REMEDIATION STATUS REPORT – SECOND QUARTER 2014

DEFENSE FUEL SUPPORT POINT NORWALK 15306 Norwalk Boulevard Norwalk, California

04-NDLA-001

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LIST OF ACRONYMS

DLA	Defense Logistics Agency
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
ТВА	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	Soil 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 as Gasoline
TPHd	Total Petroleum Hydrocarbons 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
PID	Photoionization Detector

1.0 INTRODUCTION

On behalf of our client, Defense Logistics Agency - Energy (DLA Energy), 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. Remediation systems by DLA Energy were installed to treat the hydrocarbon impacts in soil and groundwater. The purposes of these remediation systems are to reduce hydrocarbon concentrations to cleanup goals, to prevent off-site migration, to contain contaminant mass, and ultimately, to achieve site closure within a reasonable timeframe.

The impacted DLA Energy 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 Systems

The remediation technologies utilized at the Site have consisted of soil vapor extraction (SVE), groundwater extraction (GWE), biosparging, and light non-aqueous phase liquid (LNAPL) removal. A summary of Site remediation wells, including well identification, well construction information, well function, and operational status, is presented in Table 1. The 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: AST 80001 area (VEW-23), AST 80006 and 80007 areas (VEW-20, VEW-21, VEW-22, HW-1, HW-3), AST 80008 area (VEW-24, VEW-25, VEW-26, VEW-27, HW-5, HW-7), AST 55004 area (VEW-28, VEW-29, VEW-30), eastern boundary area (VEW-32, VEW-33, VEW-34, VEW-35, VEW-36, VEW-37), water tank area (VEW-31), and truck fueling area (VW-07, VW-09, VW-10, VW-11, VW-12, VW-13, VW-14, VW-15, 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 below. 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 with a pair of tertiary vessels, each 2,000 pounds. Operation of the VES is conducted in accordance with South Coast Air Quality Management District (SCAQMD) Permit to Operate G12863, A/N 518989. Active SVE wells are identified in Section 3.1 and Tables 3a, 3b, and 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, GW-13), central tank farm area (GW-14), and eastern boundary area (GW-15, GW-16, GMW-58). The GWETS utilizes electric pumps in each of the GWE wells to pump groundwater in to a shared surge tank. Groundwater is transferred via a transfer pump from the surge tank through three bag filter vessels in series (BF1, BF2, BF3), two MYCELX vessels in series (MX-7, MX-21), three GAC vessels in series (2,000 pound GAC-1, 2,000 pound GAC-2, 1,500 pound GAC-3) and two ion exchange vessels (for arsenic treatment) in series prior to being discharged to 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, 2b, and 2c.

1.2.3 Biosparge System

The biosparge wells for hydrocarbon removal from dissolved-phase subsurface impacts are located in areas throughout the tank farm area and eastern boundary area. The biosparge system is currently off line.

1.2.4 LNAPL Removal

LNAPL removal has been conducted via vacuum truck, passive skimming, and absorbent socks. Wells are gauged periodically and LNAPL removal is conducted based on the measured LNAPL thickness in each target well. LNAPL removal wells are identified in Section 3.3 and Tables 6a, 6b, 6c, 6d, 6e, and 6f.

2.0 OPERATIONS, MAINTENANCE, AND MONITORING

During this reporting period, 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 VES individual well vapor samples; and
- Collected and analyzed GWETS influent and effluent groundwater samples.

During this reporting period, remediation system inspections were performed on a weekly basis during operation. For these inspections, vapor flow rate, vacuum, volumes of extracted groundwater, hours of operation, and other system parameters were recorded during system operation. Remediation system operations activities for the reporting period are summarized in Tables 2a, 2b, and 2c and 3a, 3b, and 3c.

2.1 Soil Vapor Extraction System OM&M

The VES operated throughout the reporting period except from:

• May 29 through June 30 during the project transition.

Performance and compliance soil vapor samples from the VES were collected during the reporting period on April 23 and May 16, 2014. The vapor samples were delivered to Calscience Environmental Laboratories (Calscience) for analysis. Calscience 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 TO-3M;
- BTEX and MTBE using EPA Method 8260B; and
- VOCs using EPA Method TO-15M.

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 OM&M

The GWETS operated throughout the reporting period except from:

- April 4 to April 23 for carbon change-out and groundwater gauging and sampling; and
- May 29 through June 30 during the project transition.

Performance and compliance water samples from the GWETS were collected during the reporting period on April 23 and 30 and May 2, 16, and 29, 2014. The water samples were delivered to ELAP certified Calscience for analysis.

