		11/05/13 15:40	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		11/05/13 15:40	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	75-125	1		11/05/13 15:40	17060-07-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Sample: GW-110113-NH-BP TOTAL EFF **Lab ID: 10248020014** Collected: 11/01/13 14:25 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Surrogates								
Toluene-d8 (S)	83	%	75-125	1		11/05/13 15:40	2037-26-5	
4-Bromofluorobenzene (S)	96	%	75-125	1		11/05/13 15:40	460-00-4	

Sample: A-110113-NH-BP AS EFF **Lab ID: 10248020015** Collected: 11/01/13 14:35 Received: 11/02/13 08:37 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.97**	ppmv	0.017	33.6		11/10/13 03:20	71-43-2	A4
Ethylbenzene	**0.16**	ppmv	0.017	33.6		11/10/13 03:20	100-41-4	
THC as Gas	**3.0**	ppmv	1.2	33.6		11/10/13 03:20		
Toluene	**0.45**	ppmv	0.017	33.6		11/10/13 03:20	108-88-3	
m&p-Xylene	ND	ppmv	0.034	33.6		11/10/13 03:20	179601-23-1	
o-Xylene	ND	ppmv	0.017	33.6		11/10/13 03:20	95-47-6	

Sample: TRIP (HCL) BLANK **Lab ID: 10248020016** Collected: 11/01/13 00:00 Received: 11/02/13 08:37 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		11/11/13 13:57		
Surrogates								
a,a,a-Trifluorotoluene (S)	84	%	75-125	1		11/11/13 13:57	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		11/04/13 16:40	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		11/04/13 16:40	100-41-4	
Toluene	ND	ug/L	1.0	1		11/04/13 16:40	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		11/04/13 16:40	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	75-125	1		11/04/13 16:40	17060-07-0	
Toluene-d8 (S)	91	%	75-125	1		11/04/13 16:40	2037-26-5	
4-Bromofluorobenzene (S)	99	%	75-125	1		11/04/13 16:40	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

QC Batch: AIR/18678 Analysis Method: TO-14M Ambient Air
QC Batch Method: TO-14M Ambient Air Analysis Description: TO14 MSV AIR - AMBIENT
Associated Lab Samples: 10248020005, 10248020006, 10248020007, 10248020008, 10248020009, 10248020010, 10248020015

METHOD BLANK: 1573940 Matrix: Air
Associated Lab Samples: 10248020005, 10248020006, 10248020007, 10248020008, 10248020009, 10248020010, 10248020015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ppmv	ND	0.00050	11/09/13 18:57	
Ethylbenzene	ppmv	ND	0.00050	11/09/13 18:57	
m&p-Xylene	ppmv	ND	0.0010	11/09/13 18:57	
o-Xylene	ppmv	ND	0.00050	11/09/13 18:57	
THC as Gas	ppmv	ND	0.035	11/09/13 18:57	
Toluene	ppmv	ND	0.00050	11/09/13 18:57	

LABORATORY CONTROL SAMPLE: 1573941

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ppmv	.01	0.0099	99	72-136	
Ethylbenzene	ppmv	.01	0.0096	96	74-136	
m&p-Xylene	ppmv	.01	0.0095	95	72-135	
o-Xylene	ppmv	.01	0.0098	98	74-135	
THC as Gas	ppmv	.72	0.79	110	63-141	
Toluene	ppmv	.01	0.0094	94	71-134	

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QUALITY CONTROL DATA

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

QC Batch: GCV/11444 Analysis Method: NWTPH-Gx/8021
QC Batch Method: NWTPH-Gx/8021 Analysis Description: NWTPH-Gx/8021B Water
Associated Lab Samples: 10248020001, 10248020002, 10248020003, 10248020004, 10248020011, 10248020012, 10248020013, 10248020014, 10248020016

METHOD BLANK: 1574105 Matrix: Water
Associated Lab Samples: 10248020001, 10248020002, 10248020003, 10248020004, 10248020011, 10248020012, 10248020013, 10248020014, 10248020016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	11/11/13 13:17	
a,a,a-Trifluorotoluene (S)	%	83	75-125	11/11/13 13:17	

METHOD BLANK: 1574146 Matrix: Water
Associated Lab Samples: 10248020001, 10248020002, 10248020003, 10248020004, 10248020011, 10248020012, 10248020013, 10248020014, 10248020016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	11/11/13 16:18	
a,a,a-Trifluorotoluene (S)	%	86	75-125	11/11/13 16:18	

LABORATORY CONTROL SAMPLE & LCSD: 1574106 1574107

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	940	923	94	92	75-126	2	20	
a,a,a-Trifluorotoluene (S)	%				92	96	75-125			

MATRIX SPIKE SAMPLE: 1574850

Parameter	Units	10248020003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH as Gas	ug/L	ND	1000	1050	104	75-137	
a,a,a-Trifluorotoluene (S)	%				97	75-125	

SAMPLE DUPLICATE: 1574849

Parameter	Units	10248020002 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	ND	ND		30	
a,a,a-Trifluorotoluene (S)	%	84	82	2		

SAMPLE DUPLICATE: 1574851

Parameter	Units	10248020004 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	ND	ND		30	
a,a,a-Trifluorotoluene (S)	%	86	86	.2		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

QC Batch: MSV/25502 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10248020001, 10248020003, 10248020004, 10248020011, 10248020012, 10248020013, 10248020016

METHOD BLANK: 1568523 Matrix: Water
Associated Lab Samples: 10248020001, 10248020003, 10248020004, 10248020011, 10248020012, 10248020013, 10248020016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	11/04/13 12:21	
Ethylbenzene	ug/L	ND	1.0	11/04/13 12:21	
Toluene	ug/L	ND	1.0	11/04/13 12:21	
Xylene (Total)	ug/L	ND	3.0	11/04/13 12:21	
1,2-Dichloroethane-d4 (S)	%	96	75-125	11/04/13 12:21	
4-Bromofluorobenzene (S)	%	97	75-125	11/04/13 12:21	
Toluene-d8 (S)	%	93	75-125	11/04/13 12:21	

LABORATORY CONTROL SAMPLE: 1568524

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	22.4	112	75-125	
Ethylbenzene	ug/L	20	19.5	97	75-125	
Toluene	ug/L	20	18.9	95	75-125	
Xylene (Total)	ug/L	60	56.8	95	75-125	
1,2-Dichloroethane-d4 (S)	%			97	75-125	
4-Bromofluorobenzene (S)	%			98	75-125	
Toluene-d8 (S)	%			94	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1568525 1568526

Parameter	Units	10248033002 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	100	100	127	118	127	117	70-135	8	30	
Ethylbenzene	ug/L	ND	100	100	106	96.6	106	97	75-125	10	30	
Toluene	ug/L	ND	100	100	103	92.5	103	92	75-125	11	30	
Xylene (Total)	ug/L	ND	300	300	314	285	105	95	75-125	9	30	
1,2-Dichloroethane-d4 (S)	%						103	105	75-125			
4-Bromofluorobenzene (S)	%						97	98	75-125			
Toluene-d8 (S)	%						94	93	75-125			

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

QC Batch: MSV/25517 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10248020014

METHOD BLANK: 1569917 Matrix: Water
Associated Lab Samples: 10248020014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	11/05/13 12:47	
Ethylbenzene	ug/L	ND	1.0	11/05/13 12:47	
Toluene	ug/L	ND	1.0	11/05/13 12:47	
Xylene (Total)	ug/L	ND	3.0	11/05/13 12:47	
1,2-Dichloroethane-d4 (S)	%	96	75-125	11/05/13 12:47	
4-Bromofluorobenzene (S)	%	97	75-125	11/05/13 12:47	
Toluene-d8 (S)	%	84	75-125	11/05/13 12:47	

LABORATORY CONTROL SAMPLE: 1569918

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	25.1	126	75-125	L0
Ethylbenzene	ug/L	20	18.8	94	75-125	
Toluene	ug/L	20	18.2	91	75-125	
Xylene (Total)	ug/L	60	55.8	93	75-125	
1,2-Dichloroethane-d4 (S)	%			100	75-125	
4-Bromofluorobenzene (S)	%			97	75-125	
Toluene-d8 (S)	%			87	75-125	

MATRIX SPIKE SAMPLE: 1569919

Parameter	Units	10248082003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	20	28.2	141	70-135	M0
Ethylbenzene	ug/L	ND	20	19.2	96	75-125	
Toluene	ug/L	ND	20	18.7	93	75-125	
Xylene (Total)	ug/L	ND	60	56.6	94	75-125	
1,2-Dichloroethane-d4 (S)	%				103	75-125	
4-Bromofluorobenzene (S)	%				96	75-125	
Toluene-d8 (S)	%				85	75-125	

SAMPLE DUPLICATE: 1570970

Parameter	Units	10248082004 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	98	96	1		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

SAMPLE DUPLICATE: 1570970

Parameter	Units	10248082004 Result	Dup Result	RPD	Max RPD	Qualifiers
4-Bromofluorobenzene (S)	%	96	97	.6		
Toluene-d8 (S)	%	84	84	.3		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

QC Batch: MSV/25548
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10248020002

METHOD BLANK: 1572592 Matrix: Water
Associated Lab Samples: 10248020002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	11/08/13 10:25	
Ethylbenzene	ug/L	ND	1.0	11/08/13 10:25	
Toluene	ug/L	ND	1.0	11/08/13 10:25	
Xylene (Total)	ug/L	ND	3.0	11/08/13 10:25	
1,2-Dichloroethane-d4 (S)	%	100	75-125	11/08/13 10:25	
4-Bromofluorobenzene (S)	%	104	75-125	11/08/13 10:25	
Toluene-d8 (S)	%	102	75-125	11/08/13 10:25	

LABORATORY CONTROL SAMPLE: 1572593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	21.1	106	75-125	
Ethylbenzene	ug/L	20	19.2	96	75-125	
Toluene	ug/L	20	20.2	101	75-125	
Xylene (Total)	ug/L	60	59.2	99	75-125	
1,2-Dichloroethane-d4 (S)	%			102	75-125	
4-Bromofluorobenzene (S)	%			103	75-125	
Toluene-d8 (S)	%			103	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1573191 1573192

Parameter	Units	10248629002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	16.4	100	100	155	118	138	102	70-135	26	30	M1
Ethylbenzene	ug/L	ND	100	100	121	88.6	119	87	75-125	31	30	R1
Toluene	ug/L	5.3	100	100	132	95.8	127	91	75-125	32	30	M1,R1
Xylene (Total)	ug/L	ND	300	300	371	275	124	92	75-125	30	30	
1,2-Dichloroethane-d4 (S)	%						109	107	75-125			
4-Bromofluorobenzene (S)	%						106	106	75-125			
Toluene-d8 (S)	%						104	103	75-125			

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

QC Batch: OEXT/23564 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3510 Analysis Description: NWTPH-Dx GCS LV SG
Associated Lab Samples: 10248020001, 10248020002, 10248020003, 10248020004, 10248020011, 10248020012, 10248020013, 10248020014

METHOD BLANK: 1570004 Matrix: Water
Associated Lab Samples: 10248020001, 10248020002, 10248020003, 10248020004, 10248020011, 10248020012, 10248020013, 10248020014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range SG	mg/L	ND	0.40	11/07/13 12:10	
Motor Oil Range SG	mg/L	ND	0.40	11/07/13 12:10	
n-Triacontane (S)	%	107	30-125	11/07/13 12:10	
o-Terphenyl (S)	%	97	30-125	11/07/13 12:10	

LABORATORY CONTROL SAMPLE & LCSD: 1570005 1570006

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	2	1.8	1.9	88	93	50-150	6	20	
Motor Oil Range SG	mg/L	2	1.9	2.0	97	101	50-150	5	20	
n-Triacontane (S)	%				99	101	30-125			
o-Terphenyl (S)	%				105	98	30-125			

SAMPLE DUPLICATE: 1570007

Parameter	Units	10247733001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	ND	.077J		30	
Motor Oil Range SG	mg/L	ND	.057J		30	
n-Triacontane (S)	%	110	110	.4		
o-Terphenyl (S)	%	95	94	.8		

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

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.

