

**REMEDIATION STATUS REPORT - FOURTH QUARTER 2016**  
**DEFENSE FUEL SUPPORT POINT NORWALK**  
**15306 Norwalk Boulevard**  
**Norwalk, California**

091-NDLA-018

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## LIST OF ACRONYMS

DLA	Defense Logistics Agency Installation Support for Energy
SGI	The Source Group, Inc.
DFSP	Defense Fuel Support Point
LARWQCB	California Regional Water Quality Control Board, Los Angeles Region
JP-5	Jet Propellant Number 5
BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes
MTBE	Methyl tertiary-Butyl Ether
TBA	Tertiary-Butyl alcohol
SFPP	Santa Fe Pacific Pipelines Partners, L.P.
SVE	Soil Vapor Extraction
GWE	Groundwater Extraction
LNAPL	Light Non-Aqueous Phase Liquid
VES	Vapor Extraction System
GWETS	Groundwater Extraction and Treatment System
GAC	Granular Activated Carbon
VOCs	Volatile Organic Compounds
SCAQMD	South Coast Air Quality Management District
NPDES	National Pollutant Discharge Elimination System
OM&M	Operations, Maintenance, and Monitoring
ELAP	Environmental Laboratory Accreditation Program
TPH	Total Petroleum Hydrocarbons
EPA	United States Environmental Protection Agency
TPHg	Total Petroleum Hydrocarbons Quantified as Gasoline
TPHd	Total Petroleum Hydrocarbons Quantified as Diesel
SM	Standard Method
MBAS	Methylene Blue Active Substances
BOD	Biological Oxygen Demand
DTP	Depth to Product
DTW	Depth to Groundwater
TOC	Top of Casing
gpm	Gallons per Minute
OVA	Organic Vapor Analyzer

## 1.0 INTRODUCTION

On behalf of our client, Defense Logistics Agency Installation Support for Energy (DLA), The Source Group, Inc. (SGI) presents this report to summarize remediation system operations during this reporting period for the Defense Fuel Support Point (DFSP) Norwalk facility, located at 15306 Norwalk Boulevard, Norwalk, California (Site, Figures 1 and 2).

This report is submitted pursuant to a request from the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) in a letter dated May 3, 2013.

### 1.1 Contaminants of Concern

Soil and groundwater at the areas of concern are impacted with hydrocarbons consisting primarily of jet propellant number 5 (JP-5); diesel; benzene, toluene, ethylbenzene, and total xylenes (collectively, BTEX), methyl tertiary-butyl ether (MTBE), and tertiary-butyl alcohol (TBA). MTBE and TBA are interpreted to have resulted from Santa Fe Pacific Pipelines Partners, L.P. (SFPP) operations, and remediation of these impacts is being addressed by SFPP. Various remediation technologies have been implemented at the Site to treat the hydrocarbon impacts in soil and groundwater. The purposes of these technologies are to reduce hydrocarbon concentrations to cleanup goals, prevent off-site migration, contain contaminant mass, and ultimately achieve Site closure within a reasonable timeframe.

The impacted areas consist of the north-central former tank farm, the northeastern property boundary, off-site Holifield Park area, the northwest corner of the Site, and the former water tank and truck fueling areas.

### 1.2 Remediation Technologies

Remediation technologies utilized at the Site include soil vapor extraction (SVE), groundwater extraction (GWE), biosparging, and light non-aqueous phase liquid (LNAPL) removal via manual bailing, vacuum truck, passive skimming, active pumping using a portable skimming pump and absorbent socks. The aboveground treatment of contaminated vadose zone soils excavated at the Site has also been conducted since April 2015, and an automated product recovery system was most recently brought online (startup occurred on August 8, 2016) following the completion of installation and permitting work during the previous reporting period. A summary of Site remediation wells, including well identification, well construction information, well function, and operational status, is presented in Table 1. The soil and groundwater remediation system layout (well and piping locations) is presented in Figure 2.

#### 1.2.1 Soil Vapor Extraction System

The SVE well network for hydrocarbon extraction from vadose zone subsurface impacts historically includes wells installed in the following areas as illustrated on Figure 2: former above ground storage tank (AST) basin 80001 (VEW-23), former AST basins 80006 and 80007 (VEW-20, VEW-

21, VEW-22, HW-1, and HW-3), former AST basin 80008 (VEW-24, VEW-25, VEW-26, VEW-27, HW-5, and HW-7), former AST basin 55004 (VEW-28, VEW-29, and VEW-30), eastern boundary area (VEW-32, VEW-33, VEW-34, VEW-35, VEW-36, and VEW-37), former water tank area (VEW-31), and former truck fueling area (VW-07, VW-09, VW-10, VW-11, VW-12, VW-13, VW-14, VW-15, and VW-16).

The soil vapor extraction system (VES) utilizes a blower to remove soil vapors from the subsurface. The extracted vapors are then conveyed through a knockout tank that separates entrained moisture from the soil vapors. Accumulated moisture in the knockout tank is treated by the groundwater extraction and treatment system (GWETS), as described in the following section.

Following the knockout tank, the soil vapors are treated through four granular activated carbon (GAC) vessels where volatile organic compounds (VOCs) are adsorbed onto the GAC within the vessels. The primary and secondary GAC vessels, each 5,000 pounds, are installed in series with each other, and are followed by a pair of tertiary vessels, each 2,000 pounds, installed in parallel. Operation of the VES is conducted in accordance with South Coast Air Quality Management District (SCAQMD) Permit to Construct A/N 568793, formerly Permit to Operate G12863, A/N 518989. The new Permit to Construct was issued on March 6, 2015 to reflect the addition of on-site, aboveground soil treatment activities. Active SVE wells are identified in Section 3.1 and Tables 3a through 3c.

### **1.2.2 Groundwater Extraction and Treatment System**

The GWE well network for hydrocarbon extraction from dissolved-phase subsurface impacts historically includes wells installed in the northwestern area (GW-2 and GW-13), central tank farm area (GW-14), and eastern boundary area (GW-15, GW-16, and GMW-58). The GWETS utilizes electric pumps in each of the GWE wells to pump groundwater into a shared surge tank. Groundwater is transferred via a pump from the surge tank through three bag filter vessels in series (BF1, BF2, and BF3), two MYCELX vessels in series (MX-7 and MX-21), three GAC vessels in series (2,000 pound GAC-1, 2,000 pound GAC-2, and 1,500 pound GAC-3) and a minimum of two ion exchange vessels (for arsenic treatment) in series prior to being discharged to the storm drain.

Operation of the GWETS is conducted in accordance with National Pollutant Discharge Elimination System (NPDES) permit CAG994004, CI No. 7585 and SCAQMD Permit to Operate G6962, A/N 501180. Active GWE wells are identified in Section 3.2 and Tables 2a through 2c.

### **1.2.3 Biosparge System**

The biosparge wells for hydrocarbon removal from dissolved-phase subsurface impacts are located in areas throughout the former tank farm and eastern boundary of the Site. The biosparge system is currently off-line due to ongoing soil cleanup activities.

#### **1.2.4 LNAPL Removal**

LNAPL wells are gauged periodically and product removal is conducted based on the measured LNAPL thickness in each target well. LNAPL removal wells are identified in Sections 3.3 and 3.4, and Tables 8a through 8m.

#### **1.2.5 Aboveground Soil Treatment**

Per SGI's *Remediation Status Report – First Quarter 2015*, dated May 1, 2015, the excavation of contaminated vadose zone soils at the Site began during January 2015 and was largely completed during the current reporting period with only some limited additional cross-trenching and excavation work planned for next quarter. Ongoing treatment is achieved via the construction of soil biopiles that are connected to the SVE system for SCAQMD permit compliance purposes. From January 2015 through December 2016, a total estimated volume of 66,095 cubic yards of petroleum hydrocarbon contaminated soil was excavated at the Site to depths up to 35 feet below grade surface. The goal of this remediation is to cleanup source area soils that contribute to the degradation of groundwater, and to ready the real property of the Site for eventual conveyance.

## 2.0 OPERATIONS, MAINTENANCE AND MONITORING

Operations, Maintenance, and Monitoring (OM&M) of the remediation systems included the following tasks:

- Performed weekly maintenance and monitoring of the VES and GWETS during operation;
- Collected and analyzed VES influent and effluent vapor samples;
- Collected and analyzed GWETS influent and effluent groundwater samples;
- Monitored aboveground soil treatment piles; and
- Regularly gauged wells connected to the product recovery system and adjusted pump cycle durations and frequencies accordingly to optimize LNAPL removal.

Remediation system inspections were performed on a minimum weekly basis during operation. For these inspections, vapor flow rate, vacuum, volumes of extracted groundwater and product, hours of operation, and other system parameters were recorded during system operation.

### 2.1 Soil Vapor Extraction System

The VES operated throughout the majority of the reporting period except for some brief off-line periods in early November and December 2016 to conduct carbon change out work and/or system maintenance activities. System OM&M details and performance results for the reporting period are summarized in Tables 3a, 3b and 3c.

Compliance and/or performance soil vapor samples from the VES were collected during the reporting period on October 12, November 1, and December 5, 2016. The vapor samples were delivered to American Analytics, Inc. of Chatsworth, California (American) for analysis. American is a laboratory certified by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP).

The vapor samples were analyzed for the following:

- Total petroleum hydrocarbons (TPH) quantified as hexane using United States Environmental Protection Agency (EPA) Method 8015;
- BTEX and MTBE using EPA Method 8260B; and
- TPH quantified as gasoline (TPHg) using EPA Method 8015.

A historical summary of influent vapor analytical sample results is provided in Table 4. The laboratory analytical reports and chain-of-custody documents for these samples are included in Appendix A.



## 2.2 Groundwater Extraction and Treatment System

The GWETS was off-line from the beginning of the reporting period (manually shutdown on September 26, 2016) until October 12, 2016 to conduct semi-annual groundwater monitoring and sampling activities. The GWETS operated from October 12, 2016 until November 7, 2016 when the system was manually shutdown due to a discharge permit limit exceedance for acute toxicity which was subsequently determined to have resulted from either analytical test method variability or some other laboratory related false positive. System operations resumed on November 23, 2016 in accordance with discharge permit requirements and continued through the end of the reporting period. System OM&M details and performance results for the reporting period are summarized in Tables 2a, 2b and 2c.

Performance and compliance water samples from the GWETS were collected during the reporting period on October 12, November 1, and December 5, 2016. The water samples were delivered to ELAP certified American for analysis.

The water samples were analyzed for the following:

- TPHg and TPH quantified as diesel (TPHd) using EPA Method 8015M;
- VOCs using EPA Method 8260B;
- Metals (arsenic and copper) using EPA Method 6020;
- Oil and grease using Standard Method (SM) 5520 B;
- Turbidity using SM 2130 B;
- Sulfides using SM 4500 S2-D;
- Total dissolved solids using SM 2540 C;
- Total suspended solids using SM 2540 D;
- Settleable Solids using SM 2540 F;
- Methylene blue active substances (MBAS) using SM 5540 C;
- Phenols using EPA Method 420.1;
- Biological oxygen demand (BOD) using SM 5210 B; and
- Acute toxicity using EPA Method 2000.0.

The GWETS effluent groundwater sampling results were provided under separate cover in SGI's *Groundwater Discharge Monitoring Report*, dated October 13, 2016. A historical summary of influent water analytical sample results is provided in Table 5. The laboratory analytical reports and chain-of-custody documents for these samples are included in Appendix A.

### **2.3 LNAPL Removal Via Bailing, Skimming and Absorbent Socks**

Depth to product (DTP) and depth to groundwater (DTW) was measured to the nearest 0.01 foot from the top of the well casing (TOC) using an interface probe in select monitoring wells. LNAPL was removed from select wells via manually bailing, active pumping using a portable product skimmer and by utilizing absorbent socks installed in select wells. Mass and volume removal estimates using these techniques are summarized in Tables 8a through 8g along with associated LNAPL gauging results.

### **2.4 Product Recovery System**

The permitting and installation of the product recovery system was completed on August 8, 2016 at which time full-scale operations commenced. Product recovery system OM&M continued through the current reporting period. Details associated with the OM&M of the automated system are provided in Tables 8h through 8m.

### **2.5 Aboveground Soil Treatment**

Soil biopiles were initially connected to the VES and brought online April 24, 2015 following the completion of aboveground treatment cell construction activities. Biopile OM&M continued throughout the current reporting period. Details associated with the OM&M of the biopiles are provided in Tables 3a through 3c. Further details regarding treatment cell construction and excavated soil cleanup activities are provided in SGI's Quarter 4, 2016 *Waste Discharge Requirements Progress Report*, dated January 15, 2017.

### 3.0 SUMMARY OF REMEDIATION PROGRESS

The following sections describe remedial progress at the Site.

#### 3.1 Soil Vapor Extraction System

During the reporting period, the VES extracted soil vapors from all four horizontal wells that span through the entire former tank farm area (HW-1, HW-3, HW-5 and HW-7), and ex-situ biopiles from ongoing vadose zone soil excavation and treatment activities. The horizontal well valves were set to limit flow and allow for focused extraction from the biopiles in an effort to complete the ex-situ treatment of the remaining constructed cells within the near future. Extraction from other existing vapor extraction wells was not conducted based on field and/or laboratory data presented herein.

The total mass of VOCs removed via SVE during this period (Fourth Quarter 2016) was approximately 1,502 pounds, and an estimated 2,950,084 pounds have been removed since April 1996 (Tables 3a, 3b, and 3c). The total mass removed by SVE does not include the mass removed *in-situ* via biodegradation.

#### 3.2 Groundwater Extraction and Treatment System

During the reporting period, the GWETS extracted groundwater from the northwest (GW-2 and GW-13) and northeast (GW-15 and GW-16) areas of the Site. The total volume of groundwater extracted by the GWETS this quarter was approximately 382,910 gallons, and an estimated 75,844,247 gallons have been extracted since April 1996. Based on the TPHd results for influent water samples and total groundwater extracted, the mass of TPHd removed by GWE this period (Fourth Quarter 2016) was approximately 0.9 pounds (Table 2c), and an estimated 9,944 pounds have been removed since April 1996 (Table 2c).

#### 3.3 LNAPL Removal Via Bailing, Skimming and Absorbent Socks

During the reporting period (Fourth Quarter 2016), DTW and DTP was measured in well GMW-62 located off site in Holifield Park, and wells GMW-7, GMW-68, PZ-3, TF-15, TF-16, TF-18 and TF-19, and recently installed wells RTF-18-N, RTF-18-E, RTF-18-W, RTF-18-NW and RTF-18-NNW (all installed in the vicinity of existing well TF-18 to enhance LNAPL removal in that area). As detailed in the following section (Section 3.4), these recently installed wells were all connected to an automated product recovery system along with well TF-18 during the prior reporting period. For the remaining listed wells, LNAPL was removed via manual bailing, active pumping using a portable product skimmer and/or by utilizing absorbent socks installed in select wells. Approximately 52 gallons (353 pounds) of LNAPL was recovered from the Site this period (Tables 8a through 8g) via these techniques.

### **3.4 Product Recovery System**

The product recovery system began operating on August 8, 2016 following the completion of permitting and installation work. The system consists of four pneumatically activated product removal pumps deployed in key wells located in the north-central portion of the Site. The pumped product is routed to an AST located within the existing treatment compound via double contained conveyance piping for subsequent off-site removal by a licensed transport, recycling and disposal company.

During the current reporting period (Fourth Quarter 2016), a total of approximately 1,958 gallons (13,399 pounds) of LNAPL was pumped from wells TF-18, RTF-18-E., RTF-18-W, RTF-18-NW and RTF-18-NNW. Nearly 90% of this volume was removed from wells TF-18 and RTF-18-NW with well RTF-18-E accounting for most of the remaining product removed by the system this period. Mass and volume removal estimates from these wells along with LNAPL gauging results are summarized in Tables 8h through 8m.

When combined with the product recovery estimate from the preceding section (Section 3.3), a total of approximately 2,010 gallons (13,752 pounds) of LNAPL was removed from the Site during Fourth Quarter 2016, and an estimated 5,123 gallons (35,055 pounds) of LNAPL has been removed since January 2014. The advent of product recovery system operations since August 2016 has thus resulted in the successful removal of over 85% of all the LNAPL recovered from the Site over the last three years.

The waste manifest associated with the product that was removed from storage drums and/or the above ground storage tank this period is provided as Appendix B.

### **3.5 Aboveground Soil Treatment**

A total of two new soil biopiles were brought online during the reporting period and fifteen biopiles were taken off-line by the end of the quarter based on confirmation of treatment to below the SCAQMD permit required limit for active SVE. As of December 31, 2016, just four biopiles from former AST basins 80001 and 80002 were active, and only limited additional cross-trenching and excavation activities in select areas of the Site are planned for next quarter. Upon completion of biological treatment, all remaining soil piles will be properly backfilled and compacted at the Site following confirmation of cleanup via soil sampling and LARWQCB approval to proceed.

## 4.0 SYSTEM EVALUATION AND OPTIMIZATION

Remedial system optimization activities are ongoing at the Site to help ensure effective cleanup operations. For the VES, vapor-phase VOC concentrations from the horizontal wells remained relatively stable this quarter with wells VEW-32 through VEW-37 being left off-line based on continued low/asymptotic field readings (Table 6). Extraction from horizontal wells (i.e., HW-1, HW-3 and HW-5) continued during the reporting period, and well HW-7 was brought back online (closed since April 2015) based on field readings (Table 6). However, flow rates from all of these wells were restricted during the current reporting period in an effort to focus extraction efforts on the remaining soil biopiles and complete ex-situ treatment activities within the near future.

Ex-situ soil biopile VOC concentrations continued to exhibit overall asymptotic/low levels during the reporting period with no dilution air being required to balance the system since late December 2015. This is largely due to the low number of new biopiles that were brought online during the current reporting period as the excavation portion of the project nears completion. As indicated on Tables 3a through 3c, individual well and biopile vapor concentrations were measured with an organic vapor analyzer (OVA) in an effort to optimize system performance. SGI will continue to monitor individual well and biopile influent vapor concentrations, and modify which wells/biopiles are online along with adjusting valve positions, as necessary.

As indicated by the non-detect, stable, or declining dissolved groundwater analytical data from off-site wells (as illustrated in previous semiannual groundwater monitoring reports) and from the previous aquifer pump testing and groundwater capture zone analysis, the current GWETS with wells in the northeast area and northwest corner have been successful in preventing further impacted groundwater from flowing off site and have captured and treated a significant portion of impacted groundwater under Holifield Park and in the northwest corner. The overall area of impacts and plumes were also similar to previous events.

GWE in the northwest and northeast areas will continue to assist with contaminant containment. Additionally, absorbent sock installation and LNAPL recovery via pumping and/or manual bailing will continue along with full-scale OM&M of the product recovery system which began operating during the prior reporting period. The four pneumatically activated product removal pumps associated with this system are rotated to other key wells in the north-central portion of the Site based on current performance and gauging data. Subsequent adjustments to the associated extraction frequency and duration of each pump are then made in an effort to maximize LNAPL yields without isolating a given well from the product plume. Future adjustments will also be made on the basis of recently conducted bail down testing after establishing current transmissivity values which help correlate apparent to actual product thicknesses. Such testing will continue to be conducted on a regular basis, especially as yields decline to the point where limited recovery is occurring from all of the pumping wells. Future pilot testing may also be necessary to evaluate the feasibility of system expansion and/or enhanced recovery technologies to allow for LNAPL removal to the maximum extent practicable.

## 5.0 PLANNED FIRST QUARTER 2017 ACTIVITIES

During the next reporting period, DLA plans to continue to focus in-situ remedial efforts on the northwest, northeast, and north-central areas of the Site along with completing all ex-situ soil treatment activities. Following is a summary of planned First Quarter 2017 OM&M activities:

- Continue weekly maintenance and monitoring of the VES and GWETS;
- Measure individual well vapor concentrations with an OVA;
- Collect individual well vapor samples for laboratory analysis;
- Continue regular LNAPL gauging and removal activities, including wells GWM-7, GWM-62 (located off site in Holifield Park), GMW-68, PZ-3, TF-15, TF-16 and TF-19 along with wells RTF-18-N, RTF-18-E, RTF-18-W, RTF-18-NW and RTF-18-NNW which were recently installed to enhance product removal in the vicinity of existing well TF-18;
- Continue controlled product recovery system OM&M from wells TF-18, RTF-18-N, RTF-18-E, RTF-18-W, RTF-18-NW and/or RTF-18-NNW, located in the north-central portion of the Site, with focused efforts in wells where LNAPL yields are the most significant;
- Collect and analyze SVE and GWE system influent and effluent vapor and groundwater samples;
- Continue to evaluate GWE flow rates and confirm contaminant containment;
- Finish cross trenching activities in select areas of the Site along with any associated limited excavation work required to complete the ex-situ soil treatment project;
- Continue on-site soil treatment of all remaining constructed cells and ex-situ biopile remediation;
- Continue backfilling/compacting appropriate biopiles following confirmation of soil cleanup goals and LARWQCB approval to proceed; and
- Continue to evaluate the re-implementation of the biosparge system upon completion of ex-situ soil cleanup activities.

Ongoing remediation activities and progress will be described in the *First Quarter 2017 Remediation Progress Report* to be submitted by May 15, 2017.

## 6.0 LIMITATIONS

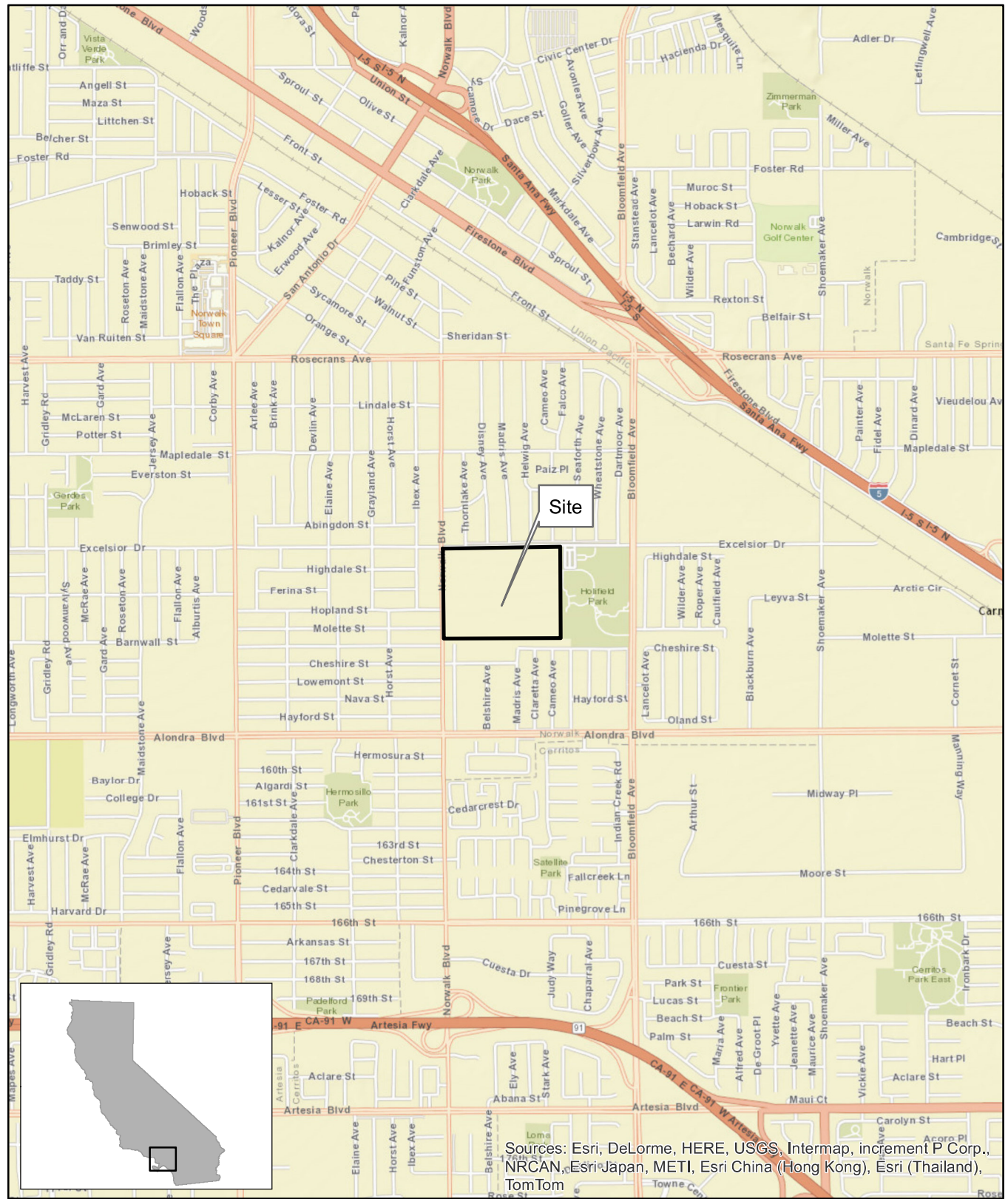
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The presented findings and recommendations in this report are intended to be taken in their entirety to assist DLA and LARWQCB personnel in applying their own professional judgment in making decisions related to the property. SGI cannot provide conclusions on environmental conditions outside the completed scope of work. SGI cannot guarantee that future conditions will not change and affect the validity of the presented conclusions and recommended work. No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, conclusions, and recommendations.