The water samples were analyzed for the following:

- TPH quantified as gasoline (TPHg) and as diesel (TPHd) using EPA Method 8015M;
- VOCs using EPA Method 8260B;
- Metals (arsenic and copper) using EPA 6020;
- Oil and grease using Standard Method (SM) 5520 B;
- Turbidity using SM 2130 B;
- Sulfides using SM 4500 S2-D;
- Residual chlorine using SM 4500-CL F;
- 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 420.1; and
- Biological oxygen demand (BOD) using SM 5210 B.

The GWETS effluent groundwater sampling results will be provided under separate cover in the NPDES discharge monitoring report for the reporting period. 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 OM&M

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 by vacuum truck and absorbent socks. LNAPL gauging results and estimated mass and volume removal are summarized in Tables 6a, 6b, 6c, 6d, 6e, and 6f.

3.0 SUMMARY OF REMEDIATION PROGRESS

The following sections describe remedial progress at the Site.

3.1 Soil Vapor Extraction System

During this reporting period, the VES extracted soil vapors from the four horizontal wells that span through the entire former tank farm area (HW-1, HW-3, HW-5, HW-7) and the six vertical wells in the northeastern area (VEW-32, VEW-33, VEW-34, VEW-35, VEW-36, VEW-37).

The total mass of VOCs removed by SVE during this reporting period was approximately 4.0 pounds and approximately 2,962 pounds since April 1996 (Tables 3a, 3b, and 3c). The total mass removed by SVE does not include the mass removed in-situ by biodegradation.

3.2 Groundwater Extraction and Treatment System

During this 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 at an average flow rate of approximately 13 gallons per minute (gpm).

The total volume of groundwater extracted by the GWETS during this reporting period was approximately 812,185 gallons and approximately 70.6 million gallons since April 1996. Based on the TPHd results for influent water samples and total groundwater extracted, the mass of TPHd removed by GWE was approximately 10 pounds (Table 2c) during second quarter 2014 and approximately 9,922 pounds since April 1996 (Table 2c).

3.3 LNAPL Removal

During this reporting period, DTW and DTP was measured in GMW-62 located off site in Holifield Park and GMW-4, GMW-21, MW-15, PZ-3, and TF-18. LNAPL was removed during the reporting period by vacuum truck and by utilizing absorbent socks installed in select wells. Approximately 21.3 gallons (145.81 pounds) of LNAPL was recovered from the Site via passive absorbent socks (Tables 6a through 6f).

4.0 SYSTEM EVALUATION AND OPTIMIZATION

Remedial system optimization is ongoing to ensure most effective operation for cleanup at the site.

For the VES, during the second quarter 2014, influent vapor-phase VOC concentrations remained low and reached asymptotic levels. During the period of VES non-operation, the rebound of VOC concentrations in the SVE wells was evaluated by collecting individual well vapor samples prior to restarting the VES. This rebound test and vapor sampling was conducted on July 9, 2014 and will be reported in the forthcoming Third Quarter 2014 Remediation Status Report.

As discussed in the first quarter 2014 Remediation Progress Report, groundwater monitoring from the second semiannual event in October resulted in an overall lower groundwater elevation and a higher number of wells with measurable free product. The overall area of impacts and plumes were similar to previous events. 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. GWE in the northwest and northeast areas will continue to assist with contaminant containment. Additionally, absorbent sock installation and vacuum truck recovery will continue, as needed, and the use of passive LNAPL skimmers in select wells will be implemented.

5.0 PLANNED THIRD QUARTER 2014 ACTIVITIES

During the third quarter 2014, DLA Energy plans to continue to focus in-situ remedial efforts on the northwest, northeast, and north-central areas. The following OM&M activities are planned to be completed during the third quarter 2014:

- Continue weekly maintenance and monitoring of the VES and GWETS;
- Measure individual well vapor concentrations with a photoionization detector (PID);
- Collect individual well vapor samples for laboratory analysis;
- Review LNAPL gauging and removal data to optimize removal methods;
- Collect and analyze system influent and effluent vapor and groundwater samples;
- Evaluate GWE flow rate and potential options of decreasing the flow rate while maintaining contaminant containment as described in Parsons' *Groundwater Capture Report*, dated June 17, 2010;
- Evaluate re-implementation of the biosparge system; and
- Perform pre-mobilization activities for soil excavation.

The VES and GWETS for the northwest, northeast, and north-central areas will continue to operate and LNAPL recovery will continue. The remediation activities and progress for the third quarter 2014 will be described in the Third Quarter 2014 Remediation Progress Report to be submitted by November 15, 2014.