PRL - Pace Reporting 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.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

A4	Sample was transferred from a sampling bag into a Summa Canister within 48 hours of collection.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 070496-2RM P66-RENTON TERMIN
Pace Project No.: 10248020

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10248020005	**A-110113-NH-SVE INF**	TO-14M Ambient Air	AIR/18678		
10248020006	**A-110113-NH-AS EFF**	TO-14M Ambient Air	AIR/18678		
10248020007	**A-110113-NH-TOTAL INF**	TO-14M Ambient Air	AIR/18678		
10248020008	**A-110113-NH-MID CARBON 1**	TO-14M Ambient Air	AIR/18678		
10248020009	**A-110113-NH-MID CARBON 2**	TO-14M Ambient Air	AIR/18678		
10248020010	**A-110113-NH-TOTAL EFF**	TO-14M Ambient Air	AIR/18678		
10248020015	**A-110113-NH-BP AS EFF**	TO-14M Ambient Air	AIR/18678		
10248020001	**GW-110113-NH-TOTAL INF**	EPA 3510	OEXT/23564	NWTPH-Dx	GCSV/12373
10248020002	**GW-110113-NH-AS EFF**	EPA 3510	OEXT/23564	NWTPH-Dx	GCSV/12373
10248020003	**GW-110113-NH-MID CARBON**	EPA 3510	OEXT/23564	NWTPH-Dx	GCSV/12373
10248020004	**GW-110113-NH-TOTAL EFF**	EPA 3510	OEXT/23564	NWTPH-Dx	GCSV/12373
10248020011	**GW-110113-NH-BP R1 INF**	EPA 3510	OEXT/23564	NWTPH-Dx	GCSV/12373
10248020012	**GW-110113-NH-BP R2 INF**	EPA 3510	OEXT/23564	NWTPH-Dx	GCSV/12373
10248020013	**GW-110113-NH-BP TOTAL INF**	EPA 3510	OEXT/23564	NWTPH-Dx	GCSV/12373
10248020014	**GW-110113-NH-BP TOTAL EFF**	EPA 3510	OEXT/23564	NWTPH-Dx	GCSV/12373
10248020001	**GW-110113-NH-TOTAL INF**	NWTPH-Gx/8021	GCV/11444		
10248020002	**GW-110113-NH-AS EFF**	NWTPH-Gx/8021	GCV/11444		
10248020003	**GW-110113-NH-MID CARBON**	NWTPH-Gx/8021	GCV/11444		
10248020004	**GW-110113-NH-TOTAL EFF**	NWTPH-Gx/8021	GCV/11444		
10248020011	**GW-110113-NH-BP R1 INF**	NWTPH-Gx/8021	GCV/11444		
10248020012	**GW-110113-NH-BP R2 INF**	NWTPH-Gx/8021	GCV/11444		
10248020013	**GW-110113-NH-BP TOTAL INF**	NWTPH-Gx/8021	GCV/11444		
10248020014	**GW-110113-NH-BP TOTAL EFF**	NWTPH-Gx/8021	GCV/11444		
10248020016	**TRIP (HCL) BLANK**	NWTPH-Gx/8021	GCV/11444		
10248020001	**GW-110113-NH-TOTAL INF**	EPA 8260	MSV/25502		
10248020002	**GW-110113-NH-AS EFF**	EPA 8260	MSV/25548		
10248020003	**GW-110113-NH-MID CARBON**	EPA 8260	MSV/25502		
10248020004	**GW-110113-NH-TOTAL EFF**	EPA 8260	MSV/25502		
10248020011	**GW-110113-NH-BP R1 INF**	EPA 8260	MSV/25502		
10248020012	**GW-110113-NH-BP R2 INF**	EPA 8260	MSV/25502		
10248020013	**GW-110113-NH-BP TOTAL INF**	EPA 8260	MSV/25502		
10248020014	**GW-110113-NH-BP TOTAL EFF**	EPA 8260	MSV/25517		
10248020016	**TRIP (HCL) BLANK**	EPA 8260	MSV/25502		

CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

COC NO.: 38443

Address: 732 BROADWAY, TACOMA, WA. 98402

Phone: 253.573.1218 Fax: 253.573.1663

10248020

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 070496-2RMOD	Laboratory Name: PACE	Lab Location: SEATTLE	SSOW ID:
Project Name: P66- RENTON TERMINAL	Lab Contact: J. GROSS	Lab Quote No:	Cooler No:
Project Location: RENTON, WA.			Carrier:
Chemistry Contact: M. DAVIS / J. CLOUD			Airbill No:
Sampler(s): N. WINSPERGER			Date Shipped:

Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	NWTPH GX	NWTPH DX	BTEX 8260	TPH/g/BTEX TO-?	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
1	GW-110113-NH-TOTAL INF	11/01/13	11:00	WG	G		X							8	X	X	X			6 TRIP BLANK
2	GW-110113-NH-AS EFF	11/01/13	11:20	WG	G		X							8	X	X	X			VIALS
3	GW-110113-NH-MID CARBON	11/01/13	11:35	WG	G		X							8	X	X	X			INCLUDED
4	GW-110113-NH-TOTAL EFF	11/01/13	11:50	WG	G		X							8	X	X	X			
5	A-110113-NH-SVE INF	11/01/13	12:40	A	G									1				X		
6	A-110113-NH-AS EFF	11/01/13	12:45	A	G									1				X		
7	A-110113-NH-TOTAL INF	11/01/13	12:50	A	G									1				X		
8	A-110113-NH-MID CARBON 1	11/01/13	12:55	A	G									1				X		
9	A-110113-NH-MID CARBON 2	11/01/13	13:00	A	G									1				X		
10	A-110113-NH-TOTAL EFF	11/01/13	13:05	A	G									1				X		
11	GW-110113-NH-BP R1 INF	11/01/13	13:30	WG	G		X							8	X	X	X			
12	GW-110113-NH-BP R2 INF	11/01/13	13:45	WG	G		X							8	X	X	X			
13	GW-110113-NH-BP TOTAL INF	11/01/13	14:00	WG	G		X							8	X	X	X			
14	GW-110113-NH-BP TOTAL EFF	11/01/13	14:25	WG	G		X							8	X	X	X			
15	A-110113-NH-BP AS EFF	11/01/13	14:35	A	G									1				X		

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: STANDARD

Total Number of Containers: 77

All Samples in Cooler must be on COC

Notes/ Special Requirements: Received with ice at 1.8°C, 7.6°C Amb.

	RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1.	[signature]	CRA	11/01/13	14:45	Jyothi Swamy / PACE	~~PACE 11/01/13~~	11/01/13	14:14
2.	Jyothi Swamy	PACE	11/01/13	16:00	[signature] PACE	PACE	11/2/13	0837
3.								

T= 0.4, 3.5

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

Pace Analytical	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 19Sep2013 Page 1 of 1
	Document No.: **F-MN-L-213-rev.07**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: CRA COP

Project #: WO#: 10248020

10248020

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

Tracking Number: 5779 5330 6964 , 6995

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

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

Thermom. Used: ☐ 80512447 ☐ 72337080 ☒ B88A912167504 ☒ B88A9132521491 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 0.1, 3.1 **Cooler Temp Corrected (°C):** 0.4, 3.5 **Biological Tissue Frozen?** ☐ Yes ☐ No

Temp should be above freezing to 6°C **Correction Factor:** +0.3, +0.4 **Date and Initials of Person Examining Contents:** IH 11-02-13

				Comments:
Chain of Custody Present?	☐ Yes	☒ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT / AP	☒ Yes	☐ No	☐ N/A	12.
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	☐ Yes	☐ No	☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☐ Yes	☐ No	☒ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	☒ Yes	☐ No		Initial when completed: IH Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☒ No	☐ N/A	14.
Trip Blank Present?	☒ Yes	☐ No	☐ N/A	15. 6 T.B.
Trip Blank Custody Seals Present?	☒ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased): 072213-3				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ **Date:** 11/4/13

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

Pace Analytical®	Document Name: **Air Sample Condition Upon Receipt**	Document Revised: 19Sep2013 Page 1 of 1
	Document No.: **F-MN-A-106-rev.08**	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt

Client Name: CRA

Project #: WO# : 10248020

10248020

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

Tracking Number: 5779 5330 6786

Custody Seal on Cooler/Box Present? ☐Yes ☒No **Seals Intact?** ☐Yes ☒No

Optional: Proj. Due Date: Proj. Name:

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

Temp. (TO17 and TO13 samples only) (°C): — **Corrected Temp (°C):** AMB **Thermom. Used:** ☐B88A912167504 ☐B88A9132521491 ☐72337080 ☐80512447

Temp should be above freezing to 6°C **Correction Factor:** — **Date & Initials of Person Examining Contents:** 11/2/13

Comments:

Chain of Custody Present?	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out?	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished?	☒Yes	☐No	☐N/A	3.
Sampler Name and/or Signature on COC?	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time?	☒Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72 hr)?	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested?	☐Yes	☒No	☐N/A	7.
Sufficient Volume?	☒Yes	☐No	☐N/A	8.
Correct Containers Used?	☒Yes	☐No	☐N/A	9.
-Pace Containers Used?	☒Yes	☐No	☐N/A	
Containers Intact?	☒Yes	☐No	☐N/A	10.
Media: AIR				11.
Sample Labels Match COC?	☐Yes	☐No	☐N/A	12.

Samples Received:

Canisters		Flow Controllers		Stand Alone G	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
005	PACE 2225				
006	PACE 1364				
007	PACE 1381				
008	PACE 1359				
009	PACE 1419				
010	PACE 1454				
015	PACE 1343				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ **Date:** 11/4/13

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

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

January 07, 2014

Edwin Turner
CRA_Conoco Phillips
20818 44th Ave. W
Lynnwood, WA 98036

RE: Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Dear Edwin Turner:
Enclosed are the analytical results for sample(s) received by the laboratory on December 20, 2013. 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,

Lori Castille for
Jennifer Gross
jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Yu Chen, CRA_Conoco Phillips
Jeffrey Cloud, Conestoga-Rovers Association
Matt Davis, CRA_Conoco Phillips
Matthew Smith, Conestoga-Rover's Association
Kelsey Whittaker, CRA

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CERTIFICATIONS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Dept of Environmental Management #40770
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
EPA Region 5 #WD-15J
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nebraska Certification #: Pace
Nevada Certification #: MN_00064
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

Montana Certification IDs

602 South 25th Street, Billings, MT 59101
EPA Region 8 Certification #: 8TMS-Q
Idaho Certification #: MT00012
Montana Certification #: MT CERT0040
NVLAP Certification #: 101292-0
Minnesota Dept of Health Certification #: 030-999-442
Washington Department of Ecology #: C993

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SAMPLE SUMMARY

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10253342001	**GW-122013-MD-Total Inf**	Water	12/20/13 09:30	12/20/13 13:19
10253342002	**GW-122013-MD-AS Eff**	Water	12/20/13 09:40	12/20/13 13:19
10253342003	**GW-122013-MD-Mid Carbon**	Water	12/20/13 09:50	12/20/13 13:19
10253342004	**GW-122013-MD-Total Eff**	Water	12/20/13 10:00	12/20/13 13:19
10253342005	**GW-122013-MD-BP R1 Inf**	Water	12/20/13 11:00	12/20/13 13:19
10253342006	**GW-122013-MD-BP R2 Inf**	Water	12/20/13 11:10	12/20/13 13:19
10253342007	**GW-122013-MD-BP Total Inf**	Water	12/20/13 11:20	12/20/13 13:19
10253342008	**GW-122013-MD-BP Total Eff**	Water	12/20/13 11:30	12/20/13 13:19
10253342009	**Trip Blank**	Water	12/20/13 00:00	12/20/13 13:19
10253342010	**A-122013-MD-SVE INF**	Air	12/20/13 12:05	12/20/13 13:19
10253342011	**A-122013-MD-AD EFF**	Air	12/20/13 12:07	12/20/13 13:19
10253342012	**A-122013-MD-TOTAL INF**	Air	12/20/13 12:09	12/20/13 13:19
10253342013	**A-122013-MD-MID 1**	Air	12/20/13 12:11	12/20/13 13:19
10253342014	**A-122013-MD-MID 2**	Air	12/20/13 12:13	12/20/13 13:19
10253342015	**A-122013-MD-TOTAL EFF**	Air	12/20/13 12:15	12/20/13 13:19
10253342016	**A-122013-MD-BP TOTAL EFF**	Air	12/20/13 11:35	12/20/13 13:19