## FIGURES





Sources: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

SOURCE:  
 ESRI 7.5 MINUTE TOPOGRAPHIC MAP.  
<http://resources.esri.com/arcgisonline/services>

PROJECT NO.:  
 04-NDLA-003

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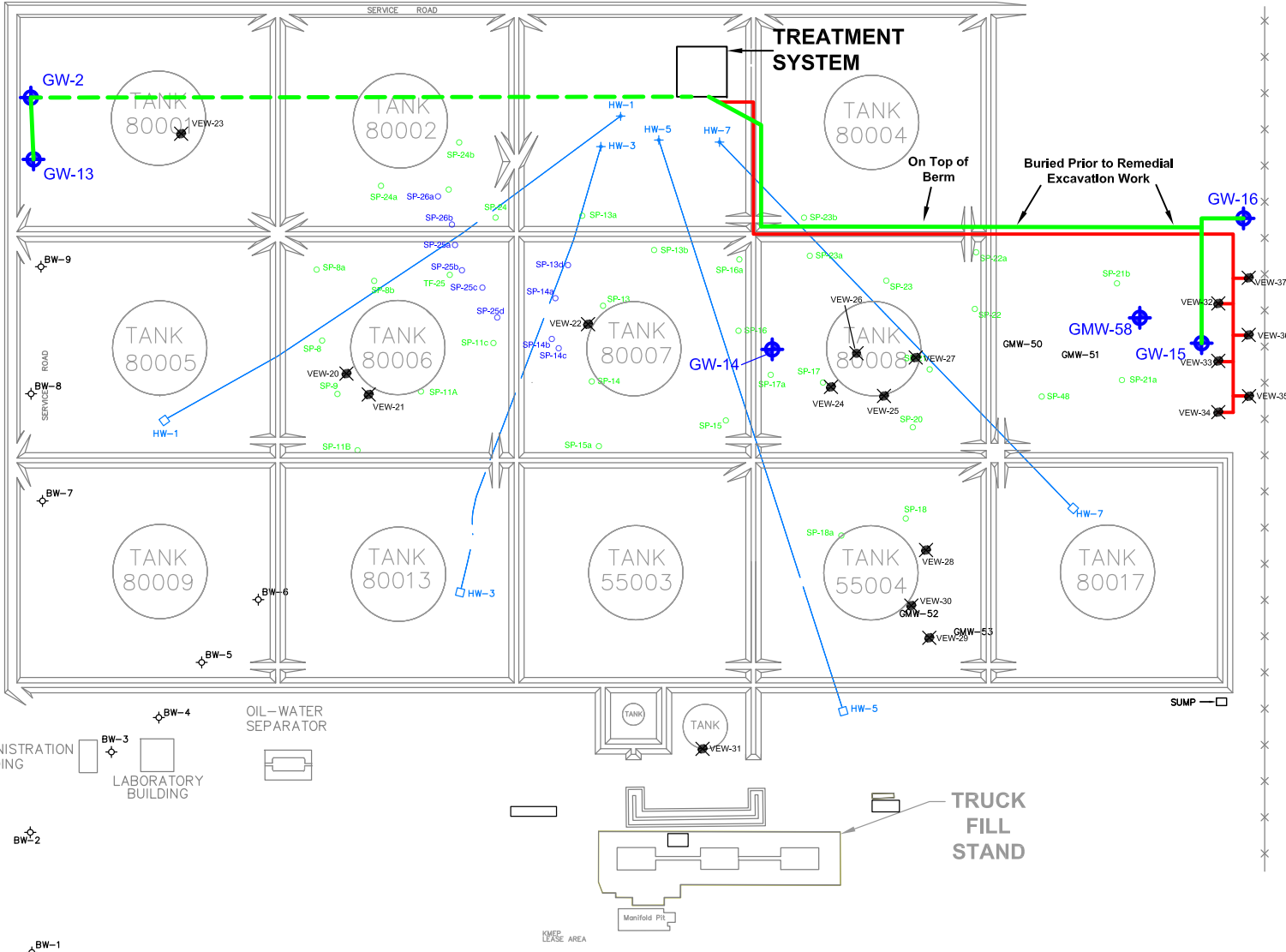
**SGI** THE SOURCE GROUP, INC.  
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 (562) 597-1055

**DEFENSE FUEL SUPPORT POINT  
 NORWALK**  
 15306 NORWALK BOULEVARD  
 NORWALK, CALIFORNIA

**SITE LOCATION MAP**

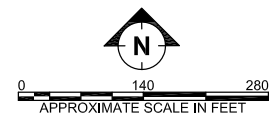
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EXCELSIOR DRIVE



**LEGEND**

- VEW-20 ✖ VAPOR EXTRACTION WELL
- GW-13 ◊ GROUNDWATER EXTRACTION WELL
- BSP-1 ○ BIOSPARGE POINTS
- SP-26a ○ SPARGE POINTS INSTALLED IN AUGUST 2004
- SP-8a ○ TOTAL FLUIDS AND SPARGE POINTS
- ABOVE GRADE GROUNDWATER EXTRACTION SYSTEM PIPING
- - - - - BELOW GRADE GROUNDWATER EXTRACTION SYSTEM PIPING
- ABOVE GRADE VAPOR EXTRACTION SYSTEM PIPING
- HW-7 BELOW GRADE HORIZONTAL VAPOR EXTRACTION SYSTEM PIPING



**SITE MAP SHOWING REMEDIATION WELL AND PIPING LOCATIONS**

DEFENSE FUEL SUPPORT POINT, NORWALK  
15306 NORWALK BOULEVARD  
NORWALK, CALIFORNIA

	DATE	DRAWN BY:	APP. BY:
04-NDLA-007	08/03/2015	S. MCDOWELL	KEN W.

**THE SOURCE GROUP, Inc.**  
environmental  
1962 FREEMAN AVENUE  
SIGNAL HILL, CA 90755

**FIGURE**  
2

## TABLES

**TABLE 1**  
**Remediation Well Construction**  
DFSP, Norwalk  
15306 Norwalk Blvd., Norwalk, CA

Remediation Area	Well	Notes	Installation Date	Casing Elevation (ft msl)	Total Depth (ft bgs)	Screen Interval (ft bgs)	Remediation Well Function
North-West (AST 80001)	GW-1		06/12/95	75.97	63	25 - 60	GWE
	GW-2		06/12/95	75.78	63	25 - 60	GWE
	GW-3		06/13/95	75.79	63	25 - 60	GWE
	GW-4		06/12/95	75.78	63	25 - 60	GWE
	GW-13		04/26/07	76.85	67	25 - 65	GWE
	VEW-23		08/03/04	76.20	25	15 - 25	SVE
North-Central (AST 80002, AST 80004, AST 80006, AST 80007, AST 80008, AST 8001, AST 55004)	HW-1		--	--	25	Continuous	SVE
	HW-3		--	--	25	Continuous	SVE
	HW-5		--	--	25	Continuous	SVE
	HW-7		--	--	25	Continuous	SVE
	GMW-21	1	08/02/91	76.23	50	25 - 50	TFE/GWE
	GW-14		04/26/07	76.54	67	25 - 65	GWE
	SP-8		--	--	50	48 - 50	Biosparge
	SP8a		--	--	50	48 - 50	Biosparge
	SP-8b		--	--	50	48 - 50	Biosparge
	SP-9		--	--	50	48 - 50	Biosparge
	SP-11		--	--	50	48 - 50	Biosparge
	SP-11a		--	--	50	48 - 50	Biosparge
	SP-11b		--	--	50	48 - 50	Biosparge
	SP-11c		--	--	50	48 - 50	Biosparge
	SP-13		--	--	50	48 - 50	Biosparge
	SP-13a		--	--	50	48 - 50	Biosparge
	SP-13b		--	--	50	48 - 50	Biosparge
	SP-13c		--	--	50	48 - 50	Biosparge
	SP-13d		--	--	50	48 - 50	Biosparge
	SP-14		--	--	50	48 - 50	Biosparge
	SP-14a		--	--	50	48 - 50	Biosparge
	SP-14b		--	--	50	48 - 50	Biosparge
	SP-14c		--	--	50	48 - 50	Biosparge
	SP-15		--	--	50	48 - 50	Biosparge
	SP-15a		--	--	50	48 - 50	Biosparge
	SP-16		--	--	50	48 - 50	Biosparge
SP-17		--	--	50	48 - 50	Biosparge	
SP-17a		--	--	50	48 - 50	Biosparge	
SP-18		--	--	50	48 - 50	Biosparge	
SP-18a		--	--	50	48 - 50	Biosparge	
SP-20		--	--	50	48 - 50	Biosparge	
SP-20a		--	--	50	48 - 50	Biosparge	
SP-21		--	--	50	48 - 50	Biosparge	
SP-22		--	--	50	48 - 50	Biosparge	

**TABLE 1**  
**Remediation Well Construction**  
DFSP, Norwalk  
15306 Norwalk Blvd., Norwalk, CA

Remediation Area	Well	Notes	Installation Date	Casing Elevation (ft msl)	Total Depth (ft bgs)	Screen Interval (ft bgs)	Remediation Well Function	
North-Central (AST 80002, AST 80004, AST 80006, AST 80007, AST 80008, AST 8001, AST 55004)	SP-23		--	--	50	48 - 50	Biosparge	
	SP-23a		--	--	50	48 - 50	Biosparge	
	SP-23b		--	--	50	48 - 50	Biosparge	
	SP-23c		--	--	50	48 - 50	Biosparge	
	SP-24		--	--	50	48 - 50	Biosparge	
	SP-24a		--	--	50	48 - 50	Biosparge	
	SP-24b		--	--	50	48 - 50	Biosparge	
	SP-24c		--	--	50	48 - 50	Biosparge	
	SP-25		--	--	50	48 - 50	Biosparge	
	SP-25a		--	--	50	48 - 50	Biosparge	
	SP-25b		--	--	50	48 - 50	Biosparge	
	SP-25c		--	--	50	48 - 50	Biosparge	
	SP-25d		--	--	50	48 - 50	Biosparge	
	SP-26		--	--	50	48 - 50	Biosparge	
	SP-26a		--	--	50	48 - 50	Biosparge	
	TF-8			09/22/95	74.86	63	25 - 60	TFE, GWE
	TF-9			09/22/95	74.47	63	25 - 60	TFE, GWE
	TF-10			09/25/95	73.61	63	25 - 60	TFE, GWE
	TF-11			09/25/95	74.40	63	25 - 60	TFE, GWE
	TF-13			09/26/95	75.47	63	25 - 60	TFE, GWE
	TF-14			09/27/95	74.35	63	25 - 60	TFE, GWE
	TF-15			09/28/95	74.78	63	25 - 60	TFE, GWE
	TF-16			09/28/95	75.89	63	25 - 60	TFE, GWE
	TF-17			09/29/95	74.88	63	25 - 60	TFE, GWE
	TF-18			07/06/94	73.75	50.5	20 - 50	TFE, GWE
	TF-19			10/03/95	75.07	63	25 - 60	TFE, GWE
	TF-20			10/03/95	75.08	63	25 - 60	TFE, GWE
	TF-21			09/29/95	74.96	63	25 - 60	TFE, GWE
	TF-22			10/02/95	74.76	63	25 - 60	TFE, GWE
	TF-23			07/05/94	75.31	50.5	20 - 50	TFE, GWE
	TF-24		2	09/26/95	76.43	63	25 - 60	TFE, GWE
	TF-25			04/04/01	74.85	47	26 - 36	TFE, GWE
	TF-26			04/03/01	75.85	47	26 - 36	TFE, GWE
	VEW-20			08/02/04	75.95	25	15 - 25	SVE
	VEW-21			08/02/04	75.75	25	15 - 25	SVE
	VEW-22			08/02/04	77.09	20	10 - 20	SVE
	VEW-24			08/02/04	76.13	25	15 - 25	SVE
	VEW-25			08/02/04	76.14	25	15 - 25	SVE
	VEW-26			08/04/04	77.50	25	15 - 25	SVE
	VEW-27			08/04/04	77.07	25	15 - 25	SVE
	VEW-28			08/03/04	75.67	25	10 - 25	SVE
	VEW-29			08/03/04	75.25	25	10 - 25	SVE
VEW-30			08/03/04	75.65	25	10 - 25	SVE	
RTF-18-N			12/28/15	75.17	40	25 - 40	TFE, GWE	
RTF-18-E			12/28/15	75.19	40	25 - 40	TFE, GWE	
RTF-18-W			12/28/15	74.86	40	25 - 40	TFE, GWE	
RTF-18-NW			12/29/15	76.22	40	25 - 40	TFE, GWE	
RTF-18-NNW			12/29/15	76.77	40	25 - 40	TFE, GWE	

**TABLE 1**  
**Remediation Well Construction**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Remediation Area	Well	Notes	Installation Date	Casing Elevation (ft msl)	Total Depth (ft bgs)	Screen Interval (ft bgs)	Remediation Well Function
North-East	BSP-1		04/18/07	--	50	47 - 49	Biosparge
	BSP-2		04/18/07	--	50	48 - 50	Biosparge
	BSP-3		04/17/07	--	48	46 - 48	Biosparge
	BSP-4		04/17/07	--	49	47 - 49	Biosparge
	BSP-5		04/17/07	--	49.5	47 - 49	Biosparge
	BSP-6		04/18/07	--	49	47 - 49	Biosparge
	BSP-7		04/19/07	--	48	46 - 48	Biosparge
	BSP-8		04/19/07	--	48	46 - 48	Biosparge
	BSP-9		04/19/07	--	48	46 - 48	Biosparge
	GMW-58		08/14/98	75.48	55	20 - 55	GWE
	GW-15		04/26/07	74.94	60.5	20.5 - 60.6	GWE
	GW-16		07/07/09	76.33	63	20.5 - 60.5	GWE
	SP-21a		--	--	50	48 - 50	Biosparge
	SP-21b		--	--	50	48 - 50	Biosparge
	SP-48		--	--	50	48 - 50	Biosparge
	VEW-32		04/11/07	--	25	10 - 25	SVE
	VEW-33		04/11/07	--	25	10 - 25	SVE
	VEW-34		04/11/07	--	25	10 - 25	SVE
VEW-35		04/10/07	--	25	10 - 25	SVE	
VEW-36		04/10/07	--	25	10 - 25	SVE	
VEW-37		40/10/07	--	25	10 - 25	SVE	
Former Truck Fueling Area and Adjacent Water Tank Area	VEW-31		08/03/04	75.10	15	5 - 15	SVE
	VW-07		--	75.64	--	--	SVE
	VW-09		--	75.77	--	--	SVE
	VW-10		03/23/04	75.78	30.5	20 - 30	SVE
	VW-11		03/23/04	75.55	25	20 - 25	SVE
	VW-12		03/23/04	75.79	30.5	15 - 30	SVE
	VW-13		03/23/04	75.42	29	25 - 29	SVE
	VW-14		03/23/04	75.89	28	15 - 28	SVE
	VW-15		04/14/04	75.45	30	20 - 30	SVE
VW-16		04/14/04	75.29	30	20 - 30	SVE	

**Legend/Notes :**

- ft msl = Feet above mean sea level
- ft bgs = Feet below ground surface
- AST = Aboveground storage tank
- GWE = Groundwater extraction
- SVE = Soil vapor extraction
- TFE = Total fluids extraction
- = Information not available
- 1 = Also referred to as TF-24.
- 2 = Also referred to as "old TF-24" or "former TF-24".

**TABLE 2a**  
**Groundwater Extraction and Treatment System Operations Summary - October**

DFSP, Norwalk  
15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	GW-2 Totalizer Reading (gallons)	GW-13 Totalizer Reading (gallons)	GW-15 Totalizer Reading (gallons)	GW-16 Totalizer Reading (gallons)	Groundwater Extracted from North-East Area (gallons)	Groundwater Extracted from North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed <sup>A</sup> (lb)
10/01/16	Off line	1	772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/02/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/03/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/04/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/05/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/06/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/07/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/08/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/09/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/10/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/11/16	Off line		772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	--	9,943
10/12/16	Technician	2,3	772,573	3,903,274	2,041,678	7,731,911	9,773,589	4,675,847	75,461,337	230	9,943
10/13/16	*		773,971	3,906,920	2,043,531	7,733,291	9,776,822	4,680,891	75,466,751	--	9,943
10/14/16	*		775,369	3,910,566	2,045,383	7,734,671	9,780,054	4,685,935	75,472,165	--	9,943
10/15/16	*		776,766	3,914,213	2,047,236	7,736,051	9,783,287	4,690,979	75,477,578	--	9,943
10/16/16	*		778,164	3,917,859	2,049,088	7,737,431	9,786,519	4,696,023	75,482,992	--	9,943
10/17/16	*		779,562	3,921,505	2,050,941	7,738,811	9,789,752	4,701,067	75,488,406	--	9,943
10/18/16	Technician		781,120	3,925,569	2,053,006	7,740,349	9,793,355	4,706,689	75,494,440	--	9,943
10/19/16	*		781,131	3,925,578	2,053,022	7,740,364	9,793,386	4,706,709	75,494,473	--	9,943
10/20/16	*		781,143	3,925,587	2,053,038	7,740,379	9,793,417	4,706,730	75,494,507	--	9,943
10/21/16	*		781,154	3,925,596	2,053,054	7,740,395	9,793,449	4,706,750	75,494,540	--	9,943
10/22/16	*		781,165	3,925,605	2,053,070	7,740,410	9,793,480	4,706,770	75,494,573	--	9,943
10/23/16	*		781,176	3,925,614	2,053,086	7,740,425	9,793,511	4,706,790	75,494,606	--	9,943
10/24/16	*		781,188	3,925,623	2,053,102	7,740,440	9,793,542	4,706,811	75,494,640	--	9,943
10/25/16	*		781,199	3,925,632	2,053,118	7,740,456	9,793,573	4,706,831	75,494,673	--	9,943
10/26/16	Technician		791,334	3,945,110	2,072,111	7,758,892	9,831,003	4,736,444	75,539,262	--	9,943
10/27/16	*		792,635	3,947,358	2,074,648	7,761,164	9,835,812	4,739,993	75,545,328	--	9,943
10/28/16	*		793,936	3,949,606	2,077,185	7,763,436	9,840,621	4,743,542	75,551,394	--	9,943
10/29/16	*		795,237	3,951,854	2,079,722	7,765,708	9,845,430	4,747,092	75,557,460	--	9,943
10/30/16	*		796,539	3,954,102	2,082,259	7,767,980	9,850,239	4,750,641	75,563,526	--	9,943
10/31/16	*		797,840	3,956,350	2,084,796	7,770,252	9,855,048	4,754,190	75,569,591	--	9,943

**Cumulative Groundwater Discharged by the GWETS to Date (gallons)**

Period	October	Quarter 1, 2016	Quarter 2, 2016	Quarter 3, 2016	Quarter 4, 2016	2016 to Date	April 1996 to Date
<b>Volume</b>	108,254	496,032	407,531	698,046	108,254	1,709,863	75,569,591

**Cumulative Mass DRO Removed by the GWETS <sup>A</sup> (lb)**

Period	October	Quarter 4 to Date	April 1996 to Date
<b>Mass</b>	0.21	0.21	9,943.1

$$Liquid-Phase\ DRO\ Mass\ [lb] = \left( Conc. \left[ \frac{\mu g}{L} \right] \right) \cdot \left( \frac{3.785\ L}{gal} \right) \cdot \left( \frac{1\ g}{1,000,000\ \mu g} \right) \cdot \left( \frac{1\ lb}{453.59\ g} \right) \cdot (Volume\ [gal])$$

**Legend / Notes:**

- 1 = GWETS off-line since 09/26/16 to conduct groundwater monitoring and sampling activities.
- 2 = GWETS restarted following completion of groundwater monitoring and sampling activities.
- 3 = Collected monthly influent, intermediate, and effluent water samples for laboratory analysis.

GWETS = Groundwater extraction and treatment system      lb = Pounds  
 ug/L - Micrograms per liter      DRO = Diesel range organics

<sup>A</sup> = Hydrocarbon removal is calculated using analytical laboratory result for DRO (if not detected, half the detection limit is used) from sample collected on: 10/12/16 (laboratory report attached).

-- = Not applicable

\* = Operational values interpolated from chart recorder data or previous monitoring event.

Groundwater extraction wells on line this month: GW-2, GW-13, GW-15, GW-16

**TABLE 2b**  
**Groundwater Extraction and Treatment System Operations Summary - November**

DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	GW-2 Totalizer Reading (gallons)	GW-13 Totalizer Reading (gallons)	GW-15 Totalizer Reading (gallons)	GW-16 Totalizer Reading (gallons)	Groundwater Extracted from North-East Area (gallons)	Groundwater Extracted from North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed <sup>A</sup> (lb)
11/01/16	Technician	1,2,3,4	0	3,958,177	2,086,857	7,772,098	9,858,955	4,757,074	75,574,520	120	9,943
11/02/16	*		0	3,958,964	2,091,204	7,773,265	9,864,469	4,630,165	75,582,179	--	9,943
11/03/16	*		0	3,959,751	2,095,550	7,774,433	9,869,983	4,503,257	75,589,838	--	9,943
11/04/16	*		0	3,960,538	2,099,897	7,775,600	9,875,498	4,376,348	75,597,497	--	9,943
11/05/16	*		0	3,961,324	2,104,244	7,776,768	9,881,012	4,249,440	75,605,156	--	9,943
11/06/16	*		0	3,962,111	2,108,591	7,777,935	9,886,526	4,122,531	75,612,815	--	9,943
11/07/16	Technician	5	15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/08/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/09/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/10/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/11/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/12/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/13/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/14/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/15/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/16/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/17/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/18/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/19/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/20/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/21/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/22/16	Off line		15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/23/16	Technician	6,7	15,876	3,963,002	2,113,511	7,779,257	9,892,768	3,978,878	75,621,485	--	9,943
11/24/16	*		19,060	3,963,002	2,115,138	7,779,257	9,894,395	3,982,062	75,625,852	--	9,943
11/25/16	*		22,243	3,963,002	2,116,764	7,779,257	9,896,021	3,985,245	75,630,218	--	9,943
11/26/16	*		25,427	3,963,002	2,118,391	7,779,257	9,897,648	3,988,429	75,634,585	--	9,943
11/27/16	*		28,610	3,963,002	2,120,017	7,779,257	9,899,274	3,991,612	75,638,951	--	9,943
11/28/16	Technician	8	31,595	3,963,002	2,121,542	7,779,257	9,900,799	3,994,597	75,643,045	--	9,943
11/29/16	*		33,908	3,963,875	2,121,542	7,779,257	9,900,799	3,997,783	75,647,229	--	9,943
11/30/16	*		36,221	3,964,748	2,121,542	7,779,257	9,900,799	4,000,969	75,651,414	--	9,943

**Cumulative Groundwater Discharged by the GWETS (gallons)**

Period	November	Quarter 1, 2016	Quarter 2, 2016	Quarter 3, 2016	Quarter 4, 2016	2016 to Date	April 1996 to Date
<b>Volume</b>	81,823	496,032	407,531	698,046	190,077	1,791,686	75,651,414

**Cumulative Mass DRO Removed by the GWETS<sup>A</sup> (lb)**

Period	November	Quarter 4 to Date	April 1996 to Date
<b>Mass</b>	0.08	0.29	9,943.2

$$Liquid\text{-Phase DRO Mass [lb]} = \left( Conc. \left[ \frac{\mu g}{L} \right] \right) \cdot \left( \frac{3.785 L}{gal} \right) \cdot \left( \frac{1 g}{1,000,000 \mu g} \right) \cdot \left( \frac{1 lb}{453.59 g} \right) \cdot (Volume [gal])$$

**Legend / Notes:**

- 1 = Collected monthly process, intermediate and effluent water samples for laboratory analysis.
- 2 = Collected annual effluent water samples for laboratory analysis.
- 3 = Measured residual chlorine in the field using HACH Test Kit Model CN-70.
- 4 = GW-2 totalizer replaced.
- 5 = GWETS manually shut down due to annual acute toxicity testing result exceedance (collected confirmation sample for laboratory analysis prior to system shutdown).
- 6 = GWETS restarted based on confirmation acute toxicity testing result and following associated regulatory notifications and NPDES permit required reporting.
- 7 = Manually shutdown GW-13 and GW-16 for pump maintenance.
- 8 = GW-15 manually shut down for pump maintenance and GW-13 brought back online.

GWETS = Groundwater extraction and treatment system  
 ug/L - Micrograms per liter

lb = Pounds  
 DRO = Diesel range organics

A = Hydrocarbon removal is calculated using analytical laboratory result for DRO (if not detected, half the detection limit is used) from sample collected on: 11/01/16 (laboratory report attached).

-- = Not applicable

\* = Operational values interpolated from chart recorder data or previous monitoring event.