6.0 LIMITATIONS

This document was prepared for the exclusive use of the Defense Logistics Agency - Energy (DLA Energy) and the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) for the express purpose of complying with a client or regulatory directive for environmental investigation or restoration. SGI and DLA Energy must approve any re-use of this work product in whole or in part for a different purpose or by others in writing. If any such unauthorized use occurs, it shall be at the user's sole risk without liability to SGI or DLA Energy. To the extent that this report is based on information provided to SGI by third parties, including DLA Energy, their direct contractors, previous workers, and other stakeholders, SGI cannot guarantee the completeness or accuracy of this information, even where efforts were made to verify thirdparty information. SGI has exercised professional judgment to collect and present findings and opinions of a scientific and technical nature. The opinions expressed are based on the conditions of the Site existing at the time of the field investigation, current regulatory requirements, and any specified assumptions. The presented findings and recommendations in this report are intended to be taken in their entirety to assist DLA Energy 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



Document Name: Fig-1 Norwalk Site Location Map



HORIZONTAL SCALE IN FEET

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
	GW-1		06/12/95	75.97	63	25 - 60	GWE
	GW-2		06/12/95	75.78	63	25 - 60	GWE
North-West	GW-3		06/13/95	75.79	63	25 - 60	GWE
(AST 80001)	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
	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
North-Central	SP-13				50	48 - 50	Biosparge
(AST 80002, AST 80004	SP-13a				50	48 - 50	Biosparge
AST 80006,	SP-13b				50	48 - 50	Biosparge
AST 80007,	SP-13c				50	48 - 50	Biosparge
AST 80008,	SP-13d				50	48 - 50	Biosparge
AST 55004)	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	Total Depth	Screen Interval	Remediation Well Function
	0.5.00			(it msi)	(it bgs)	(it bgs)	
	SP-23				50	48 - 50	Biosparge
	SP-23a				50	48 - 50	Biosparge
	SP-23b				50	48 - 50	Biosparge
	SP-230				50	48 - 50	Biosparge
	SP-24				50	48 - 50	Biosparge
	SP-24a				50	46 - 50	Biosparge
	SP-240				50	46 - 50	Biosparge
	SP-240				50	48 50	Biosparge
	SP 252				50	48 - 50	Biosparge
	SP-256				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	TFF. GWF
	TF-9		09/22/95	74.47	63	25 - 60	TFE. GWE
	TF-10		09/25/95	73.61	63	25 - 60	TFE, GWE
North-Central	TF-11		09/25/95	74.40	63	25 - 60	TFE, GWE
(AST 80002,	TF-13		09/26/95	75.47	63	25 - 60	TFE, GWE
AST 80004,	TF-14		09/27/95	74.35	63	25 - 60	TFE, GWE
AST 80006,	TF-15		09/28/95	74.78	63	25 - 60	TFE, GWE
AST 80007, AST 80008.	TF-16		09/28/95	75.89	63	25 - 60	TFE, GWE
AST 8001,	TF-17		09/29/95	74.88	63	25 - 60	TFE, GWE
AST 55004)	TF-18		07/06/94	73.94	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

TABLE 1 Remediation Well Construction DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

Remediation Area	Remediation Area Well Notes		Installation Date	Casing Elevation (ft msl)	Total Depth (ft bgs)	Screen Interval (ft bgs)	Remediation Well Function
	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
North-East	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
	VEW-31		08/03/04	75.10	15	5 - 15	SVE
	VW-07			75.64			SVE
	VW-09			75.77			SVE
Former Truck	VW-10		03/23/04	75.78	30.5	20 - 30	SVE
Fueling Area	VW-11		03/23/04	75.55	25	20 - 25	SVE
and Adjacent	VW-12		03/23/04	75.79	30.5	15 - 30	SVE
Water Tank Area	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