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10253342001	**GW-122013-MD-Total Inf**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10253342002	**GW-122013-MD-AS Eff**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10253342003	**GW-122013-MD-Mid Carbon**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10253342004	**GW-122013-MD-Total Eff**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
		SM 4500-H+B	SC1	1	PASI-MT
		EPA 1664 OG	MWD	1	PASI-M
10253342005	**GW-122013-MD-BP R1 Inf**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10253342006	**GW-122013-MD-BP R2 Inf**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10253342007	**GW-122013-MD-BP Total Inf**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10253342008	**GW-122013-MD-BP Total Eff**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
		SM 4500-H+B	SC1	1	PASI-MT
		EPA 1664 OG	MWD	1	PASI-M
10253342009	**Trip Blank**	NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10253342010	**A-122013-MD-SVE INF**	TO-14M Ambient Air	AH2	6	PASI-M
10253342011	**A-122013-MD-AD EFF**	TO-14M Ambient Air	AH2	6	PASI-M
10253342012	**A-122013-MD-TOTAL INF**	TO-14M Ambient Air	AH2	6	PASI-M
10253342013	**A-122013-MD-MID 1**	TO-14M Ambient Air	AH2	6	PASI-M
10253342014	**A-122013-MD-MID 2**	TO-14M Ambient Air	AH2	6	PASI-M
10253342015	**A-122013-MD-TOTAL EFF**	TO-14M Ambient Air	AH2	6	PASI-M
10253342016	**A-122013-MD-BP TOTAL EFF**	TO-14M Ambient Air	AH2	6	PASI-M

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Sample: GW-122013-MD-Total Inf **Lab ID: 10253342001** Collected: 12/20/13 09:30 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**1.2**	mg/L	0.40	1	12/27/13 09:08	12/30/13 21:12	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 21:12	64742-65-0	
Surrogates								
o-Terphenyl (S)	73	%.	30-125	1	12/27/13 09:08	12/30/13 21:12	84-15-1	
n-Triacontane (S)	90	%.	30-125	1	12/27/13 09:08	12/30/13 21:12	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**1290**	ug/L	100	1		12/27/13 02:02		
Surrogates								
a,a,a-Trifluorotoluene (S)	96	%.	75-125	1		12/27/13 02:02	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**116**	ug/L	2.0	2		12/31/13 13:58	71-43-2	
Ethylbenzene	**4.3**	ug/L	2.0	2		12/31/13 13:58	100-41-4	
Toluene	**20.6**	ug/L	2.0	2		12/31/13 13:58	108-88-3	
Xylene (Total)	**144**	ug/L	6.0	2		12/31/13 13:58	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%.	75-125	2		12/31/13 13:58	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	2		12/31/13 13:58	2037-26-5	
4-Bromofluorobenzene (S)	94	%.	75-125	2		12/31/13 13:58	460-00-4	

Sample: GW-122013-MD-AS Eff **Lab ID: 10253342002** Collected: 12/20/13 09:40 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 21:56	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 21:56	64742-65-0	
Surrogates								
o-Terphenyl (S)	84	%.	30-125	1	12/27/13 09:08	12/30/13 21:56	84-15-1	
n-Triacontane (S)	100	%.	30-125	1	12/27/13 09:08	12/30/13 21:56	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		12/26/13 22:21		
Surrogates								
a,a,a-Trifluorotoluene (S)	92	%.	75-125	1		12/26/13 22:21	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/31/13 11:23	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/31/13 11:23	100-41-4	
Toluene	ND	ug/L	1.0	1		12/31/13 11:23	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/31/13 11:23	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	88	%.	75-125	1		12/31/13 11:23	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		12/31/13 11:23	2037-26-5	
4-Bromofluorobenzene (S)	95	%.	75-125	1		12/31/13 11:23	460-00-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Sample: GW-122013-MD-Mid Carbon **Lab ID: 10253342003** Collected: 12/20/13 09:50 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 22:19	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 22:19	64742-65-0	
Surrogates								
o-Terphenyl (S)	75	%.	30-125	1	12/27/13 09:08	12/30/13 22:19	84-15-1	
n-Triacontane (S)	90	%.	30-125	1	12/27/13 09:08	12/30/13 22:19	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		12/26/13 22:41		
Surrogates								
a,a,a-Trifluorotoluene (S)	93	%.	75-125	1		12/26/13 22:41	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/31/13 11:38	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/31/13 11:38	100-41-4	
Toluene	ND	ug/L	1.0	1		12/31/13 11:38	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/31/13 11:38	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%.	75-125	1		12/31/13 11:38	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/31/13 11:38	2037-26-5	
4-Bromofluorobenzene (S)	94	%.	75-125	1		12/31/13 11:38	460-00-4	

Sample: GW-122013-MD-Total Eff **Lab ID: 10253342004** Collected: 12/20/13 10:00 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 22:41	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 22:41	64742-65-0	
Surrogates								
o-Terphenyl (S)	78	%.	30-125	1	12/27/13 09:08	12/30/13 22:41	84-15-1	
n-Triacontane (S)	103	%.	30-125	1	12/27/13 09:08	12/30/13 22:41	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		12/26/13 23:01		
Surrogates								
a,a,a-Trifluorotoluene (S)	93	%.	75-125	1		12/26/13 23:01	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/31/13 11:07	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/31/13 11:07	100-41-4	
Toluene	ND	ug/L	1.0	1		12/31/13 11:07	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/31/13 11:07	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%.	75-125	1		12/31/13 11:07	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/31/13 11:07	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Sample: GW-122013-MD-Total Eff **Lab ID: 10253342004** Collected: 12/20/13 10:00 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Surrogates								
4-Bromofluorobenzene (S)	94	%.	75-125	1		12/31/13 11:07	460-00-4	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**7.4**	Std. Units	0.10	1		12/24/13 13:19		H6
1664 HEM, Oil and Grease	Analytical Method: EPA 1664 OG							
Oil and Grease	ND	mg/L	6.4	1		01/04/14 09:13		

Sample: GW-122013-MD-BP R1 Inf **Lab ID: 10253342005** Collected: 12/20/13 11:00 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**1.0**	mg/L	0.40	1	12/27/13 09:08	12/30/13 23:04	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 23:04	64742-65-0	
Surrogates								
o-Terphenyl (S)	67	%.	30-125	1	12/27/13 09:08	12/30/13 23:04	84-15-1	
n-Triacontane (S)	90	%.	30-125	1	12/27/13 09:08	12/30/13 23:04	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**4120**	ug/L	500	5		12/27/13 00:22		
Surrogates								
a,a,a-Trifluorotoluene (S)	100	%.	75-125	5		12/27/13 00:22	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**1270**	ug/L	20.0	20		12/31/13 13:11	71-43-2	
Ethylbenzene	**362**	ug/L	20.0	20		12/31/13 13:11	100-41-4	
Toluene	ND	ug/L	20.0	20		12/31/13 13:11	108-88-3	
Xylene (Total)	ND	ug/L	60.0	20		12/31/13 13:11	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%.	75-125	20		12/31/13 13:11	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	20		12/31/13 13:11	2037-26-5	
4-Bromofluorobenzene (S)	94	%.	75-125	20		12/31/13 13:11	460-00-4	

Sample: GW-122013-MD-BP R2 Inf **Lab ID: 10253342006** Collected: 12/20/13 11:10 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.95**	mg/L	0.40	1	12/27/13 09:08	12/30/13 23:26	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/30/13 23:26	64742-65-0	
Surrogates								
o-Terphenyl (S)	74	%.	30-125	1	12/27/13 09:08	12/30/13 23:26	84-15-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Sample: GW-122013-MD-BP R2 Inf **Lab ID: 10253342006** Collected: 12/20/13 11:10 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Surrogates								
n-Triacontane (S)	91	%.	30-125	1	12/27/13 09:08	12/30/13 23:26	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**3880**	ug/L	500	5		12/27/13 00:02		
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%.	75-125	5		12/27/13 00:02	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**663**	ug/L	5.0	5		12/31/13 13:42	71-43-2	
Ethylbenzene	**357**	ug/L	5.0	5		12/31/13 13:42	100-41-4	
Toluene	ND	ug/L	5.0	5		12/31/13 13:42	108-88-3	
Xylene (Total)	ND	ug/L	15.0	5		12/31/13 13:42	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%.	75-125	5		12/31/13 13:42	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	5		12/31/13 13:42	2037-26-5	
4-Bromofluorobenzene (S)	93	%.	75-125	5		12/31/13 13:42	460-00-4	

Sample: GW-122013-MD-BP Total Inf **Lab ID: 10253342007** Collected: 12/20/13 11:20 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**1.0**	mg/L	0.40	1	12/27/13 09:08	01/02/14 10:19	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	12/27/13 09:08	01/02/14 10:19	64742-65-0	
Surrogates								
o-Terphenyl (S)	83	%.	30-125	1	12/27/13 09:08	01/02/14 10:19	84-15-1	
n-Triacontane (S)	98	%.	30-125	1	12/27/13 09:08	01/02/14 10:19	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**3720**	ug/L	500	5		12/26/13 23:22		
Surrogates								
a,a,a-Trifluorotoluene (S)	96	%.	75-125	5		12/26/13 23:22	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**1120**	ug/L	20.0	20		12/31/13 13:26	71-43-2	
Ethylbenzene	**329**	ug/L	20.0	20		12/31/13 13:26	100-41-4	
Toluene	ND	ug/L	20.0	20		12/31/13 13:26	108-88-3	
Xylene (Total)	ND	ug/L	60.0	20		12/31/13 13:26	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	86	%.	75-125	20		12/31/13 13:26	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	20		12/31/13 13:26	2037-26-5	
4-Bromofluorobenzene (S)	94	%.	75-125	20		12/31/13 13:26	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Sample: GW-122013-MD-BP Total Eff **Lab ID: 10253342008** Collected: 12/20/13 11:30 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/31/13 00:56	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	12/27/13 09:08	12/31/13 00:56	64742-65-0	
Surrogates								
o-Terphenyl (S)	72	%.	30-125	1	12/27/13 09:08	12/31/13 00:56	84-15-1	
n-Triacontane (S)	95	%.	30-125	1	12/27/13 09:08	12/31/13 00:56	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		12/27/13 01:42		
Surrogates								
a,a,a-Trifluorotoluene (S)	92	%.	75-125	1		12/27/13 01:42	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**1.8**	ug/L	1.0	1		12/31/13 12:09	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/31/13 12:09	100-41-4	
Toluene	ND	ug/L	1.0	1		12/31/13 12:09	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/31/13 12:09	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%.	75-125	1		12/31/13 12:09	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		12/31/13 12:09	2037-26-5	
4-Bromofluorobenzene (S)	93	%.	75-125	1		12/31/13 12:09	460-00-4	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B							
pH at 25 Degrees C	**7.7**	Std. Units	0.10	1		12/24/13 13:20		H6
1664 HEM, Oil and Grease	Analytical Method: EPA 1664 OG							
Oil and Grease	ND	mg/L	6.3	1		01/04/14 09:13		

Sample: Trip Blank **Lab ID: 10253342009** Collected: 12/20/13 00:00 Received: 12/20/13 13:19 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		12/26/13 22:01		
Surrogates								
a,a,a-Trifluorotoluene (S)	93	%.	75-125	1		12/26/13 22:01	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/31/13 10:51	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/31/13 10:51	100-41-4	
Toluene	ND	ug/L	1.0	1		12/31/13 10:51	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/31/13 10:51	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	87	%.	75-125	1		12/31/13 10:51	17060-07-0	
Toluene-d8 (S)	97	%.	75-125	1		12/31/13 10:51	2037-26-5	
4-Bromofluorobenzene (S)	94	%.	75-125	1		12/31/13 10:51	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Sample: A-122013-MD-SVE INF **Lab ID: 10253342010** Collected: 12/20/13 12:05 Received: 12/20/13 13:19 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**2.6**	ppmv	0.27	537.6		12/28/13 00:20	71-43-2	A4
Ethylbenzene	ND	ppmv	0.27	537.6		12/28/13 00:20	100-41-4	
THC as Gas	**212**	ppmv	18.8	537.6		12/28/13 00:20		
Toluene	**3.0**	ppmv	0.27	537.6		12/28/13 00:20	108-88-3	
m&p-Xylene	**0.57**	ppmv	0.54	537.6		12/28/13 00:20	179601-23-1	
o-Xylene	**0.31**	ppmv	0.27	537.6		12/28/13 00:20	95-47-6	

Sample: A-122013-MD-AD EFF **Lab ID: 10253342011** Collected: 12/20/13 12:07 Received: 12/20/13 13:19 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.0021**	ppmv	0.00084	1.68		12/27/13 20:58	71-43-2	A4
Ethylbenzene	ND	ppmv	0.00084	1.68		12/27/13 20:58	100-41-4	
THC as Gas	**0.47**	ppmv	0.059	1.68		12/27/13 20:58		
Toluene	**0.0058**	ppmv	0.00084	1.68		12/27/13 20:58	108-88-3	
m&p-Xylene	**0.0046**	ppmv	0.0017	1.68		12/27/13 20:58	179601-23-1	
o-Xylene	**0.0026**	ppmv	0.00084	1.68		12/27/13 20:58	95-47-6	