Groundwater extraction wells on line this month: GW-2, GW-13, GW-15, GW-16



**TABLE 2c**  
**Groundwater Extraction and Treatment System Operations Summary - December**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	GW-2 Totalizer Reading (gallons)	GW-13 Totalizer Reading (gallons)	GW-15 Totalizer Reading (gallons)	GW-16 Totalizer Reading (gallons)	Groundwater Extracted from North-East Area (gallons)	Groundwater Extracted from North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed <sup>A</sup> (lb)
12/01/16	Technician	1	38,678	3,965,676	2,121,542	7,779,257	9,900,799	4,004,354	75,655,860	--	9,943
12/02/16	*		40,851	3,966,535	2,126,268	7,779,257	9,905,525	4,007,386	75,662,504	--	9,943
12/03/16	*		43,023	3,967,394	2,130,995	7,779,257	9,910,252	4,010,417	75,669,148	--	9,943
12/04/16	*		45,196	3,968,253	2,135,721	7,779,257	9,914,978	4,013,449	75,675,792	--	9,943
12/05/16	Technician	2,3	46,984	3,968,960	2,139,611	7,779,257	9,918,868	4,015,944	75,681,260	450	9,943
12/06/16	*		48,950	3,970,086	2,142,352	7,779,257	9,921,609	4,019,036	75,685,909	--	9,943
12/07/16	*		50,915	3,971,212	2,145,093	7,779,257	9,924,350	4,022,127	75,690,559	--	9,943
12/08/16	*		52,881	3,972,338	2,147,833	7,779,257	9,927,090	4,025,219	75,695,208	--	9,943
12/09/16	*		54,847	3,973,464	2,150,574	7,779,257	9,929,831	4,028,310	75,699,857	--	9,943
12/10/16	*		56,812	3,974,590	2,153,315	7,779,257	9,932,572	4,031,402	75,704,507	--	9,943
12/11/16	*		58,778	3,975,716	2,156,056	7,779,257	9,935,313	4,034,494	75,709,156	--	9,943
12/12/16	Technician		61,160	3,977,080	2,159,377	7,779,257	9,938,634	4,038,240	75,714,790	--	9,943
12/13/16	*		62,874	3,978,615	2,162,775	7,779,257	9,942,032	4,041,489	75,721,914	--	9,943
12/14/16	*		64,587	3,980,151	2,166,173	7,779,257	9,945,430	4,044,738	75,729,038	--	9,943
12/15/16	*		66,301	3,981,686	2,169,571	7,779,257	9,948,828	4,047,987	75,736,162	--	9,943
12/16/16	Technician		67,848	3,983,072	2,172,638	7,779,257	9,951,895	4,050,920	75,742,594	--	9,943
12/17/16	*		68,381	3,986,062	2,176,665	7,779,257	9,955,922	4,054,443	75,749,506	--	9,943
12/18/16	*		68,914	3,989,052	2,180,692	7,779,257	9,959,949	4,057,966	75,756,419	--	9,943
12/19/16	Technician	4	69,384	3,991,689	2,184,244	7,779,257	9,963,501	4,061,073	75,762,515	--	9,944
12/20/16	*		71,107	3,992,446	2,188,346	7,783,224	9,971,570	4,063,553	75,771,303	--	9,944
12/21/16	Technician		73,051	3,993,300	2,192,976	7,787,700	9,980,676	4,066,351	75,781,220	--	9,944
12/22/16	*		74,489	3,994,255	2,195,148	7,791,068	9,986,216	4,068,743	75,787,703	--	9,944
12/23/16	*		75,926	3,995,209	2,197,320	7,794,437	9,991,757	4,071,135	75,794,186	--	9,944
12/24/16	*		77,364	3,996,164	2,199,493	7,797,805	9,997,297	4,073,527	75,800,670	--	9,944
12/25/16	*		78,801	3,997,118	2,201,665	7,801,173	10,002,838	4,075,919	75,807,153	--	9,944
12/26/16	*		80,239	3,998,073	2,203,837	7,804,541	10,008,378	4,078,311	75,813,636	--	9,944
12/27/16	Technician		81,721	3,999,057	2,206,077	7,808,015	10,014,092	4,080,778	75,820,322	--	9,944
12/28/16	*		83,007	3,999,867	2,208,611	7,810,839	10,019,450	4,082,874	75,827,115	--	9,944
12/29/16	*		84,293	4,000,677	2,211,145	7,813,663	10,024,807	4,084,970	75,833,908	--	9,944
12/30/16	Technician		85,298	4,001,310	2,213,124	7,815,869	10,028,993	4,086,608	75,839,215	--	9,944
12/31/16	*		86,138	4,001,765	2,216,072	7,817,562	10,033,634	4,087,903	75,844,247	--	9,944

Cumulative Groundwater Discharged by the GWETS (gallons)							
Period	December	Quarter 1, 2016	Quarter 2, 2016	Quarter 3, 2016	Quarter 4, 2016	2016 to Date	April 1996 to Date
Volume	192,833	496,032	407,531	698,046	382,910	1,984,519	75,844,247

Cumulative Mass DRO Removed by the GWETS <sup>A</sup> (lb)			
Period	December	Quarter 4 to Date	April 1996 to Date
Mass	0.66	0.95	9,943.8

$$Liquid-Phase\ DRO\ Mass\ [lb] = \left( Conc. \left[ \frac{\mu g}{L} \right] \right) \cdot \left( \frac{3.785\ L}{gal} \right) \cdot \left( \frac{1\ g}{1,000,000\ \mu g} \right) \cdot \left( \frac{1\ lb}{453.59\ g} \right) \cdot (Volume\ [gal])$$

**Legend / Notes:**

- 1 = GW-15 brought back online (off-line for pump maintenance since 11/28/16).
- 2 = Collected monthly influent, intermediate, and effluent water samples for laboratory analysis.
- 3 = Collected monthly acute toxicity testing sample for laboratory analysis as part of required accelerated permit compliance monitoring.
- 4 = GW-16 brought back online (off-line for pump maintenance since 11/23/16).

Groundwater extraction wells on line this month: GW-2, GW-13, GW-15, GW-16

GWETS = Groundwater extraction and treatment system      lb = Pounds  
 ug/L - Micrograms per liter      DRO = Diesel range organics

A = Hydrocarbon removal is calculated using analytical laboratory results for DRO (if not detected, half the detection limit is used) from sample collected on: 12/05/16 (laboratory report attached).

-- = Not applicable

\* = Operational values interpolated from chart recorder data or previous monitoring event.

**TABLE 3a**  
**Soil Vapor Extraction System Operations Summary - October**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	VES Hour Meter Reading (hours)	VES Process Flow <sup>A</sup> (scfm)	VES Manifold Vacuum (in. Hg)	Carbon Inlet Temperature (°F)	Laboratory Process Concentration (ppmv)	Field Process Concentration <sup>B,C</sup> (ppmv)	Field Effluent Concentration <sup>B,C</sup> (ppmv)	Cumulative Vapor-Phase GRO Removed <sup>D</sup> (lb)
10/01/16	*		39,908	772	--	--	--	--	--	2,948,587
10/02/16	*		39,932	772	--	--	--	--	--	2,948,592
10/03/16	*		39,956	772	--	--	--	--	--	2,948,597
10/04/16	*		39,980	772	--	--	--	--	--	2,948,602
10/05/16	Technician		40,004	795	4	120	--	58	0.0	2,948,608
10/06/16	*		40,028	795	--	--	--	--	--	2,948,613
10/07/16	*		40,052	795	--	--	--	--	--	2,948,618
10/08/16	*		40,076	795	--	--	--	--	--	2,948,624
10/09/16	*		40,100	795	--	--	--	--	--	2,948,629
10/10/16	*		40,124	795	--	--	--	--	--	2,948,634
10/11/16	*		40,148	795	--	--	--	--	--	2,948,640
10/12/16	Technician	1	40,172	769	4	110	19	43	0.0	2,948,645
10/13/16	*		40,196	769	--	--	--	--	--	2,948,651
10/14/16	*		40,220	769	--	--	--	--	--	2,948,656
10/15/16	*		40,244	769	--	--	--	--	--	2,948,662
10/16/16	*		40,268	769	--	--	--	--	--	2,948,667
10/17/16	Technician		40,292	752	4	114	--	46	0.0	2,948,672
10/18/16	*		40,316	752	--	--	--	--	--	2,948,678
10/19/16	*		40,340	752	--	--	--	--	--	2,948,683
10/20/16	Technician	2,3,4,5	40,364	824	2	122	--	83	0.0	2,948,689
10/21/16	*		40,388	824	--	--	--	--	--	2,948,695
10/22/16	*		40,412	824	--	--	--	--	--	2,948,701
10/23/16	*		40,436	824	--	--	--	--	--	2,948,707
10/24/16	Technician	6	40,460	833	2	110	--	93	0.7	2,948,712
10/25/16	*		40,484	833	--	--	--	--	--	2,948,718
10/26/16	*		40,508	833	--	--	--	--	--	2,948,724
10/27/16	Technician		40,532	814	2	110	--	106	2.0	2,948,730
10/28/16	*		40,556	814	--	--	--	--	--	2,948,736
10/29/16	*		40,580	814	--	--	--	--	--	2,948,742
10/30/16	*		40,604	814	--	--	--	--	--	2,948,747
10/31/16	Technician		40,628	818	3	111	--	97	3.8	2,948,753

Cumulative Mass TPHg Removed by the VES <sup>D</sup> (lb)			
Period	October	Quarter 4 to Date	April 1996 to Date
Mass	172	172	2,948,753

$$Vapor-Phase\ TPHg\ Mass\ [lb] = \left( Conc. \left[ \frac{\mu g}{L} \right] \right) \cdot \left( \frac{28.32\ L}{ft^3} \right) \cdot \left( \frac{1\ g}{1,000,000\ \mu g} \right) \cdot \left( \frac{1\ lb}{453.59\ g} \right) \cdot (Flow\ [scfm]) \cdot \left( \frac{60\ min}{hr} \right) \cdot (OpTime\ [hrs])$$

**Legend / Notes:**

- 1 = Collected monthly influent, after GAC-1, after GAC-2, and effluent samples for laboratory analysis.
- 2 = Measured individual well and/or soil biopile vapor concentrations with an OVA.
- 3 = Resumed vapor extraction from well HW-7 based on field PID readings (see Table 6 for details).
- 4 = Well valves all set to a partially open position to continue to focus extraction efforts on soil piles.
- 5 = Select soil biopiles brought online and/or taken off-line.
- 6 = VES temporarily off-line for a few hours to conduct maintenance.

Vapor extraction wells on line this month: HW-1, HW-3, HW-5, HW-7

Soil biopiles on line this month: Powerline P-SP-01, 80001-B, 80002 M-SP-01 through P-SP-01, 80006 D-SP-01 and N-SP-01 through T-SP-01, 80013 D-SP-01, and F-SP-01 through I-SP-01, and Operations A and B

VES = Soil vapor extraction system  
 scfm = Standard cubic feet per minute  
 in. Hg = Inches of mercury  
 °F = Degrees Fahrenheit

ppmv = Parts per million by volume  
 lb = Pounds

- A = Reading from chart recorder.
- B = Concentrations obtained with a calibrated organic vapor analyzer (OVA).
- C = Concentrations correlated to laboratory data and expressed as hexane.
- D = Hydrocarbon removal is calculated using analytical laboratory result for GRO (if not detected, half the detection limit is used) from sample collected on: 10/12/16 (laboratory report attached).
- = Not applicable or not measured
- \* = Operational values interpolated from chart recorder data or previous monitoring event.

**TABLE 3b**  
**Soil Vapor Extraction System Operations Summary - November**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	VES Hour Meter Reading (hours)	VES Process Flow <sup>A</sup> (scfm)	VES Manifold Vacuum (in. Hg)	Carbon Inlet Temperature (°F)	Laboratory Process Concentration (ppmv)	Field Process Concentration <sup>B,C</sup> (ppmv)	Field Effluent Concentration <sup>B,C</sup> (ppmv)	Cumulative Vapor-Phase GRO Removed <sup>D</sup> (lb)
11/01/16	Technician	1,2	40,652	808	3	108	81	114	5	2,948,777
11/02/16	*		40,676	808	--	--	--	--	--	2,948,801
11/03/16	*		40,700	808	--	--	--	--	--	2,948,825
11/04/16	Technician		40,724	820	3	114	--	104	6.0	2,948,849
11/05/16	*		40,748	820	--	--	--	--	--	2,948,874
11/06/16	*		40,772	820	--	--	--	--	--	2,948,898
11/07/16	Technician	3	40,785	827	3	120	--	95	8.6	2,948,911
11/08/16	Off line		40,785	NA	--	--	--	--	--	2,948,911
11/09/16	Technician	4	40,797	850	2	127	--	112	0.0	2,948,923
11/10/16	*		40,821	850	--	--	--	--	--	2,948,949
11/11/16	*		40,845	850	--	--	--	--	--	2,948,974
11/12/16	*		40,869	850	--	--	--	--	--	2,948,999
11/13/16	*		40,893	850	--	--	--	--	--	2,949,024
11/14/16	Technician	1,5	40,916	863	2	128	--	94	0.0	2,949,050
11/15/16	*		40,940	863	--	--	--	--	--	2,949,075
11/16/16	Technician		40,965	827	3	110	--	92	0.0	2,949,100
11/17/16	*		40,989	827	--	--	--	--	--	2,949,125
11/18/16	Technician		41,013	837	3	120	--	87	0.0	2,949,149
11/19/16	*		41,037	837	--	--	--	--	--	2,949,174
11/20/16	*		41,061	837	--	--	--	--	--	2,949,199
11/21/16	Technician		41,085	808	3	108	--	92	0.0	2,949,223
11/22/16	*		41,109	808	--	--	--	--	--	2,949,247
11/23/16	Technician		41,133	821	3	114	--	88	1.0	2,949,271
11/24/16	*		41,157	821	--	--	--	--	--	2,949,296
11/25/16	*		41,181	821	--	--	--	--	--	2,949,320
11/26/16	*		41,205	821	--	--	--	--	--	2,949,344
11/27/16	*		41,229	821	--	--	--	--	--	2,949,369
11/28/16	Technician	1	41,253	814	3	116	--	90	6.0	2,949,393
11/29/16	*		41,277	814	--	--	--	--	--	2,949,417
11/30/16	Technician	3	41,292	811	3	110	--	81	9.7	2,949,432

Cumulative Mass TPHg Removed by the VES <sup>A</sup> (lb)			
Period	November	Quarter 4 to Date	April 1996 to Date
Mass	679	851	2,949,432

$$\text{Vapor-Phase TPHg Mass [lb]} = \left( \text{Conc.} \frac{\mu\text{g}}{\text{L}} \right) \cdot \left( \frac{28.32 \text{ L}}{\text{ft}^3} \right) \cdot \left( \frac{1 \text{ g}}{1,000,000 \mu\text{g}} \right) \cdot \left( \frac{1 \text{ lb}}{453.59 \text{ g}} \right) \cdot (\text{Flow [scfm]}) \cdot \left( \frac{60 \text{ min}}{\text{hr}} \right) \cdot (\text{OpTime [hrs]})$$

**Legend / Notes:**

- 1 = Measured individual well and/or soil biopile vapor concentrations with an OVA.
- 2 = Collected monthly influent, after GAC-1, after GAC-2, and effluent samples for laboratory analysis.
- 3 = VES manually shutdown in advance of carbon change out work.
- 4 = VES restarted following completion of carbon change out work.
- 5 = Select soil biopiles brought online and/or taken off-line.

Vapor extraction wells on line this month: HW-1, HW-3, HW-5, HW-7

Soil biopiles on line this month: Powerline P-SP-01, 80002 M-SP-01 through P-SP-01, 80006 N-SP-01, P-SP-01, Q-SP-01, R-SP-01 and T-SP-01, 80013 D-SP-01, F-SP-01 and I-SP-01, and Operations A and B

VES = Soil vapor extraction system  
 scfm = Standard cubic feet per minute

in. Hg = Inches of mercury  
 °F = Degrees Fahrenheit

ppmv = Parts per million by volume  
 lb = Pounds

A = Reading from chart recorder.

B = Concentrations obtained with a calibrated organic vapor analyzer (OVA).

C = Concentrations correlated to laboratory data and expressed as hexane.

D = Hydrocarbon removal is calculated using analytical laboratory results for GRO (if not detected, half the detection limit is used) from sample collected on: 11/01/16 (laboratory report attached).

-- = Not applicable or not measured

\* = Operational values interpolated from chart recorder data or previous monitoring event.

**TABLE 3c**  
**Soil Vapor Extraction System Operations Summary - December**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	VES Hour Meter Reading (hours)	VES Process Flow <sup>A</sup> (scfm)	VES Manifold Vacuum (in. Hg)	Carbon Inlet Temperature (°F)	Laboratory Process Concentration (ppmv)	Field Process Concentration <sup>B,C</sup> (ppmv)	Field Effluent Concentration <sup>B,C</sup> (ppmv)	Cumulative Vapor-Phase GRO Removed <sup>D</sup> (lb)
12/01/16	Technician	1	41,304	772	3	112	--	86	0	2,949,444
12/02/16	*		41,328	772	--	--	--	--	--	2,949,467
12/03/16	*		41,352	772	--	--	--	--	--	2,949,490
12/04/16	*		41,376	772	--	--	--	--	--	2,949,513
12/05/16	Technician	2,3,4	41,395	791	3	104	86	96	0.0	2,949,529
12/06/16	Off line		41,395	NA	--	--	--	--	--	2,949,529
12/07/16	Off line		41,395	NA	--	--	--	--	--	2,949,529
12/08/16	Off line		41,395	NA	--	--	--	--	--	2,949,529
12/09/16	Technician	5	41,403	817	3	106	--	88	0.6	2,949,538
12/10/16	*		41,427	817	--	--	--	--	--	2,949,564
12/11/16	*		41,451	817	--	--	--	--	--	2,949,590
12/12/16	Technician	6	41,477	827	3	107	--	105	1.1	2,949,616
12/13/16	*		41,501	827	--	--	--	--	--	2,949,642
12/14/16	Technician		41,525	811	3	110	--	106	1.3	2,949,667
12/15/16	*		41,549	811	--	--	--	--	--	2,949,693
12/16/16	Technician		41,573	758	3	104	--	119	1.8	2,949,717
12/17/16	*		41,597	758	--	--	--	--	--	2,949,741
12/18/16	*		41,621	758	--	--	--	--	--	2,949,764
12/19/16	Technician		41,645	820	3	104	--	114	8	2,949,790
12/20/16	*		41,669	820	--	--	--	--	--	2,949,816
12/21/16	Technician	7	41,687	752	3	84	--	107	0.0	2,949,840
12/22/16	*		41,711	752	--	--	--	--	--	2,949,863
12/23/16	*		41,735	752	--	--	--	--	--	2,949,887
12/24/16	*		41,759	752	--	--	--	--	--	2,949,911
12/25/16	*		41,783	752	--	--	--	--	--	2,949,934
12/26/16	*		41,807	752	--	--	--	--	--	2,949,958
12/27/16	Technician		41,831	824	3	119	--	103	0.0	2,949,984
12/28/16	*		41,855	824	--	--	--	--	--	2,950,010
12/29/16	*		41,879	824	--	--	--	--	--	2,950,036
12/30/16	Technician		41,903	762	3	100	--	93	0.0	2,950,060

Cumulative Mass TPHg Removed by the VES <sup>A</sup> (lb)			
Period	December	Quarter 4 to Date	April 1996 to Date
Mass	652	1,502	2,950,084

$$Vapor\text{-}Phase\ TPHg\ Mass\ [lb] = \left( Conc. \left[ \frac{\mu g}{L} \right] \right) \cdot \left( \frac{28.32\ L}{ft^3} \right) \cdot \left( \frac{1\ g}{1,000,000\ \mu g} \right) \cdot \left( \frac{1\ lb}{453.59\ g} \right) \cdot (Flow\ [scfm]) \cdot \left( \frac{60\ min}{hr} \right) \cdot (OpTime\ [hrs])$$

**Legend / Notes:**

- 1 = VES restarted following completion of carbon change out fieldwork.
- 2 = Collected monthly influent, after GAC-1, after GAC-2, and effluent samples for laboratory analysis.
- 3 = Measured individual well and/or soil biopile vapor concentrations with an OVA.
- 4 = VES manually shutdown for maintenance.
- 5 = VES restarted following completion of maintenance activities.
- 6 = Select soil biopiles brought online and/or taken off-line.
- 7 = VES temporarily off-line for a few hours to conduct carbon change out work.

Vapor extraction wells on line this month: HW-1, HW-3, HW-5, HW-7

Soil biopiles on line this month: Powerine P-SP-01, 80002 M-SP-01 through P-SP-01, 80006 N-SP-01, and R-SP-01, and 80013 D-SP-01, F-SP-0 and I-SP-01

VES = Soil vapor extraction system      in. Hg = Inches of mercury      ppmv = Parts per million by volume  
 scfm = Standard cubic feet per minute      °F = Degrees Fahrenheit      lb = Pounds

- A = Reading from chart recorder.
- B = Concentrations obtained with a calibrated organic vapor analyzer (OVA).
- C = Concentrations correlated to laboratory data and expressed as hexane.
- D = Hydrocarbon removal is calculated using analytical laboratory results for GRO (if not detected, half the detection limit is used) from samples collected on: 11/01/16 and 12/05/16 (laboratory reports attached).
- = Not applicable or not measured
- \* = Operational values interpolated from chart recorder data or previous monitoring event.

**TABLE 4**  
**Historical Summary of Analytical Sampling Results - Influent Vapor**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Sample Date	Notes	VES Wells On Line	Laboratory Analysis Methods	GRO	GRO		GRO as Hexane		Benzene		Toluene		Ethylbenzene		o-Xylene		m,p-Xylenes		Total Xylenes		MTBE	
				Field OVA Reading	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)
04/29/11		--	TO-3 & 8260B	--	--	--	17	60	0.021	0.067	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
05/27/11		--	TO-3 & 8260B	--	--	--	13	46	0.021	0.067	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
06/30/11		--	TO-3 & 8260B	--	--	--	11	39	0.018	0.057	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
07/27/11		--	TO-3 & 8260B	--	--	--	8.6	31	0.013	0.042	<0.0050	<0.019	0.012	0.052	--	--	--	--	0.013	0.056	<0.010	<0.036
08/26/11		--	TO-3 & 8260B	--	--	--	7.8	28	0.012	0.038	<0.0050	<0.019	0.020	0.087	--	--	--	--	0.0264	0.115	<0.010	<0.036
09/30/11		--	TO-3 & 8260B	--	--	--	6.9	25	0.012	0.038	<0.0050	<0.019	0.011	0.048	--	--	--	--	0.011	0.048	<0.010	<0.036
10/28/11		--	TO-3 & 8260B	--	--	--	5.4	19	0.011	0.035	<0.0050	<0.019	0.015	0.065	--	--	--	--	0.028	0.12	<0.010	<0.036
11/30/11		--	TO-3 & 8260B	--	--	--	8.5	30	0.012	0.038	<0.0050	<0.019	0.0067	0.029	--	--	--	--	0.010	0.043	<0.010	<0.036
12/28/11		--	TO-3 & 8260B	--	--	--	8.6	31	0.024	0.077	0.0075	0.028	0.0096	0.042	--	--	--	--	0.022	0.095	<0.010	<0.036
01/26/12		--	TO-3 & 8260B	--	--	--	3.7	13	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
02/24/12		--	TO-3 & 8260B	--	--	--	4.6	16	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
03/28/12		--	TO-3 & 8260B	--	--	--	4.1	15	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
04/27/12		--	TO-3 & 8260B	--	--	--	3.6	13	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
05/31/12		--	TO-3 & 8260B	--	--	--	6.5	23	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
06/28/12		--	TO-3 & 8260B	--	--	--	5.3	19	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
07/26/12		--	TO-3 & 8260B	4.1	--	--	4.1	15	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
08/31/12		--	TO-3 & 8260B	1.5	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
09/27/12		--	TO-3 & 8260B	1.5	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
10/30/12		--	TO-3 & 8260B	1.5	--	--	6.1	22	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
11/26/12		--	TO-3 & 8260B	4.2	--	--	4.2	15	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
12/19/12		--	TO-3 & 8260B	3.2	--	--	3.2	11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
01/31/13		--	TO-3 & 8260B	4.6	--	--	4.6	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/27/13		--	TO-3 & 8260B	4.5	--	--	4.5	16	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
03/28/13		--	TO-3 & 8260B	6.7	--	--	6.7	24	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
04/22/13		--	TO-3 & 8260B	5.4	--	--	5.4	19	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
07/29/13		--	TO-3 & 8260B	1.5	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
08/12/13		--	TO-3 & 8260B	--	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
10/30/13		--	TO-3 & 8260B	3.0	--	--	3.0	11	0.014	0.045	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
11/27/13		--	TO-3 & 8260B	1.5	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	0.015	0.065	<0.010	<0.036
12/19/13		--	TO-3 & 8260B	1.5	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	--	--	--	--	<0.015	<0.065	<0.010	<0.036
03/21/14		--	TO-3 & 8260B	1.5	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	<0.0050	<0.022	<0.010	<0.043	<0.015	<0.065	<0.010	<0.036
04/23/14		VEW-32, VEW-33, VEW-34, VEW-35, VEW-36 VEW-37, HW-1, HW-3, HW-5, HW-7	TO-3 & 8260B	1.9	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	<0.0050	<0.022	<0.010	<0.043	<0.015	<0.065	<0.010	<0.036
05/16/14	1	VEW-32, VEW-33, VEW-34, VEW-35, VEW-36 VEW-37, HW-1, HW-3, HW-5, HW-7	TO-3 & 8260B	1.1	--	--	<3.0	<11	<0.0050	<0.016	<0.0050	<0.019	<0.0050	<0.022	<0.0050	<0.022	<0.010	<0.043	<0.015	<0.065	<0.010	<0.036
07/09/14	2	VEW-32, VEW-33, VEW-34, VEW-35, VEW-36 VEW-37, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	24	6.1	25	7.0	25	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
08/13/14		VEW-32, VEW-33, VEW-34, VEW-35, VEW-36 VEW-37, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	27	7.3	30	8.4	30	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0

**TABLE 4**  
**Historical Summary of Analytical Sampling Results - Influent Vapor**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Sample Date	Notes	VES Wells On Line	Laboratory Analysis Methods	GRO	GRO		GRO as Hexane		Benzene		Toluene		Ethylbenzene		o-Xylene		m,p-Xylenes		Total Xylenes		MTBE	
				Field OVA Reading	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)
09/17/14	3	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	5.6	<4.9	<20	<5.6	<20	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
10/23/14	4	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	1.2	<4.9	<20	<5.6	<20	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
11/17/14	5	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	1.3	<4.9	<20	<5.6	<20	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
12/17/14		VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	0.5	<4.9	<20	<5.6	<20	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
01/14/15		VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	1.5	<4.9	<20	<5.6	<20	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
02/20/15		VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	1.5	<4.9	<20	<5.6	<20	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
03/27/15		VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	3.4	<4.9	<20	<5.6	<20	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
04/27/15	6	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	8015M & 8260M	132	140	580	160	580	0.63	2.0	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	0.23	1.0	0.23	1.0	<0.6	<2.0
05/29/15	6.7	--	8015M & 8260M	103	83	340	97	340	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
06/03/15	6.8	VEW-32, VEW-33, VEW-34	8015M & 8260M	47	32	130	37	130	<0.16	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.3	<1.5	<0.6	<2.0
07/09/15	6	VEW-32, VEW-33, VEW-34	8015M & 8260M	162	150	600	170	600	<0.16	<0.50	0.15	0.58	<0.12	<0.50	0.67	2.9	0.71	3.1	1.38	6.0	<0.55	<2.0
07/15/15	6.9	VEW-32, VEW-33, VEW-34	8015M & 8260M	147	170	700	200	700	<0.16	<0.50	0.53	2.0	0.18	0.78	0.99	4.3	1.5	6.3	2.49	10.6	<0.55	<2.0
07/21/15	6.9	VEW-32, VEW-33, VEW-34	8015M & 8260M	259	160	640	180	640	<0.16	<0.50	0.25	0.94	<0.12	<0.50	0.71	3.1	0.62	2.7	1.33	5.8	<0.55	<2.0
07/29/15	6.9	VEW-32, VEW-33, VEW-34	8015M & 8260M	129	170	710	200	710	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	0.32	1.4	0.25	1.1	0.57	2.5	<0.55	<2.0
08/17/15	6.10	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5	8015M & 8260M	135	130	550	160	550	0.75	2.4	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	0.28	1.2	0.28	1.2	<0.55	<2.0
09/09/15	6.11	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	202	190	760	220	760	0.30	0.95	0.74	2.8	0.76	3.3	0.69	3.0	2.5	11	3.19	14	<0.55	<2.0
09/22/15	6.9	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	225	150	600	170	600	0.27	0.85	0.37	1.4	<0.12	<0.50	0.71	3.1	0.58	2.5	1.29	5.6	<0.55	<2.0
09/25/15	6.9	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	258	220	890	250	890	0.41	1.3	0.64	2.4	0.17	0.75	0.74	3.2	0.85	3.7	1.59	6.9	<0.55	<2.0
10/07/15	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	256	230	940	270	940	0.69	2.2	0.82	3.1	0.22	0.97	0.41	1.8	1.1	4.6	1.51	6.4	<0.55	<2.0
11/04/15	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	380	290	1,200	340	1,200	0.88	2.8	1.6	5.9	0.25	1.1	1.4	6.2	2.1	9.0	3.5	15	<0.55	<2.0
12/07/15	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	346	320	1,300	370	1,300	0.69	2.2	1.9	7.0	0.15	0.64	0.76	3.3	0.94	4.1	1.7	7.4	<0.55	<2.0
01/13/16	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	141	110	470	130	470	0.16	0.52	0.29	1.1	<0.12	<0.50	0.22	0.95	0.30	1.3	0.52	2.3	<0.55	<2.0
02/10/16	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	124	98	400	110	400	0.59	1.9	0.66	2.5	0.23	1.0	0.39	1.7	0.6	2.6	0.99	4.3	<0.55	<2.0
03/02/16	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	92	54	220	63	220	<0.16	<0.50	0.25	0.93	<0.12	<0.50	0.14	0.62	<0.23	<1.0	0.14	0.62	<0.55	<2.0
04/06/16	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	124	120	490	140	490	0.38	1.2	0.29	1.1	<0.12	<0.50	0.17	0.72	<0.23	<1.0	0.17	0.72	<0.55	<2.0
05/04/16	6.7	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	107	100	410	120	410	0.31	1.0	0.20	0.77	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.35	<1.5	<0.55	<2.0
06/06/16	6.12	VEW-32, VEW-33, HW-1, HW-3, HW-5	8015M & 8260M	73	59	240	68	240	0.59	1.9	0.50	1.9	<0.12	<0.50	0.41	1.8	0.51	2.2	0.92	4.0	<0.55	<2.0
07/06/16	6.13	HW-1, HW-3, HW-5	8015M & 8260M	49	37	150	43	150	0.41	1.3	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.35	<1.5	<0.55	<2.0
09/01/16	6.13	HW-1, HW-3, HW-5	8015M & 8260M	46	18	75	21	75	0.41	1.3	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.35	<1.5	<0.55	<2.0
10/12/16	6.13	HW-1, HW-3, HW-5	8015M & 8260M	43	19	79	22	79	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.35	<1.5	<0.55	<2.0
11/01/16	6.13,14	HW-1, HW-3, HW-5, HW-7	8015M & 8260M	114	81	330	94	330	0.53	1.7	0.23	0.86	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.35	<1.5	<0.55	<2.0
12/05/16	6.13	HW-1, HW-3, HW-5, HW-7	8015M & 8260M	96	86	350	100	350	0.31	1.0	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.35	<1.5	<0.55	<2.0

Legend / Notes on Next Page.

**TABLE 4**  
**Historical Summary of Analytical Sampling Results - Influent Vapor**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Sample Date	Notes	VES Wells On Line	Laboratory Analysis Methods	GRO		GRO as Hexane		Benzene		Toluene		Ethylbenzene		o-Xylene		m,p-Xylenes		Total Xylenes		MTBE	
				GRO Field OVA Reading (ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)

**Legend / Notes:**

- Data collected prior to April 2014 not verified for completeness nor accuracy.
- Influent vapor sample inadvertently not collected during August 2016.
- VES = Soil vapor extraction system
- GRO = Gasoline range organics
- MTBE = Methyl tertiary-butyl ether
- OVA = Organic Vapor Analyzer (calibrated or correlated to Hexane)
- ppmv = Parts per million by volume
- µg/L = Micrograms per liter
- <1 = Not detected at or above the Method Reporting Limit (MRL) shown.
- = Not available or not analyzed
- 1 = VES manually shut down on 05/29/14.
- 2 = VES restarted.
- 3 = Closed vapor extraction wells VEW-35, VEW-36, and VEW-37 on 08/27/14 based on field PID readings (see Table 6 for details).
- 4 = VES manually shut down.
- 5 = VES restarted on 11/03/14.
- 6 = Select soil biopiles also on line (see Tables 3a through 3c for details).
- 7 = Closed all vapor extraction wells from 05/07/15 to 06/03/15, and 05/25/16 to 06/17/16, respectively, to focus extraction efforts on soil biopiles.
- 8 = Opened vapor extraction wells VEW-32, VEW-33 and VEW-34.
- 9 = Additional sample collected for laboratory analysis as part of field instrument correlation study.
- 10 = Opened vapor extraction wells HW-1, HW-3 and HW-5 on 08/10/15 based on field PID readings (see Table 6 for details).
- 11 = Closed vapor extraction well VEW-34 on 08/19/15 based on low to non-detectable lab results (see Table 7 for details).
- 12 = Opened vapor extraction wells HW-1, HW-3 and HW-5 on 06/17/16.
- 13 = Valves associated with vapor extraction wells HW-1, HW-3, HW-5 and/or HW-7 each set to a partially open position while leaving all other wells closed to focus extraction efforts on soil biopiles.
- 14 = Resumed vapor extraction from well HW-7 on 10/20/16 based on field PID readings (see Table 6 for details).

**TABLE 5**  
**Historical Summary of Analytical Sampling Results - Influent Groundwater**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Sample Date	Notes	GWETS Wells On Line	Laboratory Analysis Methods	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	TBA	MTBE	DIPE	ETBE	TAME
				(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
04/22/08		--	--	--	--	71	25	17	42	30	14	4.6	<2.0	<2.0	<2.0
05/01/08		--	--	810	--	--	--	--	--	--	--	--	--	--	--
05/16/08		--	--	760	--	--	--	--	--	--	--	--	--	--	--
06/12/08		--	--	--	--	<0.50	<0.50	<0.50	<0.50	<0.50	25	7.7	<2.0	<2.0	<2.0
07/19/08		--	--	170	<100	27	0.77	7.0	13	7.9	<10	3.9	<2.0	<2.0	<2.0
09/03/08		--	--	--	--	--	--	--	--	--	<10	--	--	--	--
09/08/08		--	--	--	--	27	0.99	8.3	13	8.2	<10	3.1	<2.0	<2.0	<2.0
09/15/08		--	--	--	--	36	0.81	8.5	12	6.8	<10	3.8	<2.0	<2.0	<2.0
11/13/08		--	--	--	--	27	<0.50	2.0	12	5.6	<10	<0.50	<2.0	<2.0	<2.0
11/26/08		--	--	--	--	<0.50	<0.50	<0.50	1.3	0.61	16	5.6	<2.0	<2.0	<2.0
12/13/08		--	--	--	--	<0.50	<0.50	0.56	1.1	0.54	19	7.0	<2.0	<2.0	<2.0
01/09/09		--	--	--	--	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<2.0	<2.0	<2.0
03/05/09		--	--	<100	--	21	<0.50	2.5	7.2	3.1	12	3.1	<2.0	<2.0	<2.0
03/18/09		--	--	200	170	21	<0.50	2.9	7.0	4.5	13	3.3	<2.0	<2.0	<2.0
05/15/09		--	--	<100	--	--	--	--	--	--	--	--	--	--	--
06/04/09		--	--	190	--	26	<0.50	3.3	10	6.6	<10	4.8	<2.0	<2.0	<2.0
06/24/09		--	--	--	--	28	<0.50	2.5	7.6	4.2	12	4.4	<2.0	<2.0	<2.0
05/28/09		--	--	170	--	27	<0.50	2.6	7.9	4.5	<10	3.6	<2.0	<2.0	<2.0
11/19/09		--	--	<100	--	15	<0.50	1.3	5.8	2.9	5.6	2.3	1.2	<2.0	<2.0
10/26/10		--	--	--	--	20	<0.50	1.6	7.4	2.1	8.0	2.9	1.1	<2.0	<2.0
06/01/11		--	--	90	--	--	--	--	--	--	--	--	--	--	--
07/14/11		--	--	--	--	13	<0.50	2.3	6.2	3.0	6.7	1.6	<2.0	<2.0	<2.0
09/13/11		--	--	--	--	5.0	<0.50	0.37	3.4	0.99	<10	1.3	<2.0	<2.0	<2.0
09/22/11		--	--	--	--	5.5	<0.50	0.92	7.2	1.6	5.6	1.1	<2.0	<2.0	<2.0
10/19/11		--	--	--	--	8.2	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<2.0	<2.0	<2.0
01/20/12		--	--	--	--	14	<0.50	2.8	7.8	1.2	16	1.3	0.42	<2.0	<2.0
02/03/12		--	--	120	340	--	--	--	--	--	--	--	--	--	--
02/17/12		--	--	--	--	10	<0.50	1.5	7.4	1.2	15	1.2	0.39	<2.0	<2.0
02/24/12		--	--	180	--	26	<0.50	1.0	7.0	1.2	<10	1.2	0.41	<2.0	<2.0



**TABLE 5**  
**Historical Summary of Analytical Sampling Results - Influent Groundwater**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Sample Date	Notes	GWETS Wells On Line	Laboratory Analysis Methods	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	TBA	MTBE	DIPE	ETBE	TAME
				(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
03/02/12		--	--	--	--	23	<0.50	1.4	11	2.4	8.7	1.4	0.47	<2.0	<2.0
03/06/12		--	--	--	--	28	<0.50	1.0	9.0	1.7	13	1.1	0.37	<2.0	<2.0
06/15/12		--	--	--	--	39	13	17	88	26	<10	1.3	0.52	<2.0	<2.0
08/31/12		--	--	820	940	--	--	--	--	--	--	--	--	--	--
09/27/12		--	--	5,300	3,800	--	--	--	--	--	--	--	--	--	--
10/23/12		--	--	--	--	67	60	110	460	140	<10	<0.50	<2.0	<2.0	<2.0
01/31/13		--	--	3,600	--	--	--	--	--	--	--	--	--	--	--
05/01/13		--	--	6,300	5,500	20	4.7	8.0	41	14	4.8	0.56	<2.0	<2.0	<2.0
07/12/13		--	--	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<2.0	<2.0	<2.0
08/20/13		--	--	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<2.0	<2.0	<2.0
12/19/13		--	--	<100	<100	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<2.0	<2.0	<2.0
02/07/14		--	--	1,500	2,300	--	--	--	--	--	--	--	--	--	--
03/21/14		--	--	--	--	61	5.1	23	150	45	<10	0.87	<2.0	<2.0	<2.0
05/29/14	1	--	8015M & 8260B	--	--	29	1.0	30	180	45	<10	1.0	<2.0	<2.0	<2.0
07/09/14	2	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	720	1,800	82	3.8	27	110	31	<7.0	<0.40	<0.50	<0.40	<0.30
08/13/14		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	150	1,500	57	3.7	30	130	36	<7.0	0.77	<0.50	<0.40	<0.30
09/17/14		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	800	3,500	23	0.73	20	170	40	<7.0	0.83	<0.50	<0.40	<0.30
10/20/14		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	560	3,600	31	2.2	40	240	54	<7.0	0.6	<0.50	<0.40	<0.30
11/17/14	3,4	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	260	1,400	21	0.71	10	62	18	<7.0	<0.40	<0.50	<0.40	<0.30
12/17/14	4	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	190	880	23	0.66	8.8	48	14	<7.0	<0.40	<0.50	<0.40	<0.30
01/14/15	1,2	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	4,600	3,800	150	2.8	29	130	37	<7.0	<0.40	<0.50	<0.40	<0.30
02/20/15	2,4	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	2,500	8,100	230	9.8	220	880	220	<7.0	0.45	<0.50	<0.40	<0.30
03/27/15		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	620	980	9.9	<0.30	2.7	18	5.9	<7.0	1.0	<0.50	<0.40	<0.30
05/11/15	5	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	<60	330	16	5.2	5.9	37	14	<7.0	0.58 J	<0.50	<0.40	<0.30
06/03/15		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	150	340	20	6.6	12	22	25	<7.0	0.52 J	<0.50	<0.40	<0.30
07/09/15		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	180	610	<0.20	<0.30	<0.20	<0.40	<0.30	<7.0	0.62 J	<0.50	<0.40	<0.30
08/17/15		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	430	<40	<0.20	<0.30	<0.20	0.95 J	<0.30	<7.0	0.71 J	<0.50	<0.40	<0.30
09/03/15		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	86 J	570	5.9	0.37 J	3.7	10	14	<7.0	0.45 J	<0.50	<0.40	<0.30
10/05/15		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	<60	500	7.3	<0.30	8.7	35	15	<7.0	0.73 J	<0.50	<0.40	<0.30

**TABLE 5**  
**Historical Summary of Analytical Sampling Results - Influent Groundwater**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Sample Date	Notes	GWETS Wells On Line	Laboratory Analysis Methods	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	TBA	MTBE	DIPE	ETBE	TAME
				(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
11/02/15		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	420	3,400	5.1	<0.30	17	130	22	<7.0	0.85 J	<0.50	<0.40	<0.30
12/07/15		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	710	3,800	0.70	<0.30	<0.20	<0.40	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
01/12/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	2,000	510	14	<0.30	3.6	25	7.0	<7.0	<0.40	<0.50	<0.40	<0.30
02/01/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	72 J	180	13	<0.30	0.53	2.7	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
03/14/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	270	1,100	0.91	<0.30	<0.20	1.6	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
04/04/16	5	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	76 J	100	0.99	<0.30	<0.20	<0.40	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
05/04/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	170	470	<0.20	<0.30	<0.20	1.3	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
06/01/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	280	75 J	4.9	<0.30	<0.20	<0.40	<0.30	<7.0	0.43 J	<0.50	<0.40	<0.30
07/11/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	330	<40	4.7	<0.30	<0.20	<0.40	<0.30	<7.0	0.79 J	<0.50	<0.40	<0.30
08/01/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	<60	<40	3.7	<0.30	<0.20	<0.40	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
09/01/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	<60	<40	2.7	<0.30	<0.20	<0.40	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
10/12/16	5	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	230	<40	4.5	<0.30	<0.20	<0.40	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
11/01/16	5	GW-2, GW-13, GW-15, GW-16	8015M & 8260B	120	52 J	3.1	<0.30	<0.20	<0.40	<0.30	<7.0	<0.40	<0.50	<0.40	<0.30
12/05/16		GW-2, GW-13, GW-15, GW-16	8015M & 8260B	450	51 J	<0.20	<0.30	<0.20	<0.40	<0.30	<7.0	0.60 J	<0.50	<0.40	<0.30

**Legend / Notes:**

Data collected prior to July 2014 not verified for completeness nor accuracy.

GWETS = Groundwater extraction and treatment system

TPHd = Total petroleum hydrocarbons as diesel

TPHg = Total petroleum hydrocarbons as gasoline

TBA = tertiary-Butyl alcohol

MTBE = Methyl tertiary-butyl ether

DIPE = Diisopropyl ether

ETBE = Ethyl tertiary-butyl ether

TAME = tertiary-Amyl-methyl ether

µg/L = Micrograms per liter

<1 = Not detected at or above the Method Reporting Limit (MRL) shown. Beginning 07/09/14, not detected at or above the Method Detection Limit (MDL) shown.

-- = Not available or not analyzed

J = Estimated value. Analyte detected at a level less than the MRL and greater than or equal to the MDL.

1 = GWETS manually shut down.

2 = GWETS restarted on 07/02/14, 01/13/15 and 02/25/15.

3 = GWETS manually shut down on 11/11/14.

4 = GWETS temporarily restarted but left off-line upon departure.

5 = GWETS manually shut down on 04/13/15, 05/06/15, 04/04/16, 09/26/16 and 11/07/16, and restarted on 04/27/15, 05/08/15, 04/28/16, 10/12/16 and 11/23/16, respectively.

**TABLE 6**  
**Historical Summary of Field Sampling Readings - Individual Well Vapor**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Notes	VES Wells On Line	Well GRO Concentration (ppmv) / Screen Interval in Feet Below Grade									
			HW-1	HW-3	HW-5	HW-7	VEW-32	VEW-33	VEW-34	VEW-35	VEW-36	VEW-37
			25	25	25	25	10 - 25	10 - 25	10 - 25	10 - 25	10 - 25	10 - 25
07/09/14	1	VEW-32, VEW-33, VEW-34, VEW-35, VEW-36, VEW-37, HW-1, HW-3, HW-5, HW-7	69	4,176	140	20	154	10	4.2	5.5	6.4	20
07/18/14		VEW-32, VEW-33, VEW-34, VEW-35, VEW-36, VEW-37, HW-1, HW-3, HW-5, HW-7	74	15,000	4,000	21	134	5.6	3.3	2.1	4.1	18
08/27/14	2	VEW-32, VEW-33, VEW-34, VEW-35, VEW-36, VEW-37, HW-1, HW-3, HW-5, HW-7	0.8	4.5	3.6	0.1	6.3	0.4	0.4	0.2	0	0
08/27/14	3	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	2.1	146	2.5	0.3	174	0.2	0	--	--	--
10/23/14	4	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	3.3	1.8	2.9	20	191	22	8.0	28	9.1	151
12/17/14	4	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	0	0	0	0.2	62	37	2.0	15	24	11
03/30/15	4,5	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	24	382	62	1.8	2.5	0.1	0.3	4.8	20	1.0
04/02/15	4	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	400	370	270	34	25	4.1	0	0	0	0
04/06/15	4	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	825	800	835	160	171	5.7	3.0	0	0	0
04/08/15	4	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	800	580	600	315	195	35	25	0	0	0
04/15/15	4	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	680	585	545	297	273	223	87	0	0	0
04/24/15	6	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	1,900	1,233	533	125	--	--	--	--	--	--
04/27/15	4,6	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5, HW-7	1,455	810	400	138	210	324	115	4.8	5.7	2.4
06/08/15	6,7	VEW-32, VEW-33, VEW-34	--	--	--	--	180	130	40	--	--	--
06/12/15	6	VEW-32, VEW-33, VEW-34	--	--	--	--	194	126	80	--	--	--
06/15/15	6	VEW-32, VEW-33, VEW-34	--	--	--	--	158	77	39	--	--	--
06/26/15	6	VEW-32, VEW-33, VEW-34	--	--	--	--	123	104	20	--	--	--
07/16/15	6	VEW-32, VEW-33, VEW-34	--	--	--	--	256	147	17	--	--	--
08/10/15	4,6,8	VEW-32, VEW-33, VEW-34, HW-1, HW-3, HW-5	1,947	732	676	28	456	334	63	16	2.2	3.9
08/20/15	6,9	VEW-32, VEW-33, HW-1, HW-3, HW-5	1,792	1,526	1,283	--	530	329	--	--	--	--
09/08/15	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	1,914	1,811	839	--	395	162	--	--	--	--
09/16/15	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	1,333	1,142	756	--	266	184	--	--	--	--
10/09/15	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	854	807	462	--	343	258	--	--	--	--
11/04/15	6	VEW-32, VEW-33, HW-1, HW-3, HW-5	605	500	372	--	401	184	--	--	--	--
12/07/15	4,6	VEW-32, VEW-33, HW-1, HW-3, HW-5	880	760	590	--	327	246	88	22	12	14

**TABLE 6**  
**Historical Summary of Field Sampling Readings - Individual Well Vapor**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Notes	VES Wells On Line	Well GRO Concentration (ppmv) / Screen Interval in Feet Below Grade									
			HW-1	HW-3	HW-5	HW-7	VEW-32	VEW-33	VEW-34	VEW-35	VEW-36	VEW-37
			25	25	25	25	10 - 25	10 - 25	10 - 25	10 - 25	10 - 25	10 - 25
01/13/16	4,6	VEW-32, VEW-33, HW-1, HW-3, HW-5	640	390	415	--	220	260	72	34	22	17
02/08/16	4,6	VEW-32, VEW-33, HW-1, HW-3, HW-5	520	240	300	--	160	220	55	42	28	11
03/02/16	4,6	VEW-32, VEW-33, HW-1, HW-3, HW-5	400	180	360	--	120	240	47	31	32	15
04/06/16	4,6	VEW-32, VEW-33, HW-1, HW-3, HW-5	420	220	260	--	60	380	29	22	18	12
05/04/16	4,6	VEW-32, VEW-33, HW-1, HW-3, HW-5	400	180	240	--	90	340	36	18	25	19
06/17/16	6	HW-1, HW-3, HW-5	740	330	470	--	--	--	--	--	--	--
07/06/16	6,10	HW-1, HW-3, HW-5	480	220	340	--	--	--	--	--	--	--
08/05/16	4,6,10	HW-1, HW-3, HW-5	240	230	190	3.6	20	140	11	9.0	34	8.3
09/01/16	6,10	HW-1, HW-3, HW-5	280	260	220	--	--	--	--	--	--	--
10/20/16	4,6,10,11	HW-1, HW-3, HW-5, HW-7	200	280	240	140	32	80	9.1	7.3	30	6.4
11/01/16	6,10	HW-1, HW-3, HW-5, HW-7	180	260	220	120	--	--	--	--	--	--
12/05/16	4,6,10	HW-1, HW-3, HW-5, HW-7	140	240	200	100	20	60	17	8.8	20	7.1

**Legend / Notes:**

GRO = Gasoline range organics      ppmv = Parts per million by volume      OVA = Organic Vapor Analyzer (calibrated or correlated to Hexane)      -- = Not measured

Concentrations measured using calibrated field OVA.

1 = Initial readings on system restart (off line since manually shut down on 05/29/14).

2 = Readings prior to well optimization.

3 = Readings following well optimization (closed wells VEW-35, VEW-36 and VEW-37 based on field OVA readings).

4 = Offline wells temporarily opened for monitoring, then returned to closed position.

5 = Readings collected following slightly opening well field valve to vapor extraction system.

6 = Select soil biopiles also online (see Tables 3a through 3c for details).

7 = Closed select vapor wells to focus extraction efforts on soil biopiles.