Sample: A-122013-MD-TOTAL INF **Lab ID: 10253342012** Collected: 12/20/13 12:09 Received: 12/20/13 13:19 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.038**	ppmv	0.017	33.6		12/27/13 22:58	71-43-2	A4
Ethylbenzene	ND	ppmv	0.017	33.6		12/27/13 22:58	100-41-4	
THC as Gas	**3.4**	ppmv	1.2	33.6		12/27/13 22:58		
Toluene	**0.039**	ppmv	0.017	33.6		12/27/13 22:58	108-88-3	
m&p-Xylene	ND	ppmv	0.034	33.6		12/27/13 22:58	179601-23-1	
o-Xylene	ND	ppmv	0.017	33.6		12/27/13 22:58	95-47-6	

Sample: A-122013-MD-MID 1 **Lab ID: 10253342013** Collected: 12/20/13 12:11 Received: 12/20/13 13:19 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.00084	1.68		12/27/13 21:29	71-43-2	A4
Ethylbenzene	ND	ppmv	0.00084	1.68		12/27/13 21:29	100-41-4	
THC as Gas	**0.57**	ppmv	0.059	1.68		12/27/13 21:29		
Toluene	ND	ppmv	0.00084	1.68		12/27/13 21:29	108-88-3	
m&p-Xylene	ND	ppmv	0.0017	1.68		12/27/13 21:29	179601-23-1	
o-Xylene	ND	ppmv	0.00084	1.68		12/27/13 21:29	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Sample: A-122013-MD-MID 2 **Lab ID: 10253342014** Collected: 12/20/13 12:13 Received: 12/20/13 13:19 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.00084	1.68		12/27/13 22:00	71-43-2	A4
Ethylbenzene	ND	ppmv	0.00084	1.68		12/27/13 22:00	100-41-4	
THC as Gas	**0.72**	ppmv	0.059	1.68		12/27/13 22:00		
Toluene	ND	ppmv	0.00084	1.68		12/27/13 22:00	108-88-3	
m&p-Xylene	ND	ppmv	0.0017	1.68		12/27/13 22:00	179601-23-1	
o-Xylene	ND	ppmv	0.00084	1.68		12/27/13 22:00	95-47-6	

Sample: A-122013-MD-TOTAL EFF **Lab ID: 10253342015** Collected: 12/20/13 12:15 Received: 12/20/13 13:19 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.00084	1.68		12/27/13 22:30	71-43-2	A4
Ethylbenzene	ND	ppmv	0.00084	1.68		12/27/13 22:30	100-41-4	
THC as Gas	**0.67**	ppmv	0.059	1.68		12/27/13 22:30		
Toluene	ND	ppmv	0.00084	1.68		12/27/13 22:30	108-88-3	
m&p-Xylene	ND	ppmv	0.0017	1.68		12/27/13 22:30	179601-23-1	
o-Xylene	ND	ppmv	0.00084	1.68		12/27/13 22:30	95-47-6	

Sample: A-122013-MD-BP TOTAL EFF **Lab ID: 10253342016** Collected: 12/20/13 11:35 Received: 12/20/13 13:19 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**1.6**	ppmv	0.13	268.8		12/28/13 16:34	71-43-2	A3,A4
Ethylbenzene	**0.25**	ppmv	0.017	33.6		12/27/13 23:25	100-41-4	
THC as Gas	**4.1**	ppmv	1.2	33.6		12/27/13 23:25		
Toluene	ND	ppmv	0.017	33.6		12/27/13 23:25	108-88-3	
m&p-Xylene	ND	ppmv	0.034	33.6		12/27/13 23:25	179601-23-1	
o-Xylene	ND	ppmv	0.017	33.6		12/27/13 23:25	95-47-6	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

QC Batch: AIR/19048 Analysis Method: TO-14M Ambient Air
QC Batch Method: TO-14M Ambient Air Analysis Description: TO14 MSV AIR - AMBIENT
Associated Lab Samples: 10253342010, 10253342011, 10253342012, 10253342013, 10253342014, 10253342015, 10253342016

METHOD BLANK: 1602473 Matrix: Air
Associated Lab Samples: 10253342010, 10253342011, 10253342012, 10253342013, 10253342014, 10253342015, 10253342016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ppmv	ND	0.00050	12/27/13 17:55	
Ethylbenzene	ppmv	ND	0.00050	12/27/13 17:55	
m&p-Xylene	ppmv	ND	0.0010	12/27/13 17:55	
o-Xylene	ppmv	ND	0.00050	12/27/13 17:55	
THC as Gas	ppmv	ND	0.035	12/27/13 17:55	
Toluene	ppmv	ND	0.00050	12/27/13 17:55	

LABORATORY CONTROL SAMPLE: 1602474

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ppmv	.01	0.011	111	72-136	
Ethylbenzene	ppmv	.01	0.011	109	74-136	
m&p-Xylene	ppmv	.01	0.011	108	72-135	
o-Xylene	ppmv	.01	0.011	112	74-135	
THC as Gas	ppmv	.72	0.73	101	63-141	
Toluene	ppmv	.01	0.010	103	71-134	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

QC Batch: GCV/11538 Analysis Method: NWTPH-Gx/8021
QC Batch Method: NWTPH-Gx/8021 Analysis Description: NWTPH-Gx/8021B Water
Associated Lab Samples: 10253342001, 10253342002, 10253342003, 10253342004, 10253342005, 10253342006, 10253342007, 10253342008, 10253342009

METHOD BLANK: 1601273 Matrix: Water
Associated Lab Samples: 10253342001, 10253342002, 10253342003, 10253342004, 10253342005, 10253342006, 10253342007, 10253342008, 10253342009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/26/13 21:41	
a,a,a-Trifluorotoluene (S)	%.	90	75-125	12/26/13 21:41	

METHOD BLANK: 1602330 Matrix: Water
Associated Lab Samples: 10253342001, 10253342002, 10253342003, 10253342004, 10253342005, 10253342006, 10253342007, 10253342008, 10253342009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	12/27/13 01:22	
a,a,a-Trifluorotoluene (S)	%.	91	75-125	12/27/13 01:22	

LABORATORY CONTROL SAMPLE & LCSD: 1601274 1601275

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	1010	1060	101	106	75-126	5	20	
a,a,a-Trifluorotoluene (S)	%.				98	103	75-125			

MATRIX SPIKE SAMPLE: 1602329

Parameter	Units	10253342005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH as Gas	ug/L	4120	5000	10100	119	75-137	
a,a,a-Trifluorotoluene (S)	%.				112	75-125	

SAMPLE DUPLICATE: 1601277

Parameter	Units	10253342007 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	3720	3690	1	30	
a,a,a-Trifluorotoluene (S)	%.	96	97	1		

SAMPLE DUPLICATE: 1601778

Parameter	Units	10253223001 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	2000000	1950000	2	30	
a,a,a-Trifluorotoluene (S)	%.	91	92	.7		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

QC Batch: MSV/26056 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10253342001, 10253342002, 10253342003, 10253342004, 10253342005, 10253342006, 10253342007, 10253342008, 10253342009

METHOD BLANK: 1603229 Matrix: Water
Associated Lab Samples: 10253342001, 10253342002, 10253342003, 10253342004, 10253342005, 10253342006, 10253342007, 10253342008, 10253342009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/31/13 10:36	
Ethylbenzene	ug/L	ND	1.0	12/31/13 10:36	
Toluene	ug/L	ND	1.0	12/31/13 10:36	
Xylene (Total)	ug/L	ND	3.0	12/31/13 10:36	
1,2-Dichloroethane-d4 (S)	%.	87	75-125	12/31/13 10:36	
4-Bromofluorobenzene (S)	%.	94	75-125	12/31/13 10:36	
Toluene-d8 (S)	%.	98	75-125	12/31/13 10:36	

LABORATORY CONTROL SAMPLE: 1603230

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	16.8	84	75-125	
Ethylbenzene	ug/L	20	17.1	86	75-125	
Toluene	ug/L	20	17.2	86	75-125	
Xylene (Total)	ug/L	60	53.9	90	75-125	
1,2-Dichloroethane-d4 (S)	%.			86	75-125	
4-Bromofluorobenzene (S)	%.			95	75-125	
Toluene-d8 (S)	%.			99	75-125	

MATRIX SPIKE SAMPLE: 1603621

Parameter	Units	10253342002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	20	16.3	82	70-135	
Ethylbenzene	ug/L	ND	20	16.4	82	75-125	
Toluene	ug/L	ND	20	16.3	82	75-125	
Xylene (Total)	ug/L	ND	60	52.0	87	75-125	
1,2-Dichloroethane-d4 (S)	%.				87	75-125	
4-Bromofluorobenzene (S)	%.				93	75-125	
Toluene-d8 (S)	%.				98	75-125	

SAMPLE DUPLICATE: 1603622

Parameter	Units	10253342003 Result	Dup Result	RPD	Max RPD	Qualifiers
Benzene	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

SAMPLE DUPLICATE: 1603622

Parameter	Units	10253342003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane-d4 (S)	%.	89	88	1		
4-Bromofluorobenzene (S)	%.	94	93	1		
Toluene-d8 (S)	%.	98	98	.3		

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QUALITY CONTROL DATA

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

QC Batch: MT/14776 Analysis Method: SM 4500-H+B
QC Batch Method: SM 4500-H+B Analysis Description: 4500H+B pH
Associated Lab Samples: 10253342004, 10253342008

LABORATORY CONTROL SAMPLE: 1601381

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	7	7.0	100	98-102	H6

SAMPLE DUPLICATE: 1601382

Parameter	Units	10253342004 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.4	7.4	.1	3	H6

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

QC Batch: OEXT/24031 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3510 Analysis Description: NWTPH-Dx GCS LV SG
Associated Lab Samples: 10253342001, 10253342002, 10253342003, 10253342004, 10253342005, 10253342006, 10253342007, 10253342008

METHOD BLANK: 1602163 Matrix: Water
Associated Lab Samples: 10253342001, 10253342002, 10253342003, 10253342004, 10253342005, 10253342006, 10253342007, 10253342008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range SG	mg/L	ND	0.40	12/30/13 20:27	
Motor Oil Range SG	mg/L	ND	0.40	12/30/13 20:27	
n-Triacontane (S)	%.	100	30-125	12/30/13 20:27	
o-Terphenyl (S)	%.	77	30-125	12/30/13 20:27	

LABORATORY CONTROL SAMPLE & LCSD: 1602164 1602165

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	2	1.7	1.8	87	89	50-150	2	20	
Motor Oil Range SG	mg/L	2	1.9	2.0	93	98	50-150	5	20	
n-Triacontane (S)	%.				92	88	30-125			
o-Terphenyl (S)	%.				80	79	30-125			

SAMPLE DUPLICATE: 1602166

Parameter	Units	10253342001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	1.2	0.85	30	30	
Motor Oil Range SG	mg/L	ND	.27J		30	
n-Triacontane (S)	%.	90	93	3		
o-Terphenyl (S)	%.	73	78	6		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

QC Batch: WET/33881 Analysis Method: EPA 1664 OG
QC Batch Method: EPA 1664 OG Analysis Description: 1664 HEM, Oil and Grease
Associated Lab Samples: 10253342004, 10253342008

METHOD BLANK: 1604058 Matrix: Water
Associated Lab Samples: 10253342004, 10253342008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Oil and Grease	mg/L	ND	5.1	01/04/14 08:07	

LABORATORY CONTROL SAMPLE: 1604059

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Oil and Grease	mg/L	40.8	39.5	97	78-114	

MATRIX SPIKE SAMPLE: 1604060

Parameter	Units	10253826001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Oil and Grease	mg/L	ND	44.4	37.8	83	78-114	

SAMPLE DUPLICATE: 1604061

Parameter	Units	10253826002 Result	Dup Result	RPD	Max RPD	Qualifiers
Oil and Grease	mg/L	ND	ND		18	

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

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.

PRL - Pace Reporting 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.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis
PASI-MT	Pace Analytical Services - Montana

SAMPLE QUALIFIERS

Sample: 10253342010

[1]	This result is reported from a serial dilution.