8 = Opened vapor extraction wells HW-1, HW-3 and HW-5 based on field OVA readings.

9 = Closed vapor extraction well VEW-34 on 8/19/15 based on low to non-detectable lab results (see Table 7 for details).

10 = Valves associated with vapor extraction wells HW-1, HW-3, HW-5 and/or HW-7 each set to a partially open position while leaving all other wells closed to focus extraction efforts on soil biopiles.

11 = Opened vapor extraction wells HW-7 based on field OVA reading.

**TABLE 7**  
**Historical Summary of Analytical Sampling Results - Individual Well Vapor**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Well ID	Sample Date	Notes	Laboratory Analysis Methods	GRO Field OVA Reading	GRO		Benzene		Toluene		Ethylbenzene		o-Xylene		m,p-Xylenes		MTBE			
				(ppmv)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)		
HW-1	07/09/14	1	8015M & 8260M	69	23	96	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	10/23/14			3.3	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0
	04/27/15			1,455	830	3,400	1.1	3.5	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0
	08/10/15			1,947	2,700	11,000	1.0	3.3	<0.13	<0.50	0.25	1.1	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0
	02/08/16			520	440	1,800	0.88	2.8	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0
	04/06/16			420	340	1,400	1.0	3.2	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0
HW-3	07/09/14	1	8015M & 8260M	4,176	2,055	8,400	3.1	10	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	10/23/14			1.8	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0
	04/27/15			810	590	2,400	3.4	11	0.69	2.6	0.32	1.4	0.20	0.88	1.2	5.0	<0.55	<2.0		
	08/10/15			732	950	3,900	6.3	20	0.34	1.3	0.64	2.8	0.30	1.30	2.3	9.8	<0.55	<2.0		
	02/08/16			240	190	780	1.2	3.8	0.37	1.4	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	04/06/16			220	170	710	1.4	4.4	0.53	2.0	<0.12	<0.50	<0.12	<0.50	0.28	1.2	<0.55	<2.0		
HW-5	07/09/14	1	8015M & 8260M	140	46	190	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	10/23/14			2.9	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	04/27/15			400	290	1,200	0.17	0.55	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	0.30	1.3	<0.55	<2.0		
	08/10/15			676	930	3,800	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	02/08/16			300	320	1,300	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	04/06/16			260	210	870	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
HW-7	07/09/14	1	8015M & 8260M	190	120	480	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	10/23/14			20	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	04/27/15			20	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	08/10/15			138	66	270	0.28	0.88	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
				28	7.3	30	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
VEW-32	07/09/14	1	8015M & 8260M	154	132	540	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	10/23/14			191	19	76	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	04/27/15			210	320	1,300	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	08/10/15			456	460	1,900	0.66	2.1	<0.13	<0.50	0.23	1.0	<0.12	<0.50	0.46	2.0	<0.55	<2.0		
	02/08/16			160	130	550	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	04/06/16			60	17	68	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
VEW-33	07/09/14	1	8015M & 8260M	10	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	10/23/14			22	7	27	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	04/27/15			324	270	1,100	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	08/10/15			334	290	1,200	0.50	1.6	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	0.32	1.4	<0.55	<2.0		
	02/08/16			220	270	1,100	0.38	1.2	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	04/06/16			380	340	1,400	0.50	1.6	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	0.25	1.1	<0.55	<2.0		
VEW-34	07/09/14	1	8015M & 8260M	4.2	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	10/23/14			8.0	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	04/27/15			115	44	180	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	08/10/15			63	14	57	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
VEW-35	07/09/14	1	8015M & 8260M	5.5	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	10/23/14			28	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	04/27/15			4.8	<4.9	<20	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	08/10/15			16.4	<4.9	<20	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
VEW-36	07/09/14	1	8015M & 8260M	6.4	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	10/23/14			9.1	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0		
	04/27/15			5.7	<4.9	<20	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		
	08/10/15			2.2	8.1	33	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0		

**TABLE 7**  
**Historical Summary of Analytical Sampling Results - Individual Well Vapor**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Well ID	Sample Date	Notes	Laboratory Analysis Methods	GRO Field OVA Reading	GRO		Benzene		Toluene		Ethylbenzene		o-Xylene		m,p-Xylenes		MTBE	
				(ppmv)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)	(ppmv)	(µg/L)
VEW-37	07/09/14	1	8015M & 8260M	20	<4.9	<20	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0
	10/23/14			151	13	53	<0.2	<0.50	<0.1	<0.50	<0.1	<0.50	<0.1	<0.50	<0.2	<1.0	<0.6	<2.0
	04/27/15			2.4	<4.9	<20	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0
	08/10/15			3.9	<4.9	<20	<0.16	<0.50	<0.13	<0.50	<0.12	<0.50	<0.12	<0.50	<0.23	<1.0	<0.55	<2.0

**Legend / Notes:**

- GRO = Gasoline range organics
- OVA = Organic Vapor Analyzer (calibrated or correlated to Hexane)
- MTBE = Methyl tertiary-butyl ether
- ppmv = Parts per million by volume
- µg/L = Micrograms per liter
- <0.6 = Not detected at or above the method reporting limit (MRL) shown.
- = Not Analyzed
- 1 = Samples collected following system restart (off line since manual shut down on 05/29/14).

**TABLE 8a**  
**Summary of LNAPL Removal in Well GMW-7 - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/03/16	--	34.36	--	0.0	24.0	28.1	20.9	143.2
10/12/16	--	34.35	--	0.0	28.0	32.7	21.2	145.0
10/26/16	--	34.16	--	0.0	20.0	23.4	21.4	146.2
11/09/16	--	34.50	--	0.0	20.0	23.4	21.6	147.5
11/23/16	--	34.74	--	0.0	20.0	23.4	21.7	148.7
11/30/16	--	34.73	--	0.0	36.0	42.1	22.1	151.0
12/07/16	--	34.81	--	0.0	20.0	23.4	22.2	152.2
12/14/16	--	34.60	--	0.0	28.0	32.7	22.5	154.0
12/21/16	--	34.78	--	0.0	36.0	42.1	22.8	156.2
12/28/16	--	34.77	--	0.0	36.0	42.1	23.2	158.5
<b>Cumulative for the Reporting Period:</b>				<b>0.0</b>	<b>268.0</b>	<b>313.3</b>	<b>2.4</b>	<b>16.7</b>
<b>Cumulative Beginning December 2014 <sup>A</sup>:</b>				<b>8.0</b>	<b>1660.0</b>	<b>1,940.4</b>	<b>23.2</b>	<b>158.5</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock (approximately 18" long with 3" diameter)

-- = Not applicable

A = Cumulative LNAPL removed since December 2014. LNAPL removed prior to December 2014 can be found in previously submitted Remediation Progress Reports.

**TABLE 8b**  
**Summary of LNAPL Removal in Well GMW-62 - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/05/16	--	34.52	--	0.0	28.0	32.7	126.8	867.9
10/12/16	--	34.75	--	0.0	28.0	32.7	127.1	869.7
10/18/16	--	34.86	--	0.0	24.0	28.1	127.3	871.2
10/26/16	--	34.72	--	0.0	20.0	23.4	127.5	872.4
11/02/16	--	34.86	--	0.0	24.0	28.1	127.7	873.9
11/09/16	--	34.72	--	0.0	20.0	23.4	127.9	875.2
11/16/16	--	34.79	--	0.0	28.0	32.7	128.1	876.9
11/23/16	--	34.82	--	0.0	28.0	32.7	128.4	878.7
11/30/16	--	34.82	--	0.0	32.0	37.4	128.7	880.7
12/07/16	--	34.89	--	0.0	20.0	23.4	128.9	881.9
12/14/16	--	35.08	--	0.0	28.0	32.7	129.1	883.7
12/21/16	--	34.92	--	0.0	12.0	14.0	129.2	884.4
12/28/16	--	35.15	--	0.0	32.0	37.4	129.5	886.4

<b>Cumulative for the Reporting Period:</b>	<b>0.0</b>	<b>324.0</b>	<b>378.7</b>	<b>3.0</b>	<b>20.2</b>
<b>Cumulative Beginning January 2014 <sup>A</sup>:</b>	<b>112.0</b>	<b>1,920.0</b>	<b>2,244.3</b>	<b>129.5</b>	<b>886.4</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since January 2014. LNAPL removed prior to January 2014 can be found in previously submitted Remediation Progress Reports.



**TABLE 8c**  
**Summary of LNAPL Removal in Well GMW-68 - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/05/16	32.95	35.96	3.01	3.5	No Sock in Well	No Sock in Well	3.5	24.0
10/18/16	33.72	33.83	0.11	0.0	56.0	65.5	4.0	27.5
10/26/16	33.76	33.78	0.02	0.0	56.0	65.5	4.5	31.0
11/02/16	--	33.78	--	0.0	52.0	60.8	5.0	34.2
11/09/16	--	33.77	--	0.0	60.0	70.1	5.5	37.9
11/16/16	--	33.76	--	0.0	52.0	60.8	6.0	41.2
11/23/16	--	33.84	--	0.0	60.0	70.1	6.6	44.9
11/30/16	--	33.97	--	0.0	60.0	70.1	7.1	48.7
12/07/16	--	34.97	--	0.0	60.0	70.1	7.7	52.4
12/14/16	--	34.03	--	0.0	60.0	70.1	8.2	56.2
12/21/16	--	34.09	--	0.0	60.0	70.1	8.8	59.9
12/28/16	--	34.18	--	0.0	60.0	70.1	9.3	63.7

<b>Cumulative for the Reporting Period:</b>	<b>3.5</b>	<b>636.0</b>	<b>743.4</b>	<b>9.3</b>	<b>63.7</b>
<b>Cumulative Beginning October 2016 <sup>A</sup>:</b>	<b>3.5</b>	<b>636.0</b>	<b>743.4</b>	<b>9.3</b>	<b>63.7</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since October 2016 following installation of well during July 2015 (no measureable product from July 2015 to September 2016).

**TABLE 8d**  
**Summary of LNAPL Removal in PZ-3 - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/18/16	34.34	35.09	0.75	0.5	Installed Sock in Well	NA	0.7	4.9
11/02/16	34.34	34.58	0.24	0.0	12.0	14.0	0.8	5.6
11/09/16	34.50	35.24	0.74	0.3	16.0	18.7	1.2	8.4
11/16/16	34.56	35.52	0.96	0.3	12.0	14.0	1.6	10.8
11/23/16	34.39	36.45	2.06	0.5	No Sock in Well	NA	2.1	14.2
11/30/16	34.41	36.36	1.95	0.5	No Sock in Well	NA	2.6	17.7
12/07/16	34.41	36.27	1.86	0.5	No Sock in Well	NA	3.1	21.1
12/14/16	34.43	35.77	1.34	0.5	No Sock in Well	NA	3.6	24.5
12/21/16	34.43	36.22	1.79	0.5	No Sock in Well	NA	4.1	27.9
12/28/16	34.42	36.03	1.61	0.5	No Sock in Well	NA	4.6	31.3
<b>Cumulative for the Reporting Period:</b>				<b>4.0</b>	<b>40.0</b>	<b>46.8</b>	<b>4.4</b>	<b>29.9</b>
<b>Cumulative Beginning January 2014 <sup>A</sup>:</b>				<b>4.0</b>	<b>63.5</b>	<b>74.2</b>	<b>4.6</b>	<b>31.3</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock (approximately 18" long with 1" diameter)

-- = Not applicable

NM = Not measured, sock redeployed in well due to minimal LNAPL on the sock

A = Cumulative LNAPL removed since January 2014. LNAPL removed prior to January 2014 can be found in previously submitted Remediation Progress Reports.

**TABLE 8e**  
**Summary of LNAPL Removal in Well TF-15 - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/18/16	33.43	33.82	0.39	0.5	48.0	56.1	0.9	6.4
10/26/16	32.94	33.32	0.38	0.5	56.0	65.5	1.9	13.3
11/02/16	33.48	33.64	0.16	0.0	52.0	60.8	2.4	16.6
11/09/16	33.68	34.44	0.76	0.8	44.0	51.4	3.6	24.5
11/16/16	33.13	35.08	1.95	2.5	No Sock in Well	NA	6.1	41.6
11/23/16	32.98	35.65	2.67	3.0	No Sock in Well	NA	9.1	62.1
11/30/16	32.87	35.81	2.94	3.5	No Sock in Well	NA	12.6	86.1
12/07/16	32.82	35.82	3.00	3.5	No Sock in Well	NA	16.1	110.0
12/14/16	32.83	35.86	3.03	4.0	No Sock in Well	NA	20.1	137.4
12/21/16	32.85	35.92	3.07	3.5	No Sock in Well	NA	23.6	161.3
12/28/16	32.82	35.84	3.02	4.0	No Sock in Well	NA	27.6	188.7

<b>Cumulative for the Reporting Period:</b>	<b>25.8</b>	<b>200.0</b>	<b>233.8</b>	<b>27.6</b>	<b>188.7</b>
<b>Cumulative Beginning October 2016 <sup>A</sup>:</b>	<b>25.8</b>	<b>200.0</b>	<b>233.8</b>	<b>27.6</b>	<b>188.7</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since October 2016. No LNAPL removed previously during 2016 or throughout 2015 due to ongoing excavaton project inadvertently resulting in burial of well head which was located during October 2016. LNAPL removed prior to well head being buried can be found in previously submitted Remediation Progress Reports.

**TABLE 8f**  
**Summary of LNAPL Removal in Well TF-16 - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/18/16	34.31	34.66	0.35	0.5	No Sock in Well	NA	0.5	3.4
10/26/16	33.91	34.19	0.28	0.5	No Sock in Well	NA	1.0	6.8
11/02/16	34.07	34.57	0.50	0.5	No Sock in Well	NA	1.5	10.3
11/09/16	34.42	34.76	0.34	0.5	No Sock in Well	NA	2.0	13.7
11/16/16	34.57	34.79	0.22	0.0	Installed Sock in Well	NA	2.0	13.7
11/23/16	--	35.01	0.00	0.0	36.0	42.1	2.3	15.9
11/30/16	--	35.02	0.00	0.0	28.0	32.7	2.6	17.7
12/07/16	--	34.96	0.00	0.0	32.0	37.4	2.9	19.7
12/14/16	--	35.03	0.00	0.0	36.0	42.1	3.2	21.9
12/21/16	--	34.96	0.00	0.0	28.0	32.7	3.5	23.7
12/28/16	--	34.98	0.00	0.0	36.0	42.1	3.8	25.9

<b>Cumulative for the Reporting Period:</b>	<b>2.0</b>	<b>196.0</b>	<b>229.1</b>	<b>3.8</b>	<b>25.9</b>
<b>Cumulative Beginning October 2016 <sup>A</sup>:</b>	<b>2.0</b>	<b>196.0</b>	<b>229.1</b>	<b>3.8</b>	<b>25.9</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since October 2016. No LNAPL removed previously during 2016 or throughout 2015 due to ongoing excavaton project inadvertently resulting in burial of well head which was located during October 2016. LNAPL removed prior to well head being buried can be found in previously submitted Remediation Progress Reports.

**TABLE 8g**  
**Summary of LNAPL Removal in Well TF-19 - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/03/16	--	32.92	--	0.0	28.0	32.7	22.4	153.2
10/12/16	--	32.83	--	0.0	20.0	23.4	22.6	154.4
10/26/16	--	32.73	--	0.0	20.0	23.4	22.7	155.7
11/16/16	--	33.19	--	0.0	20.0	23.4	22.9	156.9
12/14/16	--	33.08	--	0.0	20.0	23.4	23.1	158.2
12/21/16	--	33.28	--	0.0	20.0	23.4	23.3	159.4
<b>Cumulative for the Reporting Period:</b>				<b>0.0</b>	<b>128.0</b>	<b>149.6</b>	<b>1.2</b>	<b>8.0</b>
<b>Cumulative Beginning June 2015 <sup>A</sup>:</b>				<b>6.8</b>	<b>1,812.0</b>	<b>2,118.0</b>	<b>23.3 <sup>B</sup></b>	<b>159.4 <sup>B</sup></b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since June 2015 (no measureable product from January 2014 to May 2015).

LNAPL removed prior to January 2014 can be found in previously submitted Remediation Progress Reports.

B = Corrected for calculation error at end of prior quarter.

**TABLE 8h**  
**Summary of LNAPL Removal in Well TF-18 - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/18/16	31.89	34.71	2.82	80.0	0.0	0.0	1,105.0	7,561.7
11/01/16	31.69	33.50	1.81	10.0	0.0	0.0	1,115.0	7,630.1
11/10/16	32.18	34.82	2.64	70.0	0.0	0.0	1,185.0	8,109.1
11/22/16	32.36	34.45	2.09	90.0	0.0	0.0	1,275.0	8,725.0
12/07/16	32.04	33.70	1.66	180.0	0.0	0.0	1,455.0	9,956.8
12/14/16	32.11	33.59	1.48	90.0	0.0	0.0	1,545.0	10,572.7
12/21/16	32.18	33.55	1.37	80.0	0.0	0.0	1,625.0	11,120.1
12/28/16	32.11	34.32	2.21	90.0	0.0	0.0	1,715.0	11,736.0
12/31/16	NM	NM	NM	35.0	0.0	0.0	1,750.0	11,975.6

<b>Cumulative for the Reporting Period:</b>	<b>725.0</b>	<b>0.0</b>	<b>0.0</b>	<b>725.0</b>	<b>4,961.3</b>
<b>Cumulative Beginning January 2014 - July 2016 <sup>A</sup>:</b>	<b>266.1</b>	<b>4,916.0</b>	<b>5,746.3</b>	<b>311.0</b>	<b>2,128.1</b>
<b>Cumulative Beginning August 2016 - December 2016 <sup>B</sup>:</b>	<b>1,439.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1,439.0</b>	<b>9,847.4</b>
<b>Cumulative Beginning January 2014 <sup>A</sup>:</b>	<b>1,705.1</b>	<b>4,916.0</b>	<b>5,746.3</b>	<b>1,750.0</b>	<b>11,975.6</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed prior to January 2014 can be found in previously submitted Remediation Progress Reports.

B = Cumulative LNAPL removed from a pneumatically controlled skimmer installed as part of a product recovery system that started operating on August 8, 2016 (system includes a total of four skimmers with skimming initially isolated to well TF-18).

\* = Product recovery system off-line from October 20, 2016 to November 1, 2016 due to a programming problem with the automated controller.

**TABLE 8i**  
**Summary of LNAPL Removal in Well RTF-18-N - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
--	No Pumping/Skimming from Product Recovery System Well During 4th Quarter 2016							

<b>Cumulative for the Reporting Period:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Cumulative Beginning April 2016 - July 2016 <sup>A</sup>:</b>	<b>47.5</b>	<b>0.0</b>	<b>0.0</b>	<b>47.5</b>	<b>325.1</b>
<b>Cumulative Beginning August 2016 - December 2016 <sup>B</sup>:</b>	<b>265.0</b>	<b>0.0</b>	<b>0.0</b>	<b>265.0</b>	<b>1,813.5</b>
<b>Cumulative Beginning April 2016 <sup>A</sup>:</b>	<b>312.5</b>	<b>0.0</b>	<b>0.0</b>	<b>312.5</b>	<b>2,138.5</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since April 2016 following installation of well during December 2015.

B = Cumulative LNAPL removed from a pneumatically controlled skimmer installed as part of a product recovery system that started operating on August 8, 2016 (system includes a total of four skimmers with skimming from well RTF-18-N initiated on August 11, 2016).

**TABLE 8j**  
**Summary of LNAPL Removal in Well RTF-18-E - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
12/14/16	32.72	33.41	0.69	25.0	0.0	0.0	365.5	2,501.2
12/21/16	32.88	32.98	0.10	65.0	0.0	0.0	430.5	2,946.0
12/28/16	32.83	33.74	0.91	55.0	0.0	0.0	485.5	3,322.4
12/31/16	--	--	--	15.0	0.0	0.0	500.5	3,425.0

<b>Cumulative for the Reporting Period:</b>	<b>160.0</b>	<b>0.0</b>	<b>0.0</b>	<b>160.0</b>	<b>1,094.9</b>
<b>Cumulative Beginning May 2016 - July 2016 <sup>A</sup>:</b>	<b>47.5</b>	<b>0.0</b>	<b>0.0</b>	<b>47.5</b>	<b>325.1</b>
<b>Cumulative Beginning August 2016 - December 2016 <sup>B</sup>:</b>	<b>453.0</b>	<b>0.0</b>	<b>0.0</b>	<b>453.0</b>	<b>3,100.0</b>
<b>Cumulative Beginning May 2016 <sup>A</sup>:</b>	<b>500.5</b>	<b>0.0</b>	<b>0.0</b>	<b>500.5</b>	<b>3,425.0</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since May 2016 following installation of well during December 2015.

B = Cumulative LNAPL removed from a pneumatically controlled skimmer installed as part of a product recovery system that started operating on August 8, 2016 (system includes a total of four skimmers with skimming from well RTF-18-E initiated on August 11, 2016; skimmer off-line from October 1, 2016 to December 9, 2016).



**TABLE 8k**  
**Summary of LNAPL Removal in Well RTF-18-W - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/18/16	32.56	35.08	2.52	8.0	0.0	0.0	60.8	415.7
11/01/16	32.38	33.55	1.17	2.0	0.0	0.0	62.8	429.4
11/10/16	33.10	34.16	1.06	10.0	0.0	0.0	72.8	497.8
11/22/16	33.16	34.28	1.12	5.0	0.0	0.0	77.8	532.1
12/09/16	32.85	33.36	0.51	3.0	0.0	0.0	80.8	552.6

<b>Cumulative for the Reporting Period:</b>	<b>28.0</b>	<b>0.0</b>	<b>0.0</b>	<b>28.0</b>	<b>191.6</b>
<b>Cumulative Beginning April 2016 - July 2016 <sup>A</sup>:</b>	<b>38.8</b>	<b>0.0</b>	<b>0.0</b>	<b>38.8</b>	<b>265.2</b>
<b>Cumulative Beginning August 2016 - December 2016 <sup>B</sup>:</b>	<b>42.0</b>	<b>0.0</b>	<b>0.0</b>	<b>42.0</b>	<b>287.4</b>
<b>Cumulative Beginning April 2016 <sup>A</sup>:</b>	<b>80.8</b>	<b>0.0</b>	<b>0.0</b>	<b>80.8</b>	<b>552.6</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since April 2016 following installation of well during December 2015.

B = Cumulative LNAPL removed from a pneumatically controlled skimmer installed as part of a product recovery system that started operating on August 8, 2016 (system includes a total of four skimmers with skimming from well RTF-18-W initiated on September 14, 2016; skimmer off-line from December 9-31, 2016).

\* = Product recovery system off-line from October 20, 2016 to November 1, 2016 due to a programming problem with the automated controller.

**TABLE 8I**  
**Summary of LNAPL Removal in Well RTF-18-NW - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/18/16	32.07	34.62	2.55	140.0	0.0	0.0	1,252.5	8,571.1
11/01/16	31.84	33.55	1.71	20.0	0.0	0.0	1,272.5	8,708.0
11/10/16	32.30	35.12	2.82	110.0	0.0	0.0	1,382.5	9,460.8
11/22/16	32.36	35.07	2.71	130.0	0.0	0.0	1,512.5	10,350.4
12/07/16	32.08	34.16	2.08	260.0	0.0	0.0	1,772.5	12,129.6
12/14/16	32.15	34.05	1.90	110.0	0.0	0.0	1,882.5	12,882.4
12/21/16	32.23	33.97	1.74	100.0	0.0	0.0	1,982.5	13,566.7
12/28/16	32.28	34.25	1.97	110.0	0.0	0.0	2,092.5	14,319.5
12/31/16	--	--	--	35.0	0.0	0.0	2,127.5	14,559.0

<b>Cumulative for the Reporting Period:</b>	<b>1,015.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1,015.0</b>	<b>6,945.9</b>
<b>Cumulative Beginning May 2016 - July 2016 <sup>A</sup>:</b>	<b>76.5</b>	<b>0.0</b>	<b>0.0</b>	<b>76.5</b>	<b>523.5</b>
<b>Cumulative Beginning August 2016 - December 2016 <sup>B</sup>:</b>	<b>2,051.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2,051.0</b>	<b>14,035.5</b>
<b>Cumulative Beginning May 2016 <sup>A</sup>:</b>	<b>2,127.5</b>	<b>0.0</b>	<b>0.0</b>	<b>2,127.5</b>	<b>14,559.0</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since May 2016 following installation of well during December 2015.

B = Cumulative LNAPL removed from a pneumatically controlled skimmer installed as part of a product recovery system that started operating on August 8, 2016 (system includes a total of four skimmers with skimming from well RTF-18-NW initiated on August 11, 2016).

\* = Product recovery system off-line from October 20, 2016 to November 1, 2016 due to a programming problem with the automated controller.

**TABLE 8m**  
**Summary of LNAPL Removal in Well RTF-18-NNW - 4th Quarter 2016**  
 DFSP, Norwalk  
 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Removed Via Vacuum Truck, Pumping and/or Bailing (gallons)	LNAPL Removed with Socks (ounces)	LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (gallons)	Cumulative LNAPL Removed Via Vacuum Truck, Pumping, Bailing and Socks <sup>A</sup> (pounds)
10/18/16	32.65	35.04	2.39	4.0	0.0	0.0	75.0	513.2
11/01/16	32.44	34.18	1.74	1.0	0.0	0.0	76.0	520.1
11/10/16	32.15	34.72	2.57	2.0	0.0	0.0	78.0	533.8
11/22/16	33.12	35.16	2.04	2.0	0.0	0.0	80.0	547.5
12/07/16	33.11	33.19	0.08	12.0	0.0	0.0	92.0	629.6
12/14/16	33.02	33.80	0.78	3.0	0.0	0.0	95.0	650.1
12/21/16	32.18	32.28	0.10	3.0	0.0	0.0	98.0	670.6
12/28/16	33.06	33.74	0.68	2.0	0.0	0.0	100.0	684.3
12/31/16	32.03	35.22	3.19	1.0	0.0	0.0	101.0	691.2

<b>Cumulative for the Reporting Period:</b>	<b>30.0</b>	<b>0.0</b>	<b>0.0</b>	<b>30.0</b>	<b>205.3</b>
<b>Cumulative Beginning April 2016 - July 2016 <sup>A</sup>:</b>	<b>54.5</b>	<b>0.0</b>	<b>0.0</b>	<b>54.5</b>	<b>373.0</b>
<b>Cumulative Beginning August 2016 - December 2016 <sup>B</sup>:</b>	<b>46.5</b>	<b>0.0</b>	<b>0.0</b>	<b>46.5</b>	<b>318.2</b>
<b>Cumulative Beginning April 2016 <sup>A</sup>:</b>	<b>101.0</b>	<b>0.0</b>	<b>0.0</b>	<b>101.0</b>	<b>691.2</b>

**Legend / Notes:**

LNAPL = Light non-aqueous phase liquids

feet btc = Feet below top of casing

Sock = LNAPL absorbent sock

-- = Not applicable

A = Cumulative LNAPL removed since April 2016 following installation of well during December 2015.

B = Cumulative LNAPL removed from a pneumatically controlled skimmer installed as part of a product recovery system that started operating on August 8, 2016 (system includes a total of four skimmers with skimming from well RTF-18-NNW initiated on September 14, 2016).

\* = Product recovery system off-line from October 20, 2016 to November 1, 2016 due to a programming problem with the automated controller.

**APPENDIX A**

**LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS**



9765 Eton Avenue  
Chatsworth  
California 91311  
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Fax: (818) 998-7258

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October 25, 2016

Neil Irish

The Source Group, Inc. (SH)  
1962 Freeman Ave.  
Signal Hill, CA 90755

**Re : DFSP Norwalk VES AQMD / 04-NDLA-013  
A5331958 / 6J12012**

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 10/12/16 16:45 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
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**VOCs BTEX/MTBE Vapor GC/MS**

Influent	6J12012-01	Vapor	5	10/12/16 09:07	10/12/16 16:45
Effluent	6J12012-02	Vapor	5	10/12/16 09:01	10/12/16 16:45

**VOCs Gasoline Range Organics Vapor**

Influent	6J12012-01	Vapor	5	10/12/16 09:07	10/12/16 16:45
Effluent	6J12012-02	Vapor	5	10/12/16 09:01	10/12/16 16:45

**VOCs GRO Vapor as Hexane**

Influent	6J12012-01	Vapor	5	10/12/16 09:07	10/12/16 16:45
Effluent	6J12012-02	Vapor	5	10/12/16 09:01	10/12/16 16:45

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**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** VOCs BTEX/MTBE Vapor by GC/MS 8260M

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16  
**Sampled:** 10/12/16  
**Prepared:** 10/14/16  
**Analyzed:** 10/14/16

**Influent****6J12012-01 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Benzene	<0.50	ug/L	0.50	<0.16	ppmv	0.16
Ethylbenzene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
Methyl-tert-Butyl Ether (MTBE)	<2.0	ug/L	2.0	<0.55	ppmv	0.55
Toluene	<0.50	ug/L	0.50	<0.13	ppmv	0.13
o-Xylene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
m,p-Xylenes	<1.0	ug/L	1.0	<0.23	ppmv	0.23

**Surrogates****%REC****%REC Limits**

4-Bromofluorobenzene  
Dibromofluoromethane  
Toluene-d8

112 %  
123 %  
99.6 %

70-140  
70-140  
70-140

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 0.5  
**Method:** VOCs BTEX/MTBE Vapor by GC/MS 8260M

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16  
**Sampled:** 10/12/16  
**Prepared:** 10/14/16  
**Analyzed:** 10/14/16

**Effluent****6J12012-02 (Vapor)**

<b>Analyte</b>	<b>Result</b>	<b>(ug/L)</b>	<b>MRL</b>	<b>Result</b>	<b>(ppmv)</b>	<b>MRL</b>
Benzene	<0.25	ug/L	0.50	<0.078	ppmv	0.16
Ethylbenzene	<0.25	ug/L	0.50	<0.058	ppmv	0.12
Methyl-tert-Butyl Ether (MTBE)	<1.0	ug/L	2.0	<0.28	ppmv	0.55
Toluene	<0.25	ug/L	0.50	<0.066	ppmv	0.13
o-Xylene	<0.25	ug/L	0.50	<0.058	ppmv	0.12
m,p-Xylenes	<0.50	ug/L	1.0	<0.12	ppmv	0.23

**Surrogates****%REC****%REC Limits**

4-Bromofluorobenzene  
Dibromofluoromethane  
Toluene-d8

114 %  
123 %  
101 %

70-140  
70-140  
70-140

**Viorel Vasile**  
Operations Manager





## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor by GC/FID

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16  
**Sampled:** 10/12/16  
**Prepared:** 10/13/16  
**Analyzed:** 10/13/16

**Influent**

**6J12012-01 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	<b>79</b>	ug/L	20	<b>19</b>	ppmv	4.9
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		96.3 %			70-130	

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor by GC/FID

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16  
**Sampled:** 10/12/16  
**Prepared:** 10/13/16  
**Analyzed:** 10/13/16

**Effluent****6J12012-02 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	<20	ug/L	20	<4.9	ppmv	4.9
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		103 %			70-130	

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor as Hexane

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16  
**Sampled:** 10/12/16  
**Prepared:** 10/13/16  
**Analyzed:** 10/13/16

**Influent****6J12012-01 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
GRO as Hexane	<b>79</b>	ug/L	20	<b>22</b>	ppmv	5.7
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		96.3 %			70-130	

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor as Hexane

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16  
**Sampled:** 10/12/16  
**Prepared:** 10/13/16  
**Analyzed:** 10/13/16

**Effluent****6J12012-02 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
GRO as Hexane	<20	ug/L	20	<5.7	ppmv	5.7
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		103 %			70-130	

**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Notes
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**VOCs BTEX/MTBE Vapor by GC/MS 8260M - Quality Control**

Batch B6J1402 - \*\*\* DEFAULT PREP \*\*\*

**Blank (B6J1402-BLK1)**

Prepared & Analyzed: 10/14/16

Benzene	<0.50	0.50	ug/L						
Ethylbenzene	<0.50	0.50	ug/L						
Methyl-tert-Butyl Ether (MTBE)	<2.0	2.0	ug/L						
Toluene	<0.50	0.50	ug/L						
o-Xylene	<0.50	0.50	ug/L						
m,p-Xylenes	<1.0	1.0	ug/L						

Surrogate: 4-Bromofluorobenzene	56.9		ug/L	50		114 70-140			
Surrogate: Dibromofluoromethane	57.8		ug/L	50		116 70-140			
Surrogate: Toluene-d8	51.7		ug/L	50		103 70-140			

**LCS (B6J1402-BS1)**

Prepared & Analyzed: 10/14/16

Benzene	21.5	0.50	ug/L	20		108 75-125			
Ethylbenzene	20.9	0.50	ug/L	20		104 75-125			
Methyl-tert-Butyl Ether (MTBE)	39.6	2.0	ug/L	40		99.1 75-125			
Toluene	20.0	0.50	ug/L	20		100 75-125			
o-Xylene	19.8	0.50	ug/L	20		99.0 75-125			
m,p-Xylenes	39.5	1.0	ug/L	40		98.7 75-125			

Surrogate: 4-Bromofluorobenzene	55.2		ug/L	50		110 70-140			
Surrogate: Dibromofluoromethane	49.1		ug/L	50		98.2 70-140			
Surrogate: Toluene-d8	49.7		ug/L	50		99.5 70-140			

**Duplicate (B6J1402-DUP1)**

Source: 6J13022-01 Prepared & Analyzed: 10/14/16

Benzene	<0.50	0.50	ug/L						30
Ethylbenzene	1.59	0.50	ug/L		1.76			10.1	30
Methyl-tert-Butyl Ether (MTBE)	<2.0	2.0	ug/L						30
Toluene	0.860	0.50	ug/L		0.960			11.0	30
o-Xylene	2.99	0.50	ug/L		3.06			2.31	30
m,p-Xylenes	12.6	1.0	ug/L		13.9			10.4	30

Surrogate: 4-Bromofluorobenzene	54.1		ug/L	50		108 70-140			
Surrogate: Dibromofluoromethane	64.6		ug/L	50		129 70-140			
Surrogate: Toluene-d8	47.8		ug/L	50		95.5 70-140			

**Gasoline Range Organics in Vapor by GC/FID - Quality Control**

**Viorel Vasile**  
 Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Notes
<b>Gasoline Range Organics in Vapor by GC/FID - Quality Control</b>									
<i>Batch B6J1321 - *** DEFAULT PREP ***</i>									
<b>Blank (B6J1321-BLK1)</b>				Prepared & Analyzed: 10/13/16					
Gasoline Range Organics (GRO)	<20	20	ug/L						
Surrogate: a,a,a-Trifluorotoluene	48.8		ug/L	50		97.6 70-130			
<b>LCS (B6J1321-BS1)</b>				Prepared & Analyzed: 10/13/16					
Gasoline Range Organics (GRO)	<b>424</b>	20	ug/L	500		84.7 75-125			
Surrogate: a,a,a-Trifluorotoluene	45.1		ug/L	50		90.2 70-130			
<b>LCS Dup (B6J1321-BSD1)</b>				Prepared & Analyzed: 10/13/16					
Gasoline Range Organics (GRO)	<b>437</b>	20	ug/L	500		87.4 75-125	3.12	30	
Surrogate: a,a,a-Trifluorotoluene	49.0		ug/L	50		98.0 70-130			
<b>Duplicate (B6J1321-DUP1)</b>				<b>Source: 6J12012-01</b>		Prepared & Analyzed: 10/13/16			
Gasoline Range Organics (GRO)	<b>70.6</b>	20	ug/L		78.8		11.0	30	
Surrogate: a,a,a-Trifluorotoluene	48.9		ug/L	50		97.9 70-130			
<b>Gasoline Range Organics in Vapor as Hexane - Quality Control</b>									
<i>Batch B6J1321 - *** DEFAULT PREP ***</i>									
<b>Blank (B6J1321-BLK1)</b>				Prepared & Analyzed: 10/13/16					
GRO as Hexane	<20	20	ug/L						
Surrogate: a,a,a-Trifluorotoluene	48.8		ug/L	50		97.6 70-130			
<b>LCS (B6J1321-BS1)</b>				Prepared & Analyzed: 10/13/16					
GRO as Hexane	<b>424</b>	20	ug/L	500		84.7 75-125			
Surrogate: a,a,a-Trifluorotoluene	45.1		ug/L	50		90.2 70-130			
<b>LCS Dup (B6J1321-BSD1)</b>				Prepared & Analyzed: 10/13/16					
GRO as Hexane	<b>437</b>	20	ug/L	500		87.4 75-125	3.12	30	
Surrogate: a,a,a-Trifluorotoluene	49.0		ug/L	50		98.0 70-130			
<b>Duplicate (B6J1321-DUP1)</b>				<b>Source: 6J12012-01</b>		Prepared & Analyzed: 10/13/16			
GRO as Hexane	<b>70.6</b>	20	ug/L		78.8		11.0	30	
Surrogate: a,a,a-Trifluorotoluene	48.9		ug/L	50		97.9 70-130			

**Viorel Vasile**  
Operations Manager



## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5331958  
**Date Received:** 10/12/16  
**Date Reported:** 10/25/16

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### Special Notes

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**Viorel Vasile**  
Operations Manager







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October 27, 2016

Neil Irish

The Source Group, Inc. (SH)  
1962 Freeman Ave.  
Signal Hill, CA 90755

**Re : DFSP Norwalk GWETS NPDES Monthly / 04-NDLA-013  
A5331961 / 6J12015**

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 10/12/16 16:45 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331961  
**Date Received:** 10/12/16  
**Date Reported:** 10/27/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
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**8260B TPHGASOLINEBTEXOXY**

Surge Tank	6J12015-01	Water	5	10/12/16 11:25	10/12/16 16:45
After GAC-1	6J12015-02	Water	5	10/12/16 11:20	10/12/16 16:45
After GAC-2	6J12015-03	Water	5	10/12/16 11:14	10/12/16 16:45

**Arsenic Total EPA 200.7**

Surge Tank	6J12015-01	Water	5	10/12/16 11:25	10/12/16 16:45
After Zeolite Bed	6J12015-04	Water	5	10/12/16 11:10	10/12/16 16:45
After Alumina Bed	6J12015-05	Water	5	10/12/16 11:09	10/12/16 16:45

**Diesel Range Organics 8015M**

Surge Tank	6J12015-01	Water	5	10/12/16 11:25	10/12/16 16:45
After GAC-1	6J12015-02	Water	5	10/12/16 11:20	10/12/16 16:45
After GAC-2	6J12015-03	Water	5	10/12/16 11:14	10/12/16 16:45

**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** TPHG/BTEX/Oxygenates by GC/MS

**AA Project No:** A5331961  
**Date Received:** 10/12/16  
**Date Reported:** 10/27/16  
**Units:** ug/L

<b>Date Sampled:</b>	10/12/16	10/12/16	10/12/16		
<b>Date Prepared:</b>	10/19/16	10/19/16	10/19/16		
<b>Date Analyzed:</b>	10/19/16	10/19/16	10/19/16		
<b>AA ID No:</b>	6J12015-01	6J12015-02	6J12015-03		
<b>Client ID No:</b>	Surge Tank	After GAC-1	After GAC-2		
<b>Matrix:</b>	Water	Water	Water		
<b>Dilution Factor:</b>	1	1	1	MDL	MRL

**8260B TPHGASOLINEBTEXOXY (EPA 8260B)**

tert-Amyl Methyl Ether (TAME)	<0.30	<0.30	<0.30	0.30	2.0
Benzene	<b>4.5</b>	<0.20	<0.20	0.20	0.50
tert-Butyl alcohol (TBA)	<7.0	<7.0	<7.0	7.0	10
Diisopropyl ether (DIPE)	<0.50	<0.50	<0.50	0.50	2.0
Ethylbenzene	<0.20	<0.20	<0.20	0.20	0.50
Ethyl-tert-Butyl Ether (ETBE)	<0.40	<0.40	<0.40	0.40	2.0
Gasoline Range Organics (GRO)	<40	<40	<40	40	100
Methyl-tert-Butyl Ether (MTBE)	<0.40	<b>0.52 J</b>	<b>0.41 J</b>	0.40	2.0
Toluene	<0.30	<0.30	<0.30	0.30	0.50
o-Xylene	<0.30	<0.30	<0.30	0.30	0.50
m,p-Xylenes	<0.40	<0.40	<0.40	0.40	1.0

**Surrogates**

				<b>%REC Limits</b>
4-Bromofluorobenzene	107%	109%	110%	70-140
Dibromofluoromethane	127%	125%	125%	70-140
Toluene-d8	96%	99%	98%	70-140

**Viorel Vasile**  
Operations Manager



## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** Diesel Range Organics by GC/FID

**AA Project No:** A5331961  
**Date Received:** 10/12/16  
**Date Reported:** 10/27/16  
**Units:** ug/L

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<b>Date Sampled:</b>	10/12/16	10/12/16	10/12/16		
<b>Date Prepared:</b>	10/17/16	10/17/16	10/17/16		
<b>Date Analyzed:</b>	10/17/16	10/17/16	10/17/16		
<b>AA ID No:</b>	6J12015-01	6J12015-02	6J12015-03		
<b>Client ID No:</b>	Surge Tank	After GAC-1	After GAC-2		
<b>Matrix:</b>	Water	Water	Water		
<b>Dilution Factor:</b>	1	1	1	MDL	MRL

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**Diesel Range Organics 8015M (EPA 8015M)**

Diesel Range Organics as Diesel	<b>230</b>	<60	<60	60	100
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**Surrogates**

o-Terphenyl	102%	130%	117%	<b><u>%REC Limits</u></b>	50-150
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**Viorel Vasile**  
Operations Manager



## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** Total Metals by ICP Atomic Emission Spectroscopy

**AA Project No:** A5331961  
**Date Received:** 10/12/16  
**Date Reported:** 10/27/16

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MDL	MRL
<b><u>Arsenic Total EPA 200.7 (EPA 200.7)</u></b>									
6J12015-01	Surge Tank	10/12/16	10/17/16	10/17/16	1	<b>0.051</b>	mg/L	0.006	0.007
6J12015-04	After Zeolite Bed	10/12/16	10/17/16	10/17/16	1	<b>0.0090</b>	mg/L	0.006	0.007
6J12015-05	After Alumina Bed	10/12/16	10/17/16	10/17/16	1	<b>0.011</b>	mg/L	0.006	0.007

**Viorel Vasile**  
Operations Manager



### LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331961  
**Date Received:** 10/12/16  
**Date Reported:** 10/27/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
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#### TPHG/BTEX/Oxygenates by GC/MS - Quality Control

Batch B6J1932 - EPA 5030B

##### Blank (B6J1932-BLK1)

Prepared & Analyzed: 10/19/16

tert-Amyl Methyl Ether (TAME)	<0.30	0.30	ug/L
Benzene	<0.20	0.20	ug/L
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L
Diisopropyl ether (DIPE)	<0.50	0.50	ug/L
Ethylbenzene	<0.20	0.20	ug/L
Ethyl-tert-Butyl Ether (ETBE)	<0.40	0.40	ug/L
Gasoline Range Organics (GRO)	<40	40	ug/L
Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	ug/L
Toluene	<0.30	0.30	ug/L
o-Xylene	<0.30	0.30	ug/L
m,p-Xylenes	<0.40	0.40	ug/L

Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50	104	70-140
Surrogate: Dibromofluoromethane	59.0		ug/L	50	118	70-140
Surrogate: Toluene-d8	48.9		ug/L	50	97.8	70-140

##### LCS (B6J1932-BS1)

Prepared & Analyzed: 10/19/16

tert-Amyl Methyl Ether (TAME)	<b>19.9</b>	0.30	ug/L	20	99.4	70-130
Benzene	<b>23.1</b>	0.20	ug/L	20	116	75-125
tert-Butyl alcohol (TBA)	<b>118</b>	7.0	ug/L	100	118	70-130
Diisopropyl ether (DIPE)	<b>23.1</b>	0.50	ug/L	20	116	70-130
Ethylbenzene	<b>20.5</b>	0.20	ug/L	20	102	75-125
Ethyl-tert-Butyl Ether (ETBE)	<b>21.4</b>	0.40	ug/L	20	107	70-130
Gasoline Range Organics (GRO)	<b>442</b>	40	ug/L	500	88.4	70-130
Methyl-tert-Butyl Ether (MTBE)	<b>42.1</b>	0.40	ug/L	40	105	70-135
Toluene	<b>21.2</b>	0.30	ug/L	20	106	75-125
o-Xylene	<b>19.7</b>	0.30	ug/L	20	98.4	75-125
m,p-Xylenes	<b>40.0</b>	0.40	ug/L	40	100	70-130

Surrogate: 4-Bromofluorobenzene	53.8		ug/L	50	108	70-140
Surrogate: Dibromofluoromethane	50.7		ug/L	50	101	70-140
Surrogate: Toluene-d8	49.4		ug/L	50	98.9	70-140

##### Matrix Spike (B6J1932-MS1)

Source: 6J12015-03 Prepared & Analyzed: 10/19/16

**Viorel Vasile**  
Operations Manager



### LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331961  
**Date Received:** 10/12/16  
**Date Reported:** 10/27/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit	Notes
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#### TPHG/BTEX/Oxygenates by GC/MS - Quality Control

Batch B6J1932 - EPA 5030B

**Matrix Spike (B6J1932-MS1) Continued Source: 6J12015-03** Prepared & Analyzed: 10/19/16

tert-Amyl Methyl Ether (TAME)	18.8	0.30	ug/L	20	<2.0	93.8	70-130			
Benzene	23.0	0.20	ug/L	20	<0.50	115	70-130			
tert-Butyl alcohol (TBA)	111	7.0	ug/L	100	<10	111	70-130			
Diisopropyl ether (DIPE)	22.6	0.50	ug/L	20	<2.0	113	70-130			
Ethylbenzene	23.2	0.20	ug/L	20	<0.50	116	70-130			
Ethyl-tert-Butyl Ether (ETBE)	20.5	0.40	ug/L	20	<2.0	102	70-130			
Gasoline Range Organics (GRO)	476	40	ug/L	500	<100	95.2	70-130			
Methyl-tert-Butyl Ether (MTBE)	38.8	0.40	ug/L	40	0.410	96.0	70-130			
Toluene	24.4	0.30	ug/L	20	<0.50	122	70-130			
o-Xylene	21.8	0.30	ug/L	20	<0.50	109	70-130			
m,p-Xylenes	43.8	0.40	ug/L	40	<1.0	109	70-130			

Surrogate: 4-Bromofluorobenzene	54.0		ug/L	50		108	70-140			
Surrogate: Dibromofluoromethane	48.0		ug/L	50		95.9	70-140			
Surrogate: Toluene-d8	53.0		ug/L	50		106	70-140			

**Matrix Spike Dup (B6J1932-MSD1) Source: 6J12015-03** Prepared: 10/19/16 Analyzed: 10/20/16

tert-Amyl Methyl Ether (TAME)	21.2	0.30	ug/L	20	<2.0	106	70-130	12.0	30	
Benzene	23.3	0.20	ug/L	20	<0.50	117	70-130	1.29	30	
tert-Butyl alcohol (TBA)	108	7.0	ug/L	100	<10	108	70-130	2.74	30	
Diisopropyl ether (DIPE)	23.9	0.50	ug/L	20	<2.0	120	70-130	5.37	30	
Ethylbenzene	20.2	0.20	ug/L	20	<0.50	101	70-130	13.4	30	
Ethyl-tert-Butyl Ether (ETBE)	22.9	0.40	ug/L	20	<2.0	114	70-130	11.2	30	
Gasoline Range Organics (GRO)	545	40	ug/L	500	<100	109	70-130	13.5	30	
Methyl-tert-Butyl Ether (MTBE)	43.6	0.40	ug/L	40	0.410	108	70-130	11.7	30	
Toluene	20.5	0.30	ug/L	20	<0.50	102	70-130	17.4	30	
o-Xylene	19.5	0.30	ug/L	20	<0.50	97.4	70-130	11.3	30	
m,p-Xylenes	39.3	0.40	ug/L	40	<1.0	98.2	70-130	10.7	30	

Surrogate: 4-Bromofluorobenzene	53.3		ug/L	50		107	70-140			
Surrogate: Dibromofluoromethane	50.9		ug/L	50		102	70-140			
Surrogate: Toluene-d8	48.9		ug/L	50		97.8	70-140			

#### Diesel Range Organics by GC/FID - Quality Control

**Viorel Vasile**  
Operations Manager



### LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331961  
**Date Received:** 10/12/16  
**Date Reported:** 10/27/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Notes
<b>Diesel Range Organics by GC/FID - Quality Control</b>									
<i>Batch B6J1720 - EPA 3510C</i>									
<b>Blank (B6J1720-BLK1)</b>				Prepared & Analyzed: 10/17/16					
Diesel Range Organics as Diesel	<60	60	ug/L						
Surrogate: o-Terphenyl	51.0		ug/L	40		128 50-150			
<b>LCS (B6J1720-BS1)</b>				Prepared & Analyzed: 10/17/16					
Diesel Range Organics as Diesel	<b>748</b>	60	ug/L	800		93.6 75-125		30	
Surrogate: o-Terphenyl	52.9		ug/L	40		132 50-150			
<b>LCS Dup (B6J1720-BSD1)</b>				Prepared & Analyzed: 10/17/16					
Diesel Range Organics as Diesel	<b>757</b>	60	ug/L	800		94.6 75-125	1.13	30	
Surrogate: o-Terphenyl	53.2		ug/L	40		133 50-150			
<b>Total Metals by ICP Atomic Emission Spectroscopy - Quality Control</b>									
<i>Batch B6J1730 - EPA 200.7</i>									
<b>Blank (B6J1730-BLK1)</b>				Prepared & Analyzed: 10/17/16					
Arsenic	<0.0060	0.0060	mg/L						
<b>LCS (B6J1730-BS1)</b>				Prepared & Analyzed: 10/17/16					
Arsenic	<b>0.203</b>	0.0060	mg/L	0.20		102 80-120		20	
<b>LCS Dup (B6J1730-BSD1)</b>				Prepared & Analyzed: 10/17/16					
Arsenic	<b>0.182</b>	0.0060	mg/L	0.20		91.2 80-120	10.7	20	
<b>Duplicate (B6J1730-DUP1)</b>				<b>Source: 6J12015-05</b> Prepared & Analyzed: 10/17/16					
Arsenic	<b>0.0120</b>	0.0060	mg/L		0.0110		8.70	30	
<b>Matrix Spike (B6J1730-MS1)</b>				<b>Source: 6J12014-01</b> Prepared & Analyzed: 10/17/16					
Arsenic	<b>0.202</b>	0.0060	mg/L	0.20	0.00800	96.8 75-125		20	
<b>Matrix Spike Dup (B6J1730-MSD1)</b>				<b>Source: 6J12014-01</b> Prepared & Analyzed: 10/17/16					
Arsenic	<b>0.223</b>	0.0060	mg/L	0.20	0.00800	108 75-125	10.2	20	