ANALYTE QUALIFIERS

A3	The sample was analyzed by serial dilution.
A4	Sample was transferred from a sampling bag into a Summa Canister within 48 hours of collection.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Dec 2013 O&M Compliance 070496
Pace Project No.: 10253342

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10253342010	**A-122013-MD-SVE INF**	TO-14M Ambient Air	AIR/19048		
10253342011	**A-122013-MD-AD EFF**	TO-14M Ambient Air	AIR/19048		
10253342012	**A-122013-MD-TOTAL INF**	TO-14M Ambient Air	AIR/19048		
10253342013	**A-122013-MD-MID 1**	TO-14M Ambient Air	AIR/19048		
10253342014	**A-122013-MD-MID 2**	TO-14M Ambient Air	AIR/19048		
10253342015	**A-122013-MD-TOTAL EFF**	TO-14M Ambient Air	AIR/19048		
10253342016	**A-122013-MD-BP TOTAL EFF**	TO-14M Ambient Air	AIR/19048		
10253342001	**GW-122013-MD-Total Inf**	EPA 3510	OEXT/24031	NWTPH-Dx	GCSV/12650
10253342002	**GW-122013-MD-AS Eff**	EPA 3510	OEXT/24031	NWTPH-Dx	GCSV/12650
10253342003	**GW-122013-MD-Mid Carbon**	EPA 3510	OEXT/24031	NWTPH-Dx	GCSV/12650
10253342004	**GW-122013-MD-Total Eff**	EPA 3510	OEXT/24031	NWTPH-Dx	GCSV/12650
10253342005	**GW-122013-MD-BP R1 Inf**	EPA 3510	OEXT/24031	NWTPH-Dx	GCSV/12650
10253342006	**GW-122013-MD-BP R2 Inf**	EPA 3510	OEXT/24031	NWTPH-Dx	GCSV/12650
10253342007	**GW-122013-MD-BP Total Inf**	EPA 3510	OEXT/24031	NWTPH-Dx	GCSV/12650
10253342008	**GW-122013-MD-BP Total Eff**	EPA 3510	OEXT/24031	NWTPH-Dx	GCSV/12650
10253342001	**GW-122013-MD-Total Inf**	NWTPH-Gx/8021	GCV/11538		
10253342002	**GW-122013-MD-AS Eff**	NWTPH-Gx/8021	GCV/11538		
10253342003	**GW-122013-MD-Mid Carbon**	NWTPH-Gx/8021	GCV/11538		
10253342004	**GW-122013-MD-Total Eff**	NWTPH-Gx/8021	GCV/11538		
10253342005	**GW-122013-MD-BP R1 Inf**	NWTPH-Gx/8021	GCV/11538		
10253342006	**GW-122013-MD-BP R2 Inf**	NWTPH-Gx/8021	GCV/11538		
10253342007	**GW-122013-MD-BP Total Inf**	NWTPH-Gx/8021	GCV/11538		
10253342008	**GW-122013-MD-BP Total Eff**	NWTPH-Gx/8021	GCV/11538		
10253342009	**Trip Blank**	NWTPH-Gx/8021	GCV/11538		
10253342001	**GW-122013-MD-Total Inf**	EPA 8260	MSV/26056		
10253342002	**GW-122013-MD-AS Eff**	EPA 8260	MSV/26056		
10253342003	**GW-122013-MD-Mid Carbon**	EPA 8260	MSV/26056		
10253342004	**GW-122013-MD-Total Eff**	EPA 8260	MSV/26056		
10253342005	**GW-122013-MD-BP R1 Inf**	EPA 8260	MSV/26056		
10253342006	**GW-122013-MD-BP R2 Inf**	EPA 8260	MSV/26056		
10253342007	**GW-122013-MD-BP Total Inf**	EPA 8260	MSV/26056		
10253342008	**GW-122013-MD-BP Total Eff**	EPA 8260	MSV/26056		
10253342009	**Trip Blank**	EPA 8260	MSV/26056		
10253342004	**GW-122013-MD-Total Eff**	SM 4500-H+B	MT/14776		
10253342008	**GW-122013-MD-BP Total Eff**	SM 4500-H+B	MT/14776		
10253342004	**GW-122013-MD-Total Eff**	EPA 1664 OG	WET/33881		
10253342008	**GW-122013-MD-BP Total Eff**	EPA 1664 OG	WET/33881		

CHAIN OF CUSTODY RECORD

1129
1131

CONESTOGA-ROVERS & ASSOCIATES — TACOMA

SHIPPED TO (Laboratory Name): PACE

REFERENCE NUMBER: 070496 10253342

SAMPLER'S SIGNATURE: _____ PRINTED NAME: MATT DAVIS

SEQ. No.	DATE	TIME	SAMPLE No.	SAMPLE TYPE	No. of Containers	PARAMETERS: TPH-GX	TPH-DX	BTEX	PH	FOG	REMARKS
	12/20/13	930	GW-122013-MD-TOTAL INF	GW	6	X	X	X			10253342001
		940	GW-122013-MD-AS EFF		6	X	X	X			002
		950	GW-122013-MD-MID CARBON		6	X	X	X			003
		1000	GW-122013-MD-TOTAL EFF		10	X	X	X	X	X	COMPOSITE A,B,C FOR 004
		1100	GW-122013-MD-BP A1 INF		6	X	X	X			FOG ANALYSIS 005
		1110	GW-122013-MD-BP A2 INF		6	X	X	X			006
		1120	GW-122013-MD-BP TOTAL INF		6	X	X	X			007
		1130	GW-122013-MD-BP TOTAL EFF		10	X	X	X	X	X	COMPOSITE A,B,C FOR 008
		1205	A-122013-MD-SVE INF	A	1	X		X			FOG ANALYSIS 010 ~~009~~
		1207	A-122013-MD-AS EFF		1	X		X			011 ~~010~~
		1209	A-122013-MD-TOTAL INF		1	X		X			012 ~~011~~
		1211	A-122013-MD-MID 1		1	X		X			NEED (5) DAYS ~~012~~ 013
		1213	A-122013-MD-MID 2		1	X		X			TAT FOR AIR ~~013~~ 014
		1215	A-122013-MD-TOTAL EFF		1	X		X			~~014~~ 015
	↓	1135	A-122013-MD-BP TOTAL EFF	↓	1	X		X			~~015~~ DUP
			TRIP BLANK			X		X			009

12-23-13

TOTAL NUMBER OF CONTAINERS: 63

HEALTH/CHEMICAL HAZARDS

RELINQUISHED BY: ① _____	DATE: 12/20/13 TIME: 1319	RECEIVED BY: ① Jyothi Swamy / PACE	DATE: 12/20/13 TIME: 13:19
RELINQUISHED BY: ② Jyothi Swamy / PACE	DATE: 12/20/13 TIME: 14:38	RECEIVED BY: ② IH / PACE	DATE: 12/23/13 TIME: 10:35
RELINQUISHED BY: ③ _____	DATE: TIME:	RECEIVED BY: ③ _____	DATE: TIME:

METHOD OF SHIPMENT: Personally delivered

WAY BILL No.

White —Fully Executed Copy
Yellow —Receiving Laboratory Copy
Pink —Shipper Copy
Goldenrod —Sampler Copy

SAMPLE TEAM: MATT DAVIS

RECEIVED FOR LABORATORY BY: _____ DATE: _____ TIME: _____

Nº CRA 21094

1001 (D) APR 28/97(NF) REV. 0 (F-15)

4.8°C 2.6°C

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 07Nov2013 Page 1 of 1
	Document No.: F-MN-L-213-rev.08	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Conestoga-Rovers & Assoc.

Project #: WO#: 10253342

10253342

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

Tracking Number: 5779 5330 9101, 9112

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No　Seals Intact? ☑ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other:　Temp Blank? ☑ Yes ☐ No

Thermom. Used: ☐ 80512447 ☐ 72337080 ☐ B88A912167504 ☑ B88A9132521491　Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 0.4, 1.3　Cooler Temp Corrected (°C): 0.5, 1.4　Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Temp should be above freezing to 6°C　Correction Factor: +0.1　Date and Initials of Person Examining Contents: LH 12-23-13

	Yes	No	N/A	Comments:
Chain of Custody Present?	☑	☐	☐	1.
Chain of Custody Filled Out?	☑	☐	☐	2.
Chain of Custody Relinquished?	☑	☐	☐	3.
Sampler Name and/or Signature on COC?	☑	☐	☐	4.
Samples Arrived within Hold Time?	☑	☐	☐	5.
Short Hold Time Analysis (<72 hr)?	☐	☑	☐	6.
Rush Turn Around Time Requested?	☐	☑	☐	7.
Sufficient Volume?	☑	☐	☐	8.
Correct Containers Used?	☑	☐	☐	9.
-Pace Containers Used?	☑	☐	☐	
Containers Intact?	☑	☐	☐	10.
Filtered Volume Received for Dissolved Tests?	☐	☐	☑	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	☐	☑	☐	12. COC says 10:00 for #4 but bottle A says 09:30 + bottle B says 09:45. COC says 11:30 for #8 but bottle A says 11:00 + B says 11:15
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	☐	☐	☑	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☐	☐	☑	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water) DOC	☑	☐		Initial when completed: LH　Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐	☑	☐	14.
Trip Blank Present?	☑	☐	☐	15. 6 T.B.
Trip Blank Custody Seals Present?	☑	☐	☐	
Pace Trip Blank Lot # (if purchased): 072213-3				

CLIENT NOTIFICATION/RESOLUTION　Field Data Required? ☐ Yes ☐ No

Person Contacted: ______　Date/Time: ______

Comments/Resolution: ______

Project Manager Review: [signature]　Date: 12/23/13

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

Pace Analytical	Document Name: Air Sample Condition Upon Receipt	Document Revised: 28Jan2013 Page 1 of 1
	Document No.: F-MN-A-106-rev.07	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt

Client Name: Pace, for CRA

Project #: WO# : 10253342

10253342

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

Tracking Number: 5779 5831 9123

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

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

Temp. (TO17 and TO13 samples only) (°C): _____ Corrected Temp (°C): _____ Thermom. Used: ☐ B88A912167504 ☐ 80512447 ☐ 72337080

Temp should be above freezing to 6°C Correction Factor: _____ Date & Initials of Person Examining Contents: CM 12-23-13

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Media: Air Bag / Air Can				11.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	12.

Samples Received: 7 Air Cans / 7 Air Bags

Canisters		Flow Controllers		Stand Alone G	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
SVE INF	2591				
AS EFF	2504				
Total INF	2561				
MID 1	2563				
MID 2	2539				
Total Eff	2573				
BP Total Eff	2552				

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ Date: 12/23/13

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

Pace Analytical™	Document Name: MN to MT Sample Transfer Form	Revised Date: 15May2013 Page: 1 of 1
	Document Number: F-MN-C-043-rev.08	Issuing Authority: Pace Minnesota Quality Office

Shipping (circle):	UPS Fed Ex
Tracking #:	5753 4197 1328
Client:	CRA_COP
Due Date:	7-Jan-2014
Pace WO:	10253342
Project Manager:	Jenni Gross

MN to MT Sample Transfer Condition Upon Receipt Form

ANALYSIS REQUESTED

Method Number & Description	Container Type	# of Bottles	Number of Samples	Preservative Yes or No	Verify Arrival Date & Initials
Tests					
pH by 4500 H+B	BP3U	2	2	No	VAS 12/24/13

REPORTING REQUIREMENTS/ADDITIONAL COMMENTS

Conoco Phillips Project 304 5008

MONTANA SAMPLE RECEIPT INFORMATION

IR Gun: **1383045**, Correction Factor:	0	Sample Matrix:	H_2O
Cooler Temp Read (°C): 2.2	Cooler Temp Corrected (°C): 2.2	Filtred volume rec'd for dissolved tests:	Yes __ No __ NA X
Arrived on Ice:	Yes X No __	Samples pH have been checked:	Yes __ No __ NA X
Custody Seal Present:	Yes X No __	Trip Blank Present:	Yes __ No __ NA X
Short Hold Time Requested < 72 Hours:	Yes __ No X	Trip Blank Custody Seals Present:	Yes __ No __ NA X
Rush TAT Requested:	Yes __ No X	Pace Trip Blank Lot #:	
Sufficient Sample Volume:	Yes X No __	Sample Composites Required:	Yes __ No __ NA X
Samples Arrived within Hold Time:	Yes X No __	Report Samples:	Wet Wt. __ Dry Wt. __
Containers Intact:	Yes X No __	Reporting Units:	

CUSTODY TRANSFER

Relinquished by/Affiliation	Date	Time	Accepted By Affiliation	Date	Time
Casey Sparks Pace MN	12-23-13	17:20			
			Pace MT	12/24/13	12:15

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____ **Date:** _____

Comments/Resolution: _____

Project Manager Review: Casey Sparks **Date:** 12-26-13

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

January 30, 2014

Edwin Turner
CRA_Conoco Phillips
20818 44th Ave. W
Lynnwood, WA 98036

RE: Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Dear Edwin Turner:
Enclosed are the analytical results for sample(s) received by the laboratory on January 08, 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,

Jennifer Gross
jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Yu Chen, CRA_Conoco Phillips
Jeffrey Cloud, Conestoga-Rovers Association
Matt Davis, CRA_Conoco Phillips
Matthew Smith, Conestoga-Rover's Association
Kelsey Whittaker, CRA

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Dept of Environmental Management #40770
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
EPA Region 5 #WD-15J
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nebraska Certification #: Pace
Nevada Certification #: MN_00064
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

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

SAMPLE SUMMARY

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10254346001	**GW-010814-NH-TOTAL INF**	Water	01/08/14 09:15	01/08/14 15:00
10254346002	**GW-010814-NH-AS EFF**	Water	01/08/14 10:45	01/08/14 15:00
10254346003	**GW-010814-NH-MID CARBON**	Water	01/08/14 11:00	01/08/14 15:00
10254346004	**GW-010814-NH-TOTAL EFF**	Water	01/08/14 11:20	01/08/14 15:00
10254346005	**a-010814-NH-SVE INF**	Air	01/08/14 11:30	01/08/14 15:00
10254346006	**a-010814-NH-AS EFF**	Air	01/08/14 11:40	01/08/14 15:00
10254346007	**a-010814-NH-TOTAL INF**	Air	01/08/14 11:50	01/08/14 15:00
10254346008	**a-010814-NH-MID CARBON 1**	Air	01/08/14 12:00	01/08/14 15:00
10254346009	**a-010814-NH-MID CARBON 2**	Air	01/08/14 12:05	01/08/14 15:00
10254346010	**a-010814-NH-TOTAL EFF**	Air	01/08/14 12:10	01/08/14 15:00
10254346011	**GW-010814-NH-BP R1 INF**	Water	01/08/14 12:20	01/08/14 15:00
10254346012	**GW-010814-NH-BP R2 INF**	Water	01/08/14 12:30	01/08/14 15:00
10254346013	**GW-010814-NH-BP TOTAL INF**	Water	01/08/14 12:45	01/08/14 15:00
10254346014	**GW-010814-NH-BP TOTAL EFF**	Water	01/08/14 13:00	01/08/14 15:00
10254346015	**A-010814-NH-BP AS EFF**	Air	01/08/14 13:30	01/08/14 15:00

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10254346001	**GW-010814-NH-TOTAL INF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10254346002	**GW-010814-NH-AS EFF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10254346003	**GW-010814-NH-MID CARBON**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10254346004	**GW-010814-NH-TOTAL EFF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10254346005	**a-010814-NH-SVE INF**	TO-14M Ambient Air	AH2	6	PASI-M
10254346006	**a-010814-NH-AS EFF**	TO-14M Ambient Air	AH2	6	PASI-M
10254346007	**a-010814-NH-TOTAL INF**	TO-14M Ambient Air	AH2	6	PASI-M
10254346008	**a-010814-NH-MID CARBON 1**	TO-14M Ambient Air	AH2	6	PASI-M
10254346009	**a-010814-NH-MID CARBON 2**	TO-14M Ambient Air	AH2	6	PASI-M
10254346010	**a-010814-NH-TOTAL EFF**	TO-14M Ambient Air	AH2	6	PASI-M
10254346011	**GW-010814-NH-BP R1 INF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10254346012	**GW-010814-NH-BP R2 INF**	NWTPH-Dx	JRH	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10254346013	**GW-010814-NH-BP TOTAL INF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10254346014	**GW-010814-NH-BP TOTAL EFF**	NWTPH-Dx	MT	4	PASI-M
		NWTPH-Gx/8021	LLC	2	PASI-M
		EPA 8260	SH2	7	PASI-M
10254346015	**A-010814-NH-BP AS EFF**	TO-14M Ambient Air	DR1	6	PASI-M

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Sample: GW-010814-NH-TOTAL INF **Lab ID: 10254346001** Collected: 01/08/14 09:15 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**1.2**	mg/L	0.40	1	01/10/14 08:33	01/13/14 15:24	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 15:24	64742-65-0	
Surrogates								
o-Terphenyl (S)	66	%.	30-125	1	01/10/14 08:33	01/13/14 15:24	84-15-1	
n-Triacontane (S)	79	%.	30-125	1	01/10/14 08:33	01/13/14 15:24	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**4490**	ug/L	500	5		01/13/14 01:34		
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%.	70-125	5		01/13/14 01:34	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**259**	ug/L	2.0	2		01/15/14 14:26	71-43-2	
Ethylbenzene	**38.9**	ug/L	2.0	2		01/15/14 14:26	100-41-4	
Toluene	**212**	ug/L	2.0	2		01/15/14 14:26	108-88-3	
Xylene (Total)	**633**	ug/L	6.0	2		01/15/14 14:26	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%.	75-125	2		01/15/14 14:26	17060-07-0	
Toluene-d8 (S)	100	%.	75-125	2		01/15/14 14:26	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125	2		01/15/14 14:26	460-00-4	

Sample: GW-010814-NH-AS EFF **Lab ID: 10254346002** Collected: 01/08/14 10:45 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.59**	mg/L	0.40	1	01/10/14 08:33	01/13/14 16:09	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 16:09	64742-65-0	
Surrogates								
o-Terphenyl (S)	77	%.	30-125	1	01/10/14 08:33	01/13/14 16:09	84-15-1	
n-Triacontane (S)	91	%.	30-125	1	01/10/14 08:33	01/13/14 16:09	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**375**	ug/L	100	1		01/12/14 21:53		
Surrogates								
a,a,a-Trifluorotoluene (S)	89	%.	70-125	1		01/12/14 21:53	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**47.3**	ug/L	1.0	1		01/13/14 15:47	71-43-2	
Ethylbenzene	**2.4**	ug/L	1.0	1		01/13/14 15:47	100-41-4	
Toluene	**35.2**	ug/L	1.0	1		01/13/14 15:47	108-88-3	
Xylene (Total)	**56.5**	ug/L	3.0	1		01/13/14 15:47	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%.	75-125	1		01/13/14 15:47	17060-07-0	
Toluene-d8 (S)	99	%.	75-125	1		01/13/14 15:47	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		01/13/14 15:47	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Sample: GW-010814-NH-MID CARBON **Lab ID: 10254346003** Collected: 01/08/14 11:00 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 16:32	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 16:32	64742-65-0	
Surrogates								
o-Terphenyl (S)	76	%.	30-125	1	01/10/14 08:33	01/13/14 16:32	84-15-1	
n-Triacontane (S)	95	%.	30-125	1	01/10/14 08:33	01/13/14 16:32	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		01/12/14 22:14		
Surrogates								
a,a,a-Trifluorotoluene (S)	93	%.	70-125	1		01/12/14 22:14	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		01/13/14 16:02	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		01/13/14 16:02	100-41-4	
Toluene	ND	ug/L	1.0	1		01/13/14 16:02	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		01/13/14 16:02	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%.	75-125	1		01/13/14 16:02	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		01/13/14 16:02	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	1		01/13/14 16:02	460-00-4	

Sample: GW-010814-NH-TOTAL EFF **Lab ID: 10254346004** Collected: 01/08/14 11:20 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 16:55	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 16:55	64742-65-0	
Surrogates								
o-Terphenyl (S)	83	%.	30-125	1	01/10/14 08:33	01/13/14 16:55	84-15-1	
n-Triacontane (S)	98	%.	30-125	1	01/10/14 08:33	01/13/14 16:55	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		01/12/14 22:34		
Surrogates								
a,a,a-Trifluorotoluene (S)	87	%.	70-125	1		01/12/14 22:34	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		01/13/14 16:16	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		01/13/14 16:16	100-41-4	
Toluene	ND	ug/L	1.0	1		01/13/14 16:16	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		01/13/14 16:16	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%.	75-125	1		01/13/14 16:16	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	1		01/13/14 16:16	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Sample: GW-010814-NH-TOTAL EFF **Lab ID: 10254346004** Collected: 01/08/14 11:20 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Surrogates								
4-Bromofluorobenzene (S)	101	%.	75-125	1		01/13/14 16:16	460-00-4	

Sample: a-010814-NH-SVE INF **Lab ID: 10254346005** Collected: 01/08/14 11:30 Received: 01/08/14 15:00 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**5.4**	ppmv	0.27	537.6		01/11/14 05:20	71-43-2	
Ethylbenzene	ND	ppmv	0.27	537.6		01/11/14 05:20	100-41-4	
THC as Gas	**232**	ppmv	18.8	537.6		01/11/14 05:20		
Toluene	**7.4**	ppmv	0.27	537.6		01/11/14 05:20	108-88-3	
m&p-Xylene	**1.3**	ppmv	0.54	537.6		01/11/14 05:20	179601-23-1	
o-Xylene	**0.50**	ppmv	0.27	537.6		01/11/14 05:20	95-47-6	

Sample: a-010814-NH-AS EFF **Lab ID: 10254346006** Collected: 01/08/14 11:40 Received: 01/08/14 15:00 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.016**	ppmv	0.00084	1.68		01/11/14 02:25	71-43-2	
Ethylbenzene	**0.0022**	ppmv	0.00084	1.68		01/11/14 02:25	100-41-4	
THC as Gas	**0.38**	ppmv	0.059	1.68		01/11/14 02:25		
Toluene	**0.021**	ppmv	0.00084	1.68		01/11/14 02:25	108-88-3	
m&p-Xylene	**0.014**	ppmv	0.0017	1.68		01/11/14 02:25	179601-23-1	
o-Xylene	**0.0063**	ppmv	0.00084	1.68		01/11/14 02:25	95-47-6	

Sample: a-010814-NH-TOTAL INF **Lab ID: 10254346007** Collected: 01/08/14 11:50 Received: 01/08/14 15:00 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.061**	ppmv	0.017	33.6		01/11/14 04:28	71-43-2	
Ethylbenzene	ND	ppmv	0.017	33.6		01/11/14 04:28	100-41-4	
THC as Gas	**4.6**	ppmv	1.2	33.6		01/11/14 04:28		
Toluene	**0.071**	ppmv	0.017	33.6		01/11/14 04:28	108-88-3	
m&p-Xylene	ND	ppmv	0.034	33.6		01/11/14 04:28	179601-23-1	
o-Xylene	ND	ppmv	0.017	33.6		01/11/14 04:28	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Sample: a-010814-NH-MID CARBON 1 **Lab ID: 10254346008** Collected: 01/08/14 12:00 Received: 01/08/14 15:00 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.00084	1.68		01/11/14 04:03	71-43-2	
Ethylbenzene	ND	ppmv	0.00084	1.68		01/11/14 04:03	100-41-4	
THC as Gas	**0.69**	ppmv	0.059	1.68		01/11/14 04:03		
Toluene	ND	ppmv	0.00084	1.68		01/11/14 04:03	108-88-3	
m&p-Xylene	ND	ppmv	0.0017	1.68		01/11/14 04:03	179601-23-1	
o-Xylene	ND	ppmv	0.00084	1.68		01/11/14 04:03	95-47-6	

Sample: a-010814-NH-MID CARBON 2 **Lab ID: 10254346009** Collected: 01/08/14 12:05 Received: 01/08/14 15:00 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.00084	1.68		01/11/14 02:59	71-43-2	
Ethylbenzene	ND	ppmv	0.00084	1.68		01/11/14 02:59	100-41-4	
THC as Gas	**0.43**	ppmv	0.059	1.68		01/11/14 02:59		
Toluene	ND	ppmv	0.00084	1.68		01/11/14 02:59	108-88-3	
m&p-Xylene	ND	ppmv	0.0017	1.68		01/11/14 02:59	179601-23-1	
o-Xylene	ND	ppmv	0.00084	1.68		01/11/14 02:59	95-47-6	