**Viorel Vasile**  
 Operations Manager





## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331961  
**Date Received:** 10/12/16  
**Date Reported:** 10/27/16

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### Special Notes

**J** : Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

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**Viorel Vasile**  
Operations Manager





9765 Eton Avenue  
Chatsworth  
California 91311  
Tel: (818) 998-5547  
Fax: (818) 998-7258

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November 07, 2016

Neil Irish

The Source Group, Inc. (SH)  
1962 Freeman Ave.  
Signal Hill, CA 90755

**Re : DFSP Norwalk VES AQMD / 04-NDLA-013  
A5331983 / 6K01011**

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 11/01/16 15:12 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
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**VOCs BTEX/MTBE Vapor GC/MS**

Influent	6K01011-01	Vapor	5	11/01/16 10:42	11/01/16 15:12
Effluent	6K01011-02	Vapor	5	11/01/16 10:37	11/01/16 15:12

**VOCs Gasoline Range Organics Vapor**

Influent	6K01011-01	Vapor	5	11/01/16 10:42	11/01/16 15:12
Effluent	6K01011-02	Vapor	5	11/01/16 10:37	11/01/16 15:12

**VOCs GRO Vapor as Hexane**

Influent	6K01011-01	Vapor	5	11/01/16 10:42	11/01/16 15:12
Effluent	6K01011-02	Vapor	5	11/01/16 10:37	11/01/16 15:12

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**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** VOCs BTEX/MTBE Vapor by GC/MS 8260M

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16  
**Sampled:** 11/01/16  
**Prepared:** 11/04/16  
**Analyzed:** 11/04/16

**Influent****6K01011-01 (Vapor)**

<b>Analyte</b>	<b>Result</b>	<b>(ug/L)</b>	<b>MRL</b>	<b>Result</b>	<b>(ppmv)</b>	<b>MRL</b>
Benzene	1.7	ug/L	0.50	0.53	ppmv	0.16
Ethylbenzene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
Methyl-tert-Butyl Ether (MTBE)	<2.0	ug/L	2.0	<0.55	ppmv	0.55
Toluene	0.86	ug/L	0.50	0.23	ppmv	0.13
o-Xylene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
m,p-Xylenes	<1.0	ug/L	1.0	<0.23	ppmv	0.23

**Surrogates****%REC****%REC Limits**

4-Bromofluorobenzene  
Dibromofluoromethane  
Toluene-d8

108 %  
116 %  
101 %

70-140  
70-140  
70-140

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 0.5  
**Method:** VOCs BTEX/MTBE Vapor by GC/MS 8260M

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16  
**Sampled:** 11/01/16  
**Prepared:** 11/04/16  
**Analyzed:** 11/04/16

**Effluent****6K01011-02 (Vapor)**

<b>Analyte</b>	<b>Result</b>	<b>(ug/L)</b>	<b>MRL</b>	<b>Result</b>	<b>(ppmv)</b>	<b>MRL</b>
Benzene	<0.25	ug/L	0.50	<0.078	ppmv	0.16
Ethylbenzene	<0.25	ug/L	0.50	<0.058	ppmv	0.12
Methyl-tert-Butyl Ether (MTBE)	<1.0	ug/L	2.0	<0.28	ppmv	0.55
Toluene	<0.25	ug/L	0.50	<0.066	ppmv	0.13
o-Xylene	<0.25	ug/L	0.50	<0.058	ppmv	0.12
m,p-Xylenes	<0.50	ug/L	1.0	<0.12	ppmv	0.23

**Surrogates****%REC****%REC Limits**

4-Bromofluorobenzene  
Dibromofluoromethane  
Toluene-d8

109 %  
113 %  
101 %

70-140  
70-140  
70-140

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor by GC/FID

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16  
**Sampled:** 11/01/16  
**Prepared:** 11/03/16  
**Analyzed:** 11/03/16

**Influent****6K01011-01 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	<b>330</b>	ug/L	20	<b>81</b>	ppmv	4.9
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		90.5 %			70-130	

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor by GC/FID

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16  
**Sampled:** 11/01/16  
**Prepared:** 11/03/16  
**Analyzed:** 11/03/16

**Effluent****6K01011-02 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	<20	ug/L	20	<4.9	ppmv	4.9
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		96.6 %			70-130	

**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor as Hexane

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16  
**Sampled:** 11/01/16  
**Prepared:** 11/03/16  
**Analyzed:** 11/03/16

**Influent****6K01011-01 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
GRO as Hexane	330	ug/L	20	94	ppmv	5.7
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		90.5 %			70-130	

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor as Hexane

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16  
**Sampled:** 11/01/16  
**Prepared:** 11/03/16  
**Analyzed:** 11/03/16

**Effluent****6K01011-02 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
GRO as Hexane	<20	ug/L	20	<5.7	ppmv	5.7
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		96.6 %			70-130	

**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
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**VOCs BTEX/MTBE Vapor by GC/MS 8260M - Quality Control**

Batch B6K0405 - \*\*\* DEFAULT PREP \*\*\*

**Blank (B6K0405-BLK1)**

Prepared & Analyzed: 11/04/16

Benzene	<0.50	0.50	ug/L							
Ethylbenzene	<0.50	0.50	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<2.0	2.0	ug/L							
Toluene	<0.50	0.50	ug/L							
o-Xylene	<0.50	0.50	ug/L							
m,p-Xylenes	<1.0	1.0	ug/L							

Surrogate: 4-Bromofluorobenzene	54.9		ug/L	50		110	70-140			
Surrogate: Dibromofluoromethane	56.8		ug/L	50		114	70-140			
Surrogate: Toluene-d8	50.1		ug/L	50		100	70-140			

**LCS (B6K0405-BS1)**

Prepared & Analyzed: 11/04/16

Benzene	21.5	0.50	ug/L	20		107	75-125			
Ethylbenzene	21.0	0.50	ug/L	20		105	75-125			
Methyl-tert-Butyl Ether (MTBE)	46.5	2.0	ug/L	40		116	75-125			
Toluene	21.9	0.50	ug/L	20		109	75-125			
o-Xylene	20.0	0.50	ug/L	20		100	75-125			
m,p-Xylenes	41.0	1.0	ug/L	40		103	75-125			

Surrogate: 4-Bromofluorobenzene	53.5		ug/L	50		107	70-140			
Surrogate: Dibromofluoromethane	45.5		ug/L	50		91.1	70-140			
Surrogate: Toluene-d8	51.0		ug/L	50		102	70-140			

**Duplicate (B6K0405-DUP1)**

Source: 6K02021-01 Prepared & Analyzed: 11/04/16

Benzene	<0.25	0.25	ug/L							30
Ethylbenzene	<0.25	0.25	ug/L							30
Methyl-tert-Butyl Ether (MTBE)	<1.0	1.0	ug/L							30
Toluene	<0.25	0.25	ug/L							30
o-Xylene	<0.25	0.25	ug/L							30
m,p-Xylenes	<0.50	0.50	ug/L							30

Surrogate: 4-Bromofluorobenzene	27.4		ug/L	25		109	70-140			
Surrogate: Dibromofluoromethane	30.0		ug/L	25		120	70-140			
Surrogate: Toluene-d8	25.0		ug/L	25		99.9	70-140			

**Gasoline Range Organics in Vapor by GC/FID - Quality Control**

**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	Limit	Notes
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**Gasoline Range Organics in Vapor by GC/FID - Quality Control**

*Batch B6K0323 - \*\*\* DEFAULT PREP \*\*\**

**Blank (B6K0323-BLK1)**

Prepared & Analyzed: 11/03/16

Gasoline Range Organics (GRO)	<20	20	ug/L							
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<i>Surrogate: a,a,a-Trifluorotoluene</i>	45.8		ug/L	50		91.6	70-130			
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**LCS (B6K0323-BS1)**

Prepared & Analyzed: 11/03/16

Gasoline Range Organics (GRO)	<b>448</b>	20	ug/L	500		89.6	75-125			
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<i>Surrogate: a,a,a-Trifluorotoluene</i>	48.8		ug/L	50		97.5	70-130			
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**LCS Dup (B6K0323-BSD1)**

Prepared & Analyzed: 11/03/16

Gasoline Range Organics (GRO)	<b>466</b>	20	ug/L	500		93.3	75-125	3.99	30	
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<i>Surrogate: a,a,a-Trifluorotoluene</i>	51.9		ug/L	50		104	70-130			
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**Duplicate (B6K0323-DUP1)**

**Source: 6K01011-01** Prepared & Analyzed: 11/03/16

Gasoline Range Organics (GRO)	<b>324</b>	20	ug/L		328			1.37	30	
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<i>Surrogate: a,a,a-Trifluorotoluene</i>	47.1		ug/L	50		94.2	70-130			
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**Gasoline Range Organics in Vapor as Hexane - Quality Control**

*Batch B6K0323 - \*\*\* DEFAULT PREP \*\*\**

**Blank (B6K0323-BLK1)**

Prepared & Analyzed: 11/03/16

GRO as Hexane	<20	20	ug/L							
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<i>Surrogate: a,a,a-Trifluorotoluene</i>	45.8		ug/L	50		91.6	70-130			
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**LCS (B6K0323-BS1)**

Prepared & Analyzed: 11/03/16

GRO as Hexane	<b>448</b>	20	ug/L	500		89.6	75-125			
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<i>Surrogate: a,a,a-Trifluorotoluene</i>	48.8		ug/L	50		97.5	70-130			
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**LCS Dup (B6K0323-BSD1)**

Prepared & Analyzed: 11/03/16

GRO as Hexane	<b>466</b>	20	ug/L	500		93.3	75-125	3.99	30	
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<i>Surrogate: a,a,a-Trifluorotoluene</i>	51.9		ug/L	50		104	70-130			
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**Duplicate (B6K0323-DUP1)**

**Source: 6K01011-01** Prepared & Analyzed: 11/03/16

GRO as Hexane	<b>324</b>	20	ug/L		328			1.37	30	
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<i>Surrogate: a,a,a-Trifluorotoluene</i>	47.1		ug/L	50		94.2	70-130			
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**Viorel Vasile**  
Operations Manager



## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5331983  
**Date Received:** 11/01/16  
**Date Reported:** 11/07/16

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### Special Notes

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**Viorel Vasile**  
Operations Manager





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---

November 16, 2016

Neil Irish

The Source Group, Inc. (SH)  
1962 Freeman Ave.  
Signal Hill, CA 90755

**Re : DFSP Norwalk GWETS NPDES Monthly / 04-NDLA-013  
A5331982 / 6K01014**

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 11/01/16 15:12 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331982  
**Date Received:** 11/01/16  
**Date Reported:** 11/16/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
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**8260B TPHGASOLINEBTEXOXY**

Surge Tank	6K01014-01	Water	5	11/01/16 11:28	11/01/16 15:12
After GAC-1	6K01014-02	Water	5	11/01/16 11:23	11/01/16 15:12
After GAC-2	6K01014-03	Water	5	11/01/16 11:19	11/01/16 15:12

**Arsenic Total EPA 200.7**

Surge Tank	6K01014-01	Water	5	11/01/16 11:28	11/01/16 15:12
After Zeolite Bed	6K01014-04	Water	5	11/01/16 11:14	11/01/16 15:12
After Alumina Bed	6K01014-05	Water	5	11/01/16 11:13	11/01/16 15:12

**Diesel Range Organics 8015M**

Surge Tank	6K01014-01	Water	5	11/01/16 11:28	11/01/16 15:12
After GAC-1	6K01014-02	Water	5	11/01/16 11:23	11/01/16 15:12
After GAC-2	6K01014-03	Water	5	11/01/16 11:19	11/01/16 15:12

**Viorel Vasile**  
Operations Manager





**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** TPHG/BTEX/Oxygenates by GC/MS

**AA Project No:** A5331982  
**Date Received:** 11/01/16  
**Date Reported:** 11/16/16  
**Units:** ug/L

<b>Date Sampled:</b>	11/01/16	11/01/16	11/01/16		
<b>Date Prepared:</b>	11/02/16	11/02/16	11/02/16		
<b>Date Analyzed:</b>	11/02/16	11/02/16	11/02/16		
<b>AA ID No:</b>	6K01014-01	6K01014-02	6K01014-03		
<b>Client ID No:</b>	Surge Tank	After GAC-1	After GAC-2		
<b>Matrix:</b>	Water	Water	Water		
<b>Dilution Factor:</b>	1	1	1	MDL	MRL

**8260B TPH GASOLINE BTEX OXY (EPA 8260B)**

tert-Amyl Methyl Ether (TAME)	<0.30	<0.30	<0.30	0.30	2.0
Benzene	<b>3.1</b>	<0.20	<0.20	0.20	0.50
tert-Butyl alcohol (TBA)	<7.0	<7.0	<7.0	7.0	10
Diisopropyl ether (DIPE)	<0.50	<0.50	<0.50	0.50	2.0
Ethylbenzene	<0.20	<0.20	<0.20	0.20	0.50
Ethyl-tert-Butyl Ether (ETBE)	<0.40	<0.40	<0.40	0.40	2.0
Gasoline Range Organics (GRO)	<b>52 J</b>	<40	<40	40	100
Methyl-tert-Butyl Ether (MTBE)	<0.40	<0.40	<0.40	0.40	2.0
Toluene	<0.30	<0.30	<0.30	0.30	0.50
o-Xylene	<0.30	<0.30	<0.30	0.30	0.50
m,p-Xylenes	<0.40	<0.40	<0.40	0.40	1.0

**Surrogates**

				<b>%REC Limits</b>
4-Bromofluorobenzene	120%	119%	120%	70-140
Dibromofluoromethane	117%	107%	114%	70-140
Toluene-d8	103%	107%	106%	70-140

**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** Diesel Range Organics by GC/FID

**AA Project No:** A5331982  
**Date Received:** 11/01/16  
**Date Reported:** 11/16/16  
**Units:** ug/L

<b>Date Sampled:</b>	11/01/16	11/01/16	11/01/16		
<b>Date Prepared:</b>	11/04/16	11/04/16	11/04/16		
<b>Date Analyzed:</b>	11/04/16	11/04/16	11/04/16		
<b>AA ID No:</b>	6K01014-01	6K01014-02	6K01014-03		
<b>Client ID No:</b>	Surge Tank	After GAC-1	After GAC-2		
<b>Matrix:</b>	Water	Water	Water		
<b>Dilution Factor:</b>	1	1	1	MDL	MRL

**Diesel Range Organics 8015M (EPA 8015M)**

Diesel Range Organics as Diesel	<b>120</b>	<b>98 J</b>	<60	60	100
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**Surrogates**

o-Terphenyl	120%	92%	121%	<b><u>%REC Limits</u></b>	50-150
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**Viorel Vasile**  
Operations Manager



## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** Total Metals by ICP Atomic Emission Spectroscopy

**AA Project No:** A5331982  
**Date Received:** 11/01/16  
**Date Reported:** 11/16/16

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MDL	MRL
<b><u>Arsenic Total EPA 200.7 (EPA 200.7)</u></b>									
6K01014-01	Surge Tank	11/01/16	11/07/16	11/07/16	1	<b>0.025</b>	mg/L	0.006	0.007
6K01014-04	After Zeolite Bed	11/01/16	11/07/16	11/07/16	1	<b>0.015</b>	mg/L	0.006	0.007
6K01014-05	After Alumina Bed	11/01/16	11/07/16	11/07/16	1	<b>0.015</b>	mg/L	0.006	0.007

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331982  
**Date Received:** 11/01/16  
**Date Reported:** 11/16/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**TPHG/BTEX/Oxygenates by GC/MS - Quality Control**

Batch B6K0215 - EPA 5030B

**Blank (B6K0215-BLK1)**

Prepared &amp; Analyzed: 11/02/16

tert-Amyl Methyl Ether (TAME)	<0.30	0.30	ug/L
Benzene	<0.20	0.20	ug/L
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L
Diisopropyl ether (DIPE)	<0.50	0.50	ug/L
Ethylbenzene	<0.20	0.20	ug/L
Ethyl-tert-Butyl Ether (ETBE)	<0.40	0.40	ug/L
Gasoline Range Organics (GRO)	<40	40	ug/L
Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	ug/L
Toluene	<0.30	0.30	ug/L
o-Xylene	<0.30	0.30	ug/L
m,p-Xylenes	<0.40	0.40	ug/L

Surrogate: 4-Bromofluorobenzene	55.5		ug/L	50	111	70-140
Surrogate: Dibromofluoromethane	59.2		ug/L	50	118	70-140
Surrogate: Toluene-d8	50.0		ug/L	50	99.9	70-140

**LCS (B6K0215-BS1)**

Prepared &amp; Analyzed: 11/02/16

tert-Amyl Methyl Ether (TAME)	<b>20.1</b>	0.30	ug/L	20	100	70-130
Benzene	<b>24.0</b>	0.20	ug/L	20	120	75-125
tert-Butyl alcohol (TBA)	<b>96.8</b>	7.0	ug/L	100	96.8	70-130
Diisopropyl ether (DIPE)	<b>24.5</b>	0.50	ug/L	20	123	70-130
Ethylbenzene	<b>21.0</b>	0.20	ug/L	20	105	75-125
Ethyl-tert-Butyl Ether (ETBE)	<b>22.7</b>	0.40	ug/L	20	114	70-130
Gasoline Range Organics (GRO)	<b>530</b>	40	ug/L	500	106	70-130
Methyl-tert-Butyl Ether (MTBE)	<b>42.0</b>	0.40	ug/L	40	105	70-135
Toluene	<b>19.8</b>	0.30	ug/L	20	99.0	75-125
o-Xylene	<b>19.2</b>	0.30	ug/L	20	96.1	75-125
m,p-Xylenes	<b>38.5</b>	0.40	ug/L	40	96.2	70-130

Surrogate: 4-Bromofluorobenzene	55.9		ug/L	50	112	70-140
Surrogate: Dibromofluoromethane	54.9		ug/L	50	110	70-140
Surrogate: Toluene-d8	50.3		ug/L	50	101	70-140

**LCS Dup (B6K0215-BSD1)**

Prepared &amp; Analyzed: 11/02/16

**Viorel Vasile**  
 Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331982  
**Date Received:** 11/01/16  
**Date Reported:** 11/16/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Notes
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**TPHG/BTEX/Oxygenates by GC/MS - Quality Control**

Batch B6K0215 - EPA 5030B

**LCS Dup (B6K0215-BSD1) Continued**

Prepared & Analyzed: 11/02/16

tert-Amyl Methyl Ether (TAME)	19.7	0.30	ug/L	20		98.7	70-130	1.66	30	
Benzene	22.8	0.20	ug/L	20		114	75-125	5.26	30	
tert-Butyl alcohol (TBA)	95.0	7.0	ug/L	100		95.0	70-130	1.91	30	
Diisopropyl ether (DIPE)	23.4	0.50	ug/L	20		117	70-130	4.50	30	
Ethylbenzene	20.4	0.20	ug/L	20		102	75-125	2.89	30	
Ethyl-tert-Butyl Ether (ETBE)	22.1	0.40	ug/L	20		111	70-130	2.54	30	
Gasoline Range Organics (GRO)	545	40	ug/L	500		109	70-130	2.79	30	
Methyl-tert-Butyl Ether (MTBE)	39.4	0.40	ug/L	40		98.4	70-135	6.51	30	
Toluene	20.2	0.30	ug/L	20		101	75-125	2.10	30	
o-Xylene	19.4	0.30	ug/L	20		96.9	75-125	0.829	30	
m,p-Xylenes	38.5	0.40	ug/L	40		96.2	70-130	0.0520	30	
Surrogate: 4-Bromofluorobenzene	57.4		ug/L	50		115	70-140			
Surrogate: Dibromofluoromethane	54.1		ug/L	50		108	70-140			
Surrogate: Toluene-d8	50.9		ug/L	50		102	70-140			

**Diesel Range Organics by GC/FID - Quality Control**

Batch B6K0401 - EPA 3510C

**Blank (B6K0401-BLK1)**

Prepared & Analyzed: 11/04/16

Diesel Range Organics as Diesel	<60	60	ug/L							
Surrogate: o-Terphenyl	59.2		ug/L	40		148	50-150			

**LCS (B6K0401-BS1)**

Prepared & Analyzed: 11/04/16

Diesel Range Organics as Diesel	789	60	ug/L	800		98.7	75-125		30	
Surrogate: o-Terphenyl	54.8		ug/L	40		137	50-150			

**LCS Dup (B6K0401-BSD1)**

Prepared & Analyzed: 11/04/16

Diesel Range Organics as Diesel	718	60	ug/L	800		89.8	75-125	9.44	30	
Surrogate: o-Terphenyl	44.4		ug/L	40		111	50-150			

**Total Metals by ICP Atomic Emission Spectroscopy - Quality Control**

Batch B6K0714 - EPA 200.7

**Blank (B6K0714-BLK1)**

Prepared & Analyzed: 11/07/16

Arsenic	<0.0060	0.0060	mg/L							
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**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331982  
**Date Received:** 11/01/16  
**Date Reported:** 11/16/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Total Metals by ICP Atomic Emission Spectroscopy - Quality Control</b>										
<i>Batch B6K0714 - EPA 200.7</i>										
<b>LCS (B6K0714-BS1)</b>				Prepared & Analyzed: 11/07/16						
Arsenic	0.208	0.0060	mg/L	0.20		104	80-120		20	
<b>LCS Dup (B6K0714-BSD1)</b>				Prepared & Analyzed: 11/07/16						
Arsenic	0.211	0.0060	mg/L	0.20		105	80-120	1.34	20	
<b>Duplicate (B6K0714-DUP1)</b>				Source: 6K01014-05 Prepared & Analyzed: 11/07/16						
Arsenic	0.0170	0.0060	mg/L		0.0150			12.5	30	
<b>Matrix Spike (B6K0714-MS1)</b>				Source: 6K01013-01 Prepared & Analyzed: 11/07/16						
Arsenic	0.197	0.0060	mg/L	0.20		98.4	75-125		20	
<b>Matrix Spike Dup (B6K0714-MSD1)</b>				Source: 6K01013-01 Prepared & Analyzed: 11/07/16						
Arsenic	0.212	0.0060	mg/L	0.20		106	75-125	7.39	20	

**Viorel Vasile**  
Operations Manager



## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5331982  
**Date Received:** 11/01/16  
**Date Reported:** 11/16/16

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### Special Notes

**J** : Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

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**Viorel Vasile**  
Operations Manager







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December 20, 2016

Neil Irish

The Source Group, Inc. (SH)  
1962 Freeman Ave.  
Signal Hill, CA 90755

**Re : DFSP Norwalk VES AQMD / 04-NDLA-013  
A5332017 / 6L05017**

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 12/05/16 13:19 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
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**VOCs BTEX/MTBE Vapor GC/MS**

Influent	6L05017-01	Vapor	5	12/05/16 10:36	12/05/16 13:19
Effluent	6L05017-02	Vapor	5	12/05/16 10:30	12/05/16 13:19

**VOCs Gasoline Range Organics Vapor**

Influent	6L05017-01	Vapor	5	12/05/16 10:36	12/05/16 13:19
Effluent	6L05017-02	Vapor	5	12/05/16 10:30	12/05/16 13:19

**VOCs GRO Vapor as Hexane**

Influent	6L05017-01	Vapor	5	12/05/16 10:36	12/05/16 13:19
Effluent	6L05017-02	Vapor	5	12/05/16 10:30	12/05/16 13:19

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**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** VOCs BTEX/MTBE Vapor by GC/MS 8260M

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16  
**Sampled:** 12/05/16  
**Prepared:** 12/07/16  
**Analyzed:** 12/07/16

**Influent****6L05017-01 (Vapor)**

<b>Analyte</b>	<b>Result</b>	<b>(ug/L)</b>	<b>MRL</b>	<b>Result</b>	<b>(ppmv)</b>	<b>MRL</b>
Benzene	1.0	ug/L	0.50	0.31	ppmv	0.16
Ethylbenzene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
Methyl-tert-Butyl Ether (MTBE)	<2.0	ug/L	2.0	<0.55	ppmv	0.55
Toluene	<0.50	ug/L	0.50	<0.13	ppmv	0.13
o-Xylene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
m,p-Xylenes	<1.0	ug/L	1.0	<0.23	ppmv	0.23

**Surrogates****%REC****%REC Limits**

4-Bromofluorobenzene  
Dibromofluoromethane  
Toluene-d8

138 %  
97.9 %  
103 %

70-140  
70-140  
70-140

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 0.5  
**Method:** VOCs BTEX/MTBE Vapor by GC/MS 8260M

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16  
**Sampled:** 12/05/16  
**Prepared:** 12/07/16  
**Analyzed:** 12/07/16