Sample: a-010814-NH-TOTAL EFF **Lab ID: 10254346010** Collected: 01/08/14 12:10 Received: 01/08/14 15:00 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	ND	ppmv	0.00084	1.68		01/11/14 03:28	71-43-2	
Ethylbenzene	ND	ppmv	0.00084	1.68		01/11/14 03:28	100-41-4	
THC as Gas	**0.48**	ppmv	0.059	1.68		01/11/14 03:28		
Toluene	ND	ppmv	0.00084	1.68		01/11/14 03:28	108-88-3	
m&p-Xylene	ND	ppmv	0.0017	1.68		01/11/14 03:28	179601-23-1	
o-Xylene	ND	ppmv	0.00084	1.68		01/11/14 03:28	95-47-6	

Sample: GW-010814-NH-BP R1 INF **Lab ID: 10254346011** Collected: 01/08/14 12:20 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**1.1**	mg/L	0.40	1	01/10/14 08:33	01/13/14 17:17	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 17:17	64742-65-0	
Surrogates								
o-Terphenyl (S)	74	%.	30-125	1	01/10/14 08:33	01/13/14 17:17	84-15-1	
n-Triacontane (S)	94	%.	30-125	1	01/10/14 08:33	01/13/14 17:17	638-68-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Sample: GW-010814-NH-BP R1 INF **Lab ID: 10254346011** Collected: 01/08/14 12:20 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**4060**	ug/L	200	2		01/13/14 00:14		
Surrogates								
a,a,a-Trifluorotoluene (S)	113	%.	70-125	2		01/13/14 00:14	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**1800**	ug/L	10.0	10		01/13/14 17:00	71-43-2	
Ethylbenzene	**523**	ug/L	10.0	10		01/13/14 17:00	100-41-4	
Toluene	**17.7**	ug/L	10.0	10		01/13/14 17:00	108-88-3	
Xylene (Total)	ND	ug/L	30.0	10		01/13/14 17:00	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%.	75-125	10		01/13/14 17:00	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	10		01/13/14 17:00	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	10		01/13/14 17:00	460-00-4	

Sample: GW-010814-NH-BP R2 INF **Lab ID: 10254346012** Collected: 01/08/14 12:30 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 17:40	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 17:40	64742-65-0	
Surrogates								
o-Terphenyl (S)	0	%.	30-125	1	01/10/14 08:33	01/13/14 17:40	84-15-1	1M,S0
n-Triacontane (S)	98	%.	30-125	1	01/10/14 08:33	01/13/14 17:40	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**878**	ug/L	200	2		01/13/14 00:34		
Surrogates								
a,a,a-Trifluorotoluene (S)	94	%.	70-125	2		01/13/14 00:34	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**129**	ug/L	1.0	1		01/15/14 14:09	71-43-2	
Ethylbenzene	**71.7**	ug/L	1.0	1		01/15/14 14:09	100-41-4	
Toluene	ND	ug/L	1.0	1		01/15/14 14:09	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		01/15/14 14:09	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%.	75-125	1		01/15/14 14:09	17060-07-0	
Toluene-d8 (S)	101	%.	75-125	1		01/15/14 14:09	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125	1		01/15/14 14:09	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Sample: GW-010814-NH-BP TOTAL INF **Lab ID: 10254346013** Collected: 01/08/14 12:45 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	**0.80**	mg/L	0.40	1	01/10/14 08:33	01/13/14 19:11	68334-30-5	
Motor Oil Range SG	**0.46**	mg/L	0.40	1	01/10/14 08:33	01/13/14 19:11	64742-65-0	
Surrogates								
o-Terphenyl (S)	77	%.	30-125	1	01/10/14 08:33	01/13/14 19:11	84-15-1	
n-Triacontane (S)	89	%.	30-125	1	01/10/14 08:33	01/13/14 19:11	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	**2300**	ug/L	200	2		01/13/14 01:14		
Surrogates								
a,a,a-Trifluorotoluene (S)	100	%.	70-125	2		01/13/14 01:14	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**904**	ug/L	10.0	10		01/13/14 17:15	71-43-2	
Ethylbenzene	**274**	ug/L	10.0	10		01/13/14 17:15	100-41-4	
Toluene	ND	ug/L	10.0	10		01/13/14 17:15	108-88-3	
Xylene (Total)	ND	ug/L	30.0	10		01/13/14 17:15	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%.	75-125	10		01/13/14 17:15	17060-07-0	
Toluene-d8 (S)	98	%.	75-125	10		01/13/14 17:15	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125	10		01/13/14 17:15	460-00-4	

Sample: GW-010814-NH-BP TOTAL EFF **Lab ID: 10254346014** Collected: 01/08/14 13:00 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS Silica Gel LV	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Fuel Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 19:34	68334-30-5	
Motor Oil Range SG	ND	mg/L	0.40	1	01/10/14 08:33	01/13/14 19:34	64742-65-0	
Surrogates								
o-Terphenyl (S)	59	%.	30-125	1	01/10/14 08:33	01/13/14 19:34	84-15-1	
n-Triacontane (S)	67	%.	30-125	1	01/10/14 08:33	01/13/14 19:34	638-68-6	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx/8021							
TPH as Gas	ND	ug/L	100	1		01/12/14 22:54		
Surrogates								
a,a,a-Trifluorotoluene (S)	91	%.	70-125	1		01/12/14 22:54	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**3.0**	ug/L	1.0	1		01/13/14 16:31	71-43-2	
Ethylbenzene	**1.2**	ug/L	1.0	1		01/13/14 16:31	100-41-4	
Toluene	ND	ug/L	1.0	1		01/13/14 16:31	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		01/13/14 16:31	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%.	75-125	1		01/13/14 16:31	17060-07-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(612)607-1700

ANALYTICAL RESULTS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Sample: GW-010814-NH-BP TOTAL EFF **Lab ID: 10254346014** Collected: 01/08/14 13:00 Received: 01/08/14 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Surrogates								
Toluene-d8 (S)	98	%.	75-125	1		01/13/14 16:31	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125	1		01/13/14 16:31	460-00-4	

Sample: A-010814-NH-BP AS EFF **Lab ID: 10254346015** Collected: 01/08/14 13:30 Received: 01/08/14 15:00 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO-14M MSV AIR - Ambient	Analytical Method: TO-14M Ambient Air							
Benzene	**0.81**	ppmv	0.034	67.2		01/13/14 03:52	71-43-2	
Ethylbenzene	**0.12**	ppmv	0.034	67.2		01/13/14 03:52	100-41-4	
THC as Gas	**4.8**	ppmv	2.4	67.2		01/13/14 03:52		
Toluene	ND	ppmv	0.034	67.2		01/13/14 03:52	108-88-3	
m&p-Xylene	ND	ppmv	0.067	67.2		01/13/14 03:52	179601-23-1	
o-Xylene	ND	ppmv	0.034	67.2		01/13/14 03:52	95-47-6	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

QC Batch: AIR/19153 Analysis Method: TO-14M Ambient Air
QC Batch Method: TO-14M Ambient Air Analysis Description: TO14 MSV AIR - AMBIENT
Associated Lab Samples: 10254346005, 10254346006, 10254346007, 10254346008, 10254346009, 10254346010

METHOD BLANK: 1606997 Matrix: Air
Associated Lab Samples: 10254346005, 10254346006, 10254346007, 10254346008, 10254346009, 10254346010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ppmv	ND	0.00050	01/10/14 21:40	
Ethylbenzene	ppmv	ND	0.00050	01/10/14 21:40	
m&p-Xylene	ppmv	ND	0.0010	01/10/14 21:40	
o-Xylene	ppmv	ND	0.00050	01/10/14 21:40	
THC as Gas	ppmv	ND	0.035	01/10/14 21:40	
Toluene	ppmv	ND	0.00050	01/10/14 21:40	

LABORATORY CONTROL SAMPLE: 1606998

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ppmv	.01	0.011	108	69-134	
Ethylbenzene	ppmv	.01	0.011	107	73-139	
m&p-Xylene	ppmv	.01	0.011	106	73-139	
o-Xylene	ppmv	.01	0.011	108	71-138	
THC as Gas	ppmv	.72	0.81	112	65-136	
Toluene	ppmv	.01	0.011	111	67-133	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

QC Batch: AIR/19160 — Analysis Method: TO-14M Ambient Air
QC Batch Method: TO-14M Ambient Air — Analysis Description: TO14 MSV AIR - AMBIENT
Associated Lab Samples: 10254346015

METHOD BLANK: 1607372 — Matrix: Air
Associated Lab Samples: 10254346015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ppmv	ND	0.00050	01/12/14 16:03	
Ethylbenzene	ppmv	ND	0.00050	01/12/14 16:03	
m&p-Xylene	ppmv	ND	0.0010	01/12/14 16:03	
o-Xylene	ppmv	ND	0.00050	01/12/14 16:03	
THC as Gas	ppmv	ND	0.035	01/12/14 16:03	
Toluene	ppmv	ND	0.00050	01/12/14 16:03	

LABORATORY CONTROL SAMPLE: 1607373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ppmv	1.1	0.011	1	69-134	
Ethylbenzene	ppmv	.99	0.011	1	73-139	
m&p-Xylene	ppmv	2	0.011	.5	73-139	
o-Xylene	ppmv	.93	0.011	1	71-138	
THC as Gas	ppmv	72	0.77	1	65-136	
Toluene	ppmv	1	0.012	1	67-133	

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QUALITY CONTROL DATA

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

QC Batch: GCV/11576 Analysis Method: NWTPH-Gx/8021
QC Batch Method: NWTPH-Gx/8021 Analysis Description: NWTPH-Gx/8021B Water
Associated Lab Samples: 10254346001, 10254346002, 10254346003, 10254346004, 10254346011, 10254346012, 10254346013, 10254346014

METHOD BLANK: 1606877 Matrix: Water
Associated Lab Samples: 10254346001, 10254346002, 10254346003, 10254346004, 10254346011, 10254346012, 10254346013, 10254346014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	ND	100	01/12/14 21:33	
a,a,a-Trifluorotoluene (S)	%.	96	70-125	01/12/14 21:33	

LABORATORY CONTROL SAMPLE & LCSD: 1606878 1606879

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	945	919	95	92	75-125	3	20	
a,a,a-Trifluorotoluene (S)	%.				100	97	70-125			

MATRIX SPIKE SAMPLE: 1609460

Parameter	Units	10254346004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
TPH as Gas	ug/L	ND	1000	971	97	52-150	
a,a,a-Trifluorotoluene (S)	%.				108	70-125	

SAMPLE DUPLICATE: 1609461

Parameter	Units	10254346012 Result	Dup Result	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	878	720	20	30	
a,a,a-Trifluorotoluene (S)	%.	94	100	6		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

QC Batch: MSV/26115 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10254346002, 10254346003, 10254346004, 10254346011, 10254346013, 10254346014

METHOD BLANK: 1607584 Matrix: Water
Associated Lab Samples: 10254346002, 10254346003, 10254346004, 10254346011, 10254346013, 10254346014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	01/13/14 11:33	
Ethylbenzene	ug/L	ND	1.0	01/13/14 11:33	
Toluene	ug/L	ND	1.0	01/13/14 11:33	
Xylene (Total)	ug/L	ND	3.0	01/13/14 11:33	
1,2-Dichloroethane-d4 (S)	%.	95	75-125	01/13/14 11:33	
4-Bromofluorobenzene (S)	%.	102	75-125	01/13/14 11:33	
Toluene-d8 (S)	%.	99	75-125	01/13/14 11:33	

LABORATORY CONTROL SAMPLE: 1607585

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.5	92	75-125	
Ethylbenzene	ug/L	20	18.0	90	75-125	
Toluene	ug/L	20	18.3	92	75-125	
Xylene (Total)	ug/L	60	54.9	91	75-125	
1,2-Dichloroethane-d4 (S)	%.			96	75-125	
4-Bromofluorobenzene (S)	%.			100	75-125	
Toluene-d8 (S)	%.			99	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1607739 1607740

Parameter	Units	10254574003 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	100	100	94.3	104	94	104	75-129	10	30	
Ethylbenzene	ug/L	ND	100	100	89.1	101	89	101	75-128	13	30	
Toluene	ug/L	ND	100	100	90.0	101	90	101	75-129	12	30	
Xylene (Total)	ug/L	ND	300	300	271	307	90	102	75-129	12	30	
1,2-Dichloroethane-d4 (S)	%.						96	95	75-125			
4-Bromofluorobenzene (S)	%.						99	100	75-125			
Toluene-d8 (S)	%.						100	100	75-125			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

QC Batch: MSV/26126 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10254346001, 10254346012