**Effluent****6L05017-02 (Vapor)**

<b>Analyte</b>	<b>Result</b>	<b>(ug/L)</b>	<b>MRL</b>	<b>Result</b>	<b>(ppmv)</b>	<b>MRL</b>
Benzene	<0.25	ug/L	0.50	<0.078	ppmv	0.16
Ethylbenzene	<0.25	ug/L	0.50	<0.058	ppmv	0.12
Methyl-tert-Butyl Ether (MTBE)	<1.0	ug/L	2.0	<0.28	ppmv	0.55
Toluene	<0.25	ug/L	0.50	<0.066	ppmv	0.13
o-Xylene	<0.25	ug/L	0.50	<0.058	ppmv	0.12
m,p-Xylenes	<0.50	ug/L	1.0	<0.12	ppmv	0.23

**Surrogates****%REC****%REC Limits**

4-Bromofluorobenzene  
Dibromofluoromethane  
Toluene-d8

114 %  
88.5 %  
106 %

70-140  
70-140  
70-140

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor by GC/FID

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16  
**Sampled:** 12/05/16  
**Prepared:** 12/06/16  
**Analyzed:** 12/06/16

**Influent****6L05017-01 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	350	ug/L	20	86	ppmv	4.9
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		98.0 %			70-130	

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor by GC/FID

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16  
**Sampled:** 12/05/16  
**Prepared:** 12/06/16  
**Analyzed:** 12/06/16

**Effluent****6L05017-02 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	<20	ug/L	20	<4.9	ppmv	4.9
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		94.8 %			70-130	

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor as Hexane

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16  
**Sampled:** 12/05/16  
**Prepared:** 12/06/16  
**Analyzed:** 12/06/16

**Influent****6L05017-01 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
GRO as Hexane	350	ug/L	20	100	ppmv	5.7
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		98.0 %			70-130	

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD  
**Matrix:** Vapor  
**Dilution:** 1  
**Method:** Gasoline Range Organics in Vapor as Hexane

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16  
**Sampled:** 12/05/16  
**Prepared:** 12/06/16  
**Analyzed:** 12/06/16

**Effluent****6L05017-02 (Vapor)**

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
GRO as Hexane	<20	ug/L	20	<5.7	ppmv	5.7
<b><u>Surrogates</u></b>		<b><u>%REC</u></b>			<b><u>%REC Limits</u></b>	
a,a,a-Trifluorotoluene		94.8 %			70-130	

**Viorel Vasile**  
Operations Manager





### LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Notes
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#### VOCs BTEX/MTBE Vapor by GC/MS 8260M - Quality Control

Batch B6L0723 - \*\*\* DEFAULT PREP \*\*\*

##### Blank (B6L0723-BLK1)

Prepared & Analyzed: 12/07/16

Benzene	<0.50	0.50	ug/L						
Ethylbenzene	<0.50	0.50	ug/L						
Methyl-tert-Butyl Ether (MTBE)	<2.0	2.0	ug/L						
Toluene	<0.50	0.50	ug/L						
o-Xylene	<0.50	0.50	ug/L						
m,p-Xylenes	<1.0	1.0	ug/L						

Surrogate: 4-Bromofluorobenzene	67.4		ug/L	50		135 70-140			
Surrogate: Dibromofluoromethane	43.0		ug/L	50		86.1 70-140			
Surrogate: Toluene-d8	54.8		ug/L	50		110 70-140			

##### LCS (B6L0723-BS1)

Prepared & Analyzed: 12/07/16

Benzene	22.6	0.50	ug/L	20		113 75-125			
Ethylbenzene	20.6	0.50	ug/L	20		103 75-125			
Methyl-tert-Butyl Ether (MTBE)	37.2	2.0	ug/L	40		92.9 75-125			
Toluene	22.0	0.50	ug/L	20		110 75-125			
o-Xylene	19.1	0.50	ug/L	20		95.6 75-125			
m,p-Xylenes	39.2	1.0	ug/L	40		98.0 75-125			

Surrogate: 4-Bromofluorobenzene	57.6		ug/L	50		115 70-140			
Surrogate: Dibromofluoromethane	42.7		ug/L	50		85.4 70-140			
Surrogate: Toluene-d8	52.9		ug/L	50		106 70-140			

##### LCS Dup (B6L0723-BSD1)

Prepared & Analyzed: 12/07/16

Benzene	22.7	0.50	ug/L	20		114 75-125	0.529	30	
Ethylbenzene	19.5	0.50	ug/L	20		97.5 75-125	5.39	30	
Methyl-tert-Butyl Ether (MTBE)	38.3	2.0	ug/L	40		95.8 75-125	3.10	30	
Toluene	20.8	0.50	ug/L	20		104 75-125	5.83	30	
o-Xylene	17.6	0.50	ug/L	20		87.9 75-125	8.34	30	
m,p-Xylenes	35.8	1.0	ug/L	40		89.6 75-125	9.01	30	

Surrogate: 4-Bromofluorobenzene	62.0		ug/L	50		124 70-140			
Surrogate: Dibromofluoromethane	42.6		ug/L	50		85.1 70-140			
Surrogate: Toluene-d8	52.8		ug/L	50		106 70-140			

##### Duplicate (B6L0723-DUP1)

Source: 6L06017-02 Prepared & Analyzed: 12/07/16

**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
<b>VOCs BTEX/MTBE Vapor by GC/MS 8260M - Quality Control</b>										
<i>Batch B6L0723 - *** DEFAULT PREP ***</i>										
<b>Duplicate (B6L0723-DUP1) Continued Source: 6L06017-02 Prepared &amp; Analyzed: 12/07/16</b>										
Benzene	<0.50	0.50	ug/L						30	
Ethylbenzene	<0.50	0.50	ug/L						30	
Methyl-tert-Butyl Ether (MTBE)	<2.0	2.0	ug/L						30	
Toluene	<0.50	0.50	ug/L						30	
o-Xylene	<0.50	0.50	ug/L						30	
m,p-Xylenes	<1.0	1.0	ug/L						30	
<i>Surrogate: 4-Bromofluorobenzene</i>	57.8		ug/L	50		116	70-140			
<i>Surrogate: Dibromofluoromethane</i>	42.8		ug/L	50		85.5	70-140			
<i>Surrogate: Toluene-d8</i>	55.2		ug/L	50		110	70-140			
<b>Gasoline Range Organics in Vapor by GC/FID - Quality Control</b>										
<i>Batch B6L0625 - *** DEFAULT PREP ***</i>										
<b>Blank (B6L0625-BLK1) Prepared &amp; Analyzed: 12/06/16</b>										
Gasoline Range Organics (GRO)	<20	20	ug/L							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	48.9		ug/L	50		97.8	70-130			
<b>LCS (B6L0625-BS1) Prepared &amp; Analyzed: 12/06/16</b>										
Gasoline Range Organics (GRO)	432	20	ug/L	500		86.5	75-125			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	47.0		ug/L	50		94.1	70-130			
<b>LCS Dup (B6L0625-BSD1) Prepared &amp; Analyzed: 12/06/16</b>										
Gasoline Range Organics (GRO)	454	20	ug/L	500		90.8	75-125	4.89	30	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	48.2		ug/L	50		96.3	70-130			
<b>Duplicate (B6L0625-DUP1) Source: 6L05017-01 Prepared &amp; Analyzed: 12/06/16</b>										
Gasoline Range Organics (GRO)	303	20	ug/L		349			14.3	30	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	48.1		ug/L	50		96.1	70-130			
<b>Gasoline Range Organics in Vapor as Hexane - Quality Control</b>										
<i>Batch B6L0625 - *** DEFAULT PREP ***</i>										
<b>Blank (B6L0625-BLK1) Prepared &amp; Analyzed: 12/06/16</b>										
GRO as Hexane	<20	20	ug/L							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	48.9		ug/L	50		97.8	70-130			

**Viorel Vasile**  
Operations Manager



### LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
<b>Gasoline Range Organics in Vapor as Hexane - Quality Control</b>										
<i>Batch B6L0625 - *** DEFAULT PREP ***</i>										
<b>LCS (B6L0625-BS1)</b>				Prepared & Analyzed: 12/06/16						
GRO as Hexane	432	20	ug/L	500	86.5	75-125				
Surrogate: a,a,a-Trifluorotoluene	47.0		ug/L	50	94.1	70-130				
<b>LCS Dup (B6L0625-BSD1)</b>				Prepared & Analyzed: 12/06/16						
GRO as Hexane	454	20	ug/L	500	90.8	75-125	4.89	30		
Surrogate: a,a,a-Trifluorotoluene	48.2		ug/L	50	96.3	70-130				
<b>Duplicate (B6L0625-DUP1)</b>				Source: 6L05017-01 Prepared & Analyzed: 12/06/16						
GRO as Hexane	303	20	ug/L		349			14.3	30	
Surrogate: a,a,a-Trifluorotoluene	48.1		ug/L	50	96.1	70-130				

**Viorel Vasile**  
Operations Manager



## LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk VES AQMD

**AA Project No:** A5332017  
**Date Received:** 12/05/16  
**Date Reported:** 12/20/16

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### Special Notes

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**Viorel Vasile**  
Operations Manager





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Chatsworth  
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December 19, 2016

Neil Irish

The Source Group, Inc. (SH)  
1962 Freeman Ave.  
Signal Hill, CA 90755

**Re : DFSP Norwalk GWETS NPDES Monthly / 04-NDLA-013  
A5332016 / 6L05016**

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 12/05/16 13:19 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5332016  
**Date Received:** 12/05/16  
**Date Reported:** 12/19/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
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**8260B TPHGASOLINEBTEXOXY**

Surge Tank	6L05016-01	Water	5	12/05/16 11:11	12/05/16 13:19
After GAC-1	6L05016-02	Water	5	12/05/16 11:06	12/05/16 13:19
After GAC-2	6L05016-03	Water	5	12/05/16 11:02	12/05/16 13:19

**Arsenic Total EPA 200.7**

Surge Tank	6L05016-01	Water	5	12/05/16 11:11	12/05/16 13:19
After Zeolite Bed	6L05016-04	Water	5	12/05/16 10:56	12/05/16 13:19
After Alumina Bed	6L05016-05	Water	5	12/05/16 10:55	12/05/16 13:19

**Diesel Range Organics 8015M**

Surge Tank	6L05016-01	Water	5	12/05/16 11:11	12/05/16 13:19
After GAC-1	6L05016-02	Water	5	12/05/16 11:06	12/05/16 13:19
After GAC-2	6L05016-03	Water	5	12/05/16 11:02	12/05/16 13:19

**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** TPHG/BTEX/Oxygenates by GC/MS

**AA Project No:** A5332016  
**Date Received:** 12/05/16  
**Date Reported:** 12/19/16  
**Units:** ug/L

<b>Date Sampled:</b>	12/05/16	12/05/16	12/05/16		
<b>Date Prepared:</b>	12/13/16	12/13/16	12/13/16		
<b>Date Analyzed:</b>	12/13/16	12/13/16	12/13/16		
<b>AA ID No:</b>	6L05016-01	6L05016-02	6L05016-03		
<b>Client ID No:</b>	Surge Tank	After GAC-1	After GAC-2		
<b>Matrix:</b>	Water	Water	Water		
<b>Dilution Factor:</b>	1	1	1	MDL	MRL

**8260B TPH GASOLINE BTEX OXY (EPA 8260B)**

tert-Amyl Methyl Ether (TAME)	<0.30	<0.30	<0.30	0.30	2.0
Benzene	<0.20	<0.20	<0.20	0.20	0.50
tert-Butyl alcohol (TBA)	<7.0	<7.0	<7.0	7.0	10
Diisopropyl ether (DIPE)	<0.50	<0.50	<0.50	0.50	2.0
Ethylbenzene	<0.20	<0.20	<0.20	0.20	0.50
Ethyl-tert-Butyl Ether (ETBE)	<0.40	<0.40	<0.40	0.40	2.0
Gasoline Range Organics (GRO)	<b>51 J</b>	<40	<40	40	100
Methyl-tert-Butyl Ether (MTBE)	<b>0.60 J</b>	<b>0.84 J</b>	<b>0.70 J</b>	0.40	2.0
Toluene	<0.30	<0.30	<0.30	0.30	0.50
o-Xylene	<0.30	<0.30	<0.30	0.30	0.50
m,p-Xylenes	<0.40	<0.40	<0.40	0.40	1.0

**Surrogates**

				<b>%REC Limits</b>
4-Bromofluorobenzene	98%	98%	98%	70-140
Dibromofluoromethane	117%	114%	117%	70-140
Toluene-d8	99%	97%	97%	70-140

**Viorel Vasile**  
Operations Manager



**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** Diesel Range Organics by GC/FID

**AA Project No:** A5332016  
**Date Received:** 12/05/16  
**Date Reported:** 12/19/16  
**Units:** ug/L

<b>Date Sampled:</b>	12/05/16	12/05/16	12/05/16		
<b>Date Prepared:</b>	12/06/16	12/06/16	12/06/16		
<b>Date Analyzed:</b>	12/06/16	12/06/16	12/06/16		
<b>AA ID No:</b>	6L05016-01	6L05016-02	6L05016-03		
<b>Client ID No:</b>	Surge Tank	After GAC-1	After GAC-2		
<b>Matrix:</b>	Water	Water	Water		
<b>Dilution Factor:</b>	1	1	1	MDL	MRL

**Diesel Range Organics 8015M (EPA 8015M)**

Diesel Range Organics as Diesel	<b>450</b>	<60	<60	60	100
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**Surrogates**

o-Terphenyl	99%	85%	82%	<b><u>%REC Limits</u></b>	50-150
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**Viorel Vasile**  
Operations Manager

**LABORATORY ANALYSIS RESULTS**

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly  
**Method:** Total Metals by ICP Atomic Emission Spectroscopy

**AA Project No:** A5332016  
**Date Received:** 12/05/16  
**Date Reported:** 12/19/16

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MDL	MRL
<b><u>Arsenic Total EPA 200.7 (EPA 200.7)</u></b>									
6L05016-01	Surge Tank	12/05/16	12/07/16	12/08/16	1	<b>0.038</b>	mg/L	0.006	0.007
6L05016-04	After Zeolite Bed	12/05/16	12/07/16	12/08/16	1	<b>0.020</b>	mg/L	0.006	0.007
6L05016-05	After Alumina Bed	12/05/16	12/07/16	12/08/16	1	<b>0.016</b>	mg/L	0.006	0.007

**Viorel Vasile**  
Operations Manager



### LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5332016  
**Date Received:** 12/05/16  
**Date Reported:** 12/19/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### TPHG/BTEX/Oxygenates by GC/MS - Quality Control

Batch B6L1324 - EPA 5030B

##### Blank (B6L1324-BLK1)

Prepared & Analyzed: 12/13/16

tert-Amyl Methyl Ether (TAME)	<0.30	0.30	ug/L							
Benzene	<0.20	0.20	ug/L							
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L							
Diisopropyl ether (DIPE)	<0.50	0.50	ug/L							
Ethylbenzene	<0.20	0.20	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	<0.40	0.40	ug/L							
Gasoline Range Organics (GRO)	<40	40	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	ug/L							
Toluene	<0.30	0.30	ug/L							
o-Xylene	<0.30	0.30	ug/L							
m,p-Xylenes	<0.40	0.40	ug/L							

Surrogate: 4-Bromofluorobenzene	48.9		ug/L	50		97.8	70-140			
Surrogate: Dibromofluoromethane	58.4		ug/L	50		117	70-140			
Surrogate: Toluene-d8	47.7		ug/L	50		95.4	70-140			

##### LCS (B6L1324-BS1)

Prepared & Analyzed: 12/13/16

tert-Amyl Methyl Ether (TAME)	17.7	0.30	ug/L	20		88.5	70-130			
Benzene	21.3	0.20	ug/L	20		106	75-125			
tert-Butyl alcohol (TBA)	115	7.0	ug/L	100		115	70-130			
Diisopropyl ether (DIPE)	20.4	0.50	ug/L	20		102	70-130			
Ethylbenzene	21.4	0.20	ug/L	20		107	75-125			
Ethyl-tert-Butyl Ether (ETBE)	18.9	0.40	ug/L	20		94.3	70-130			
Gasoline Range Organics (GRO)	471	40	ug/L	500		94.2	70-130			
Methyl-tert-Butyl Ether (MTBE)	38.8	0.40	ug/L	40		97.0	70-135			
Toluene	20.9	0.30	ug/L	20		104	75-125			
o-Xylene	20.4	0.30	ug/L	20		102	75-125			
m,p-Xylenes	42.3	0.40	ug/L	40		106	70-130			

Surrogate: 4-Bromofluorobenzene	49.2		ug/L	50		98.5	70-140			
Surrogate: Dibromofluoromethane	49.4		ug/L	50		98.9	70-140			
Surrogate: Toluene-d8	49.6		ug/L	50		99.3	70-140			

**Matrix Spike (B6L1324-MS1) Source: 6L05015-01** Prepared & Analyzed: 12/13/16

**Viorel Vasile**  
Operations Manager



### LABORATORY ANALYSIS RESULTS

**Client:** The Source Group, Inc. (SH)  
**Project No:** 04-NDLA-013  
**Project Name:** DFSP Norwalk GWETS NPDES Monthly

**AA Project No:** A5332016  
**Date Received:** 12/05/16  
**Date Reported:** 12/19/16

Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Notes
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#### TPHG/BTEX/Oxygenates by GC/MS - Quality Control

Batch B6L1324 - EPA 5030B

**Matrix Spike (B6L1324-MS1) Continued Source: 6L05015-01** Prepared & Analyzed: 12/13/16

tert-Amyl Methyl Ether (TAME)	19.1	0.30	ug/L	20		95.4	70-130			
Benzene	20.8	0.20	ug/L	20		104	70-130			
tert-Butyl alcohol (TBA)	117	7.0	ug/L	100		117	70-130			
Diisopropyl ether (DIPE)	20.2	0.50	ug/L	20		101	70-130			
Ethylbenzene	21.0	0.20	ug/L	20		105	70-130			
Ethyl-tert-Butyl Ether (ETBE)	19.6	0.40	ug/L	20		98.0	70-130			
Methyl-tert-Butyl Ether (MTBE)	40.4	0.40	ug/L	40		101	70-130			
Toluene	20.0	0.30	ug/L	20		100	70-130			
o-Xylene	20.0	0.30	ug/L	20		100	70-130			
m,p-Xylenes	41.4	0.40	ug/L	40		103	70-130			

Surrogate: 4-Bromofluorobenzene	48.2		ug/L	50		96.5	70-140			
Surrogate: Dibromofluoromethane	49.2		ug/L	50		98.4	70-140			
Surrogate: Toluene-d8	49.3		ug/L	50		98.5	70-140			

**Matrix Spike Dup (B6L1324-MSD1) Source: 6L05015-01** Prepared & Analyzed: 12/13/16

tert-Amyl Methyl Ether (TAME)	20.1	0.30	ug/L	20		100	70-130	5.15	30	
Benzene	20.5	0.20	ug/L	20		102	70-130	1.45	30	
tert-Butyl alcohol (TBA)	121	7.0	ug/L	100		121	70-130	3.36	30	
Diisopropyl ether (DIPE)	20.3	0.50	ug/L	20		101	70-130	0.346	30	
Ethylbenzene	21.2	0.20	ug/L	20		106	70-130	1.19	30	
Ethyl-tert-Butyl Ether (ETBE)	20.4	0.40	ug/L	20		102	70-130	3.85	30	
Methyl-tert-Butyl Ether (MTBE)	45.8	0.40	ug/L	40		115	70-130	12.7	30	
Toluene	20.2	0.30	ug/L	20		101	70-130	0.994	30	
o-Xylene	20.3	0.30	ug/L	20		101	70-130	1.29	30	
m,p-Xylenes	42.1	0.40	ug/L	40		105	70-130	1.63	30	

Surrogate: 4-Bromofluorobenzene	49.3		ug/L	50		98.6	70-140			
Surrogate: Dibromofluoromethane	49.6		ug/L	50		99.3	70-140			
Surrogate: Toluene-d8	49.1		ug/L	50		98.1	70-140			

#### Diesel Range Organics by GC/FID - Quality Control

Batch B6L0618 - EPA 3510C

**Blank (B6L0618-BLK1)**

Prepared & Analyzed: 12/06/16

**Viorel Vasile**  
Operations Manager



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Analyte	Reporting Result	Limit	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Notes
<b>Diesel Range Organics by GC/FID - Quality Control</b>									
<i>Batch B6L0618 - EPA 3510C</i>									
<b>Blank (B6L0618-BLK1) Continued</b>				Prepared & Analyzed: 12/06/16					
Diesel Range Organics as Diesel	<60	60	ug/L						
Surrogate: o-Terphenyl	44.8		ug/L	40		112 50-150			
<b>LCS (B6L0618-BS1)</b>				Prepared & Analyzed: 12/06/16					
Diesel Range Organics as Diesel	<b>652</b>	60	ug/L	800		81.5 75-125		30	
Surrogate: o-Terphenyl	40.7		ug/L	40		102 50-150			
<b>LCS Dup (B6L0618-BSD1)</b>				Prepared & Analyzed: 12/06/16					
Diesel Range Organics as Diesel	<b>880</b>	60	ug/L	800		110 75-125	29.7	30	
Surrogate: o-Terphenyl	49.6		ug/L	40		124 50-150			
<b>Total Metals by ICP Atomic Emission Spectroscopy - Quality Control</b>									
<i>Batch B6L0715 - EPA 200.7</i>									
<b>Blank (B6L0715-BLK1)</b>				Prepared: 12/07/16 Analyzed: 12/08/16					
Arsenic	<0.0060	0.0060	mg/L						
<b>LCS (B6L0715-BS1)</b>				Prepared: 12/07/16 Analyzed: 12/08/16					
Arsenic	<b>0.186</b>	0.0060	mg/L	0.20		92.8 80-120		20	
<b>LCS Dup (B6L0715-BSD1)</b>				Prepared: 12/07/16 Analyzed: 12/08/16					
Arsenic	<b>0.194</b>	0.0060	mg/L	0.20		97.0 80-120	4.37	20	
<b>Duplicate (B6L0715-DUP1)</b>				<b>Source: 6L05016-04</b> Prepared: 12/07/16 Analyzed: 12/08/16					
Arsenic	<b>0.0186</b>	0.0060	mg/L		0.0200		7.25	30	
<b>Matrix Spike (B6L0715-MS1)</b>				<b>Source: 6L05015-01</b> Prepared: 12/07/16 Analyzed: 12/08/16					
Arsenic	<b>0.206</b>	0.0060	mg/L	0.20	0.0456	80.0 75-125		20	
<b>Matrix Spike Dup (B6L0715-MSD1)</b>				<b>Source: 6L05015-01</b> Prepared: 12/07/16 Analyzed: 12/08/16					
Arsenic	<b>0.203</b>	0.0060	mg/L	0.20	0.0456	78.7 75-125	1.27	20	

**Viorel Vasile**  
 Operations Manager



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### Special Notes

**J** : Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

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Operations Manager



**APPENDIX B**  
**WASTE MANIFEST**



<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>CA 8971524360</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(310) 241-2833</b>	4. Manifest Tracking Number <b>008698337 FLE</b>	
5. Generator's Name and Mailing Address <b>Defense Logistics Agency Installation Support for Energy 3171 North Gaffey St. Attn: Wayne Worthington San Pedro, CA 90731 (310) 241-2833</b>				Generator's Site Address (if different than mailing address) <b>DFSP Norwalk 15306 Norwalk Blvd. Norwalk, CA 90650</b>		
6. Transporter 1 Company Name <b>Nieto and Sons Trucking, Inc.</b>				U.S. EPA ID Number <b>CAT080016116</b>		
7. Transporter 2 Company Name				U.S. EPA ID Number		
8. Designated Facility Name and Site Address <b>DeMenno Kerdoon (Attn: Hannah) 2000 N. Alameda Street Compton, CA 90222 (310) 537-7100</b>				U.S. EPA ID Number <b>CAT080013352</b>		
Facility's Phone:						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		No.	Type			
X	1. <b>UN1993, Flammable Liquid, n.o.s., 3, PGI (contains jet fuel)</b>	001	TT	1150	G	134
	2. <del>_____</del>					
	3. <del>_____</del>					
	4. <del>_____</del>					
No Others						
14. Special Handling Instructions and Additional Information <b>ERG# 128 / Jet Fuels &amp; Groundwater SGI/APEX Contact: Glenn Androska (714) 608-1089</b>				BESI PO # 275930 <b>WEAR ALL APPROPRIATE PROTECTIVE CLOTHING</b> <i>Profile #406367</i>		
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offoror's Printed/Typed Name <b>Wayne Worthington</b>				Signature <i>Wayne Worthington</i>		Month Day Year <b>12   09   16</b>
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>Lupe Flores</b>				Signature <i>Lupe Flores</i>		Month Day Year <b>12   09   16</b>
Transporter 2 Printed/Typed Name				Signature		Month Day Year
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator)				Manifest Reference Number: _____ U.S. EPA ID Number _____		
Facility's Phone: _____						
18c. Signature of Alternate Facility (or Generator)				Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.	<b>H1039</b>	2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Alfredo Perez</b>				Signature <i>Alfredo Perez</i>		Month Day Year <b>12   09   16</b>

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