METHOD BLANK: 1608244 Matrix: Water
Associated Lab Samples: 10254346001, 10254346012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	01/15/14 10:27	
Ethylbenzene	ug/L	ND	1.0	01/15/14 10:27	
Toluene	ug/L	ND	1.0	01/15/14 10:27	
Xylene (Total)	ug/L	ND	3.0	01/15/14 10:27	
1,2-Dichloroethane-d4 (S)	%.	97	75-125	01/15/14 10:27	
4-Bromofluorobenzene (S)	%.	100	75-125	01/15/14 10:27	
Toluene-d8 (S)	%.	99	75-125	01/15/14 10:27	

LABORATORY CONTROL SAMPLE: 1608245

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.4	92	75-125	
Ethylbenzene	ug/L	20	20.0	100	75-125	
Toluene	ug/L	20	19.3	97	75-125	
Xylene (Total)	ug/L	60	58.9	98	75-125	
1,2-Dichloroethane-d4 (S)	%.			98	75-125	
4-Bromofluorobenzene (S)	%.			98	75-125	
Toluene-d8 (S)	%.			102	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1609357 1609358

Parameter	Units	10254890003 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	100	100	91.5	86.8	91	87	75-129	5	30	
Ethylbenzene	ug/L	ND	100	100	97.1	93.1	97	93	75-128	4	30	
Toluene	ug/L	ND	100	100	95.1	91.2	95	91	75-129	4	30	
Xylene (Total)	ug/L	ND	300	300	295	275	98	92	75-129	7	30	
1,2-Dichloroethane-d4 (S)	%.						99	100	75-125			
4-Bromofluorobenzene (S)	%.						100	99	75-125			
Toluene-d8 (S)	%.						101	102	75-125			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

QC Batch: OEXT/24104 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3510 Analysis Description: NWTPH-Dx GCS LV SG
Associated Lab Samples: 10254346001, 10254346002, 10254346003, 10254346004, 10254346011, 10254346012, 10254346013, 10254346014

METHOD BLANK: 1606608 Matrix: Water
Associated Lab Samples: 10254346001, 10254346002, 10254346003, 10254346004, 10254346011, 10254346012, 10254346013, 10254346014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Fuel Range SG	mg/L	ND	0.40	01/13/14 14:15	
Motor Oil Range SG	mg/L	ND	0.40	01/13/14 14:15	
n-Triacontane (S)	%.	80	30-125	01/13/14 14:15	
o-Terphenyl (S)	%.	65	30-125	01/13/14 14:15	

LABORATORY CONTROL SAMPLE & LCSD: 1606609 1606610

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	2	1.9	1.7	95	83	50-150	14	20	
Motor Oil Range SG	mg/L	2	1.9	1.7	97	85	50-150	13	20	
n-Triacontane (S)	%.				92	87	30-125			
o-Terphenyl (S)	%.				74	76	30-125			

SAMPLE DUPLICATE: 1606611

Parameter	Units	10254346001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Fuel Range SG	mg/L	1.2	1.1	14	30	
Motor Oil Range SG	mg/L	ND	0.48		30	
n-Triacontane (S)	%.	79	56	35		
o-Terphenyl (S)	%.	66	48	33		

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

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.

PRL - Pace Reporting 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.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

SAMPLE QUALIFIERS

Sample: 10254346015

[1]	This result is reported from a serial dilution.

ANALYTE QUALIFIERS

1M	Prep analyst missed o-Terphenyl spike. Ok to report per client.
S0	Surrogate recovery outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Jan 2014 O&M Compliance 070496
Pace Project No.: 10254346

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10254346005	**a-010814-NH-SVE INF**	TO-14M Ambient Air	AIR/19153		
10254346006	**a-010814-NH-AS EFF**	TO-14M Ambient Air	AIR/19153		
10254346007	**a-010814-NH-TOTAL INF**	TO-14M Ambient Air	AIR/19153		
10254346008	**a-010814-NH-MID CARBON 1**	TO-14M Ambient Air	AIR/19153		
10254346009	**a-010814-NH-MID CARBON 2**	TO-14M Ambient Air	AIR/19153		
10254346010	**a-010814-NH-TOTAL EFF**	TO-14M Ambient Air	AIR/19153		
10254346015	**A-010814-NH-BP AS EFF**	TO-14M Ambient Air	AIR/19160		
10254346001	**GW-010814-NH-TOTAL INF**	EPA 3510	OEXT/24104	NWTPH-Dx	GCSV/12687
10254346002	**GW-010814-NH-AS EFF**	EPA 3510	OEXT/24104	NWTPH-Dx	GCSV/12687
10254346003	**GW-010814-NH-MID CARBON**	EPA 3510	OEXT/24104	NWTPH-Dx	GCSV/12687
10254346004	**GW-010814-NH-TOTAL EFF**	EPA 3510	OEXT/24104	NWTPH-Dx	GCSV/12687
10254346011	**GW-010814-NH-BP R1 INF**	EPA 3510	OEXT/24104	NWTPH-Dx	GCSV/12687
10254346012	**GW-010814-NH-BP R2 INF**	EPA 3510	OEXT/24104	NWTPH-Dx	GCSV/12687
10254346013	**GW-010814-NH-BP TOTAL INF**	EPA 3510	OEXT/24104	NWTPH-Dx	GCSV/12687
10254346014	**GW-010814-NH-BP TOTAL EFF**	EPA 3510	OEXT/24104	NWTPH-Dx	GCSV/12687
10254346001	**GW-010814-NH-TOTAL INF**	NWTPH-Gx/8021	GCV/11576		
10254346002	**GW-010814-NH-AS EFF**	NWTPH-Gx/8021	GCV/11576		
10254346003	**GW-010814-NH-MID CARBON**	NWTPH-Gx/8021	GCV/11576		
10254346004	**GW-010814-NH-TOTAL EFF**	NWTPH-Gx/8021	GCV/11576		
10254346011	**GW-010814-NH-BP R1 INF**	NWTPH-Gx/8021	GCV/11576		
10254346012	**GW-010814-NH-BP R2 INF**	NWTPH-Gx/8021	GCV/11576		
10254346013	**GW-010814-NH-BP TOTAL INF**	NWTPH-Gx/8021	GCV/11576		
10254346014	**GW-010814-NH-BP TOTAL EFF**	NWTPH-Gx/8021	GCV/11576		
10254346001	**GW-010814-NH-TOTAL INF**	EPA 8260	MSV/26126		
10254346002	**GW-010814-NH-AS EFF**	EPA 8260	MSV/26115		
10254346003	**GW-010814-NH-MID CARBON**	EPA 8260	MSV/26115		
10254346004	**GW-010814-NH-TOTAL EFF**	EPA 8260	MSV/26115		
10254346011	**GW-010814-NH-BP R1 INF**	EPA 8260	MSV/26115		
10254346012	**GW-010814-NH-BP R2 INF**	EPA 8260	MSV/26126		
10254346013	**GW-010814-NH-BP TOTAL INF**	EPA 8260	MSV/26115		
10254346014	**GW-010814-NH-BP TOTAL EFF**	EPA 8260	MSV/26115		

CHAIN OF CUSTODY RECORD

CONESTOGA-ROVERS & ASSOCIATES

Address: 737 BROADWAY, TACOMA, WA. 98402
Phone: 253.573.1218 Fax: 253.573.1667

COC NO.: 33713
PAGE 1 OF 1
(See Reverse Side for Instructions)

10254346

Project No/ Phase/Task Code: 070496-2RM00	Laboratory Name: PACE
Project Name: P66 - RENTON TERMINAL	Lab Contact: J. GROSS
Project Location: RENTON, WA.	Lab Location: SEATTLE, WA.
Chemistry Contact: M. DAVIS / J. CLOND	Lab Quote No:
Sampler(s): N. LINSPERGER	SSOW ID: / Cooler No: / Carrier: / Airbill No: / Date Shipped:

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	AWSTPH DX	AWSTPH GX	BTEX 8260	BTEX 76-14	MS/MSD Request	Comments/ Special Instructions:
1	GW-010814-NH-TOTAL INF	01/08/14	915	WG	G		X							8	X	X	X			001
2	GW-010814-NH-AS EFF	01/08/14	1045	WG	G		X							8	X	X	X			002
3	GW-010814-NH-MID CARBON	01/08/14	1100	WG	G		X							8	X	X	X			003
4	GW-010814-NH-TOTAL EFF	01/08/14	1120	WG	G		X							8	X	X	X			004
5	a-010814-NH-SVE INF	01/08/14	1130	A	G									1				X		005
6	a-010814-NH-AS EFF	01/08/14	1140	A	G									1				X		006
7	a-010814-NH-TOTAL INF	01/08/14	1150	A	G									1				X		007
8	a-010814-NH-MID CARBON1	01/08/14	1200	A	G									1				X		008
9	a-010814-NH-MID CARBON2	01/08/14	1205	A	G									1				X		009
10	a-010814-NH-TOTAL EFF	01/08/14	1210	A	G									1				X		010
11	GW-010814-NH-BP R1 INF	01/08/14	1220	WG	G		X							8	X	X	X			011
12	GW-010814-NH-BP R2 INF	01/08/14	1230	WG	G		X							8	X	X	X			012
13	GW-010814-NH-BP TOTAL INF	01/08/14	1245	WG	G		X							8	X	X	X			013
14	GW-010814-NH-BP TOTAL EFF	01/08/14	1300	WG	G		X							8	X	X	X			014
15	a-010814-NH-BP AS EFF	01/08/14	1330	A	G									1				X		015

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: STANDARD

Total Number of Containers: 71

All Samples in Cooler must be on COC

Notes/ Special Requirements:
T = 1.6, 1.0

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	01/08/14	1430	1.	PACE	1/9/14	1500
2.				2.	Pace	1/9/14	1055
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Temp: 4.9, 3.9

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-168 (20120901)

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 07Nov2013 Page 1 of 1
	Document No.: F-MN-L-213-rev.08	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: ERA

Project #: WO#: 10254346

10254346

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

Tracking Number: 7975 8937 3920 8045 4560 7832

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☑ Other: ZPLC Temp Blank? ☑ Yes ☐ No

Thermom. Used: ☐ 80512447 ☐ 72337080 ☑ B88A912167504 ☐ B88A9132521491 Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 1.4, 1.8 Cooler Temp Corrected (°C): 1.6, 1.0 Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Temp should be above freezing to 6°C Correction Factor: +0.2 Date and Initials of Person Examining Contents: 1/9/14 AM

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	☑ Yes	☐ No	☐ N/A	12.
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☐ Yes	☐ No	☑ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water) DOC	☑ Yes	☐ No		Initial when completed: AA Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☑ No	☐ N/A	14.
Trip Blank Present?	☐ Yes	☑ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☑ No	☐ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: JENNA GROSS Date: 1/9/14

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

Pace Analytical	Document Name: Air Sample Condition Upon Receipt	Document Revised: 19Sep2013 Page 1 of 1
	Document No.: F-MN-A-106-rev.08	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt

Client Name: Pace, WA

Project #: WO# : 10254346

10254346

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

Tracking Number: 7975 8937 3942

Custody Seal on Cooler/Box Present? ☐Yes ☑No **Seals Intact?** ☐Yes ☐No

Optional: Proj. Due Date: Proj. Name:

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

Temp. (TO17 and TO13 samples only) (°C): — **Corrected Temp (°C):** —

Thermom. Used: ☐B88A912167504 ☐B88A9132521491 ☐72387880 ☐80512447

Temp should be above freezing to 6°C **Correction Factor:** —

Date & Initials of Person Examining Contents: 1-

Comments:

Chain of Custody Present?	☑Yes	☐No	☑N/A	1. CW 1-9-13
Chain of Custody Filled Out?	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished?	☑Yes	☐No	☐N/A	3.
Sampler Name and/or Signature on COC?	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time?	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72 hr)?	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested?	☐Yes	☑No	☐N/A	7.
Sufficient Volume?	☑Yes	☐No	☐N/A	8.
Correct Containers Used?	☑Yes	☐No	☐N/A	9.
-Pace Containers Used?	☑Yes	☐No	☐N/A	
Containers Intact?	☑Yes	☐No	☐N/A	10.
Media: Air Can				11.
Sample Labels Match COC?	☐Yes	☐No	☐N/A	12.

Samples Received: 7 Air Cans, 7 Air Bags

Canisters		Flow Controllers		Stand Alone G	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
10104-NH-Mid	1153				
" Total Eff	1009				
" BP ASEF	1314				
" AS Eff	2441				
" Mid Carbon 1	2615				
" Total INF	2072				
" SVE INF	1332				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: ERIN GROSS **Date:** 1/9/14

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