-- = 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 Summary of Operations - April 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 the North-East Area (gallons)	Groundwater Extracted from the North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed (Ib)
04/01/14	*		2,895,897	1,844,900	552,850	5,965,439	6,518,289	4,740,797	69,809,124		9,912
04/02/14	Technician		2,904,789	1,850,510	557,689	5,971,133	6,528,822	4,755,299	69,829,940		9,913
04/03/14	*		2,914,049	1,856,344	562,343	5,976,896	6,539,239	4,770,393	69,850,770		9,913
04/04/14	Technician	1	2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/05/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/06/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/07/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/08/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/09/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/10/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/11/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/12/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/13/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/14/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/15/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/16/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/17/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/18/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/19/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/20/14	Off line		2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/21/14	Technician	2	2,922,344	1,861,571	566,512	5,982,059	6,548,571	4,783,915	69,869,430		9,913
04/22/14	Technician	3	2,924,506	1,862,988	567,582	5,982,089	6,549,671	4,787,494	69,874,045		9,913
04/23/14	Technician	4	2,932,101	1,868,577	571,097	5,982,089	6,553,186	4,800,678	69,885,215		9,913
04/24/14	*		2,940,402	1,874,385	576,030	5,987,229	6,563,258	4,814,788	69,906,164		9,914
04/25/14	Technician		2,949,828	1,880,980	581,630	5,993,065	6,574,695	4,830,808	69,929,950		9,914
04/26/14	*		2,958,891	1,886,618	586,334	5,998,518	6,584,851	4,845,509	69,951,274		9,914
04/27/14	*		2,967,954	1,892,257	591,037	6,003,970	6,595,007	4,860,211	69,972,599		9,914
04/28/14	Technician		2,977,615	1,898,267	596,051	6,009,783	6,605,834	4,875,882	69,995,330		9,915
04/29/14	*		2,986,651	1,903,392	600,392	6,015,181	6,615,573	4,890,044	70,015,112		9,915
04/30/14	Technician	4	2,995,060	1,908,162	604,432	6,020,205	6,624,637	4,903,222	70,033,520		9,915

	Cumulative Groundwater Discharged by the GWETS to Date (gallons)												
Period	April	Quarter 1, 2014	Quarter 2, 2014	Quarter 3, 2014	Quarter 4, 2014	2014	April 1996 to Date						
Volume	245,505	1,950,806	245,505			2,196,311	70,033,520						

Cumulative Mass DRO Removed by the GWETS ^A (Ib)										
Period	April	Quarter 2 to Date	April 1996 to Date							
Mass	3.07	3.07	9,915.11							

Legend / Notes:

1 = GWETS manually shut down.

2 = GWETS operated temporarily.

3 = GWETS restarted.

4 = Collected effluent GWETS sample for laboratory analysis.

Liquid _Phase DRO Mass [lb] =	Conc]).	(3.785 L)	۱.	1 g	1	1 <i>lb</i>	1.	Volume	al])
Liquid - Mase DRO Mass [10]-	$\begin{bmatrix} COIIC. \\ L \end{bmatrix}$])	gal)	$\overline{1,000,000\mu g}$	Л	453.59 g)	voune [8	ui])

GWETS = Groundwater extraction and treatment system

ug/L - Micrograms per liter

lb = Pounds DRO = Diesel range organics

A = Mass removal is calculated using analytical laboratory results for DRO from samples collected on: 02/07/14.

-- = 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 Summary of Operations - May 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 the North-East Area (gallons)	Groundwater Extracted from the North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed (Ib)
05/01/14	*		3,004,067	1,914,091	609,169	6,025,592	6,634,761	4,918,158	70,054,456		9,915
05/02/14	Technician	1	3,012,762	1,919,814	613,742	6,030,792	6,644,534	4,932,576	70,074,665		9,916
05/03/14	*		3,021,952	1,925,825	618,173	6,036,240	6,654,413	4,947,777	70,094,725		9,916
05/04/14	*		3,031,142	1,931,835	622,604	6,041,688	6,664,293	4,962,977	70,114,786		9,916
05/05/14	Technician		3,039,056	1,937,011	626,420	6,046,380	6,672,800	4,976,067	70,132,060		9,916
05/06/14	Technician		3,047,937	1,943,484	630,766	6,051,819	6,682,584	4,991,421	70,152,600		9,917
05/07/14	Technician		3,055,963	1,949,392	634,991	6,056,941	6,691,932	5,005,355	70,172,150		9,917
05/08/14	*		3,065,044	1,956,074	640,281	6,062,455	6,702,736	5,021,118	70,193,233		9,917
05/09/14	Technician		3,072,656	1,961,674	644,715	6,067,077	6,711,792	5,034,330	70,210,905		9,917
05/10/14	*		3,081,703	1,968,309	649,596	6,072,453	6,722,048	5,050,012	70,231,487		9,918
05/11/14	*		3,090,750	1,974,944	654,476	6,077,829	6,732,305	5,065,694	70,252,069		9,918
05/12/14	Technician		3,099,677	1,981,492	659,293	6,083,135	6,742,427	5,081,169	70,272,380		9,918
05/13/14	*		3,103,839	1,984,373	661,741	6,085,817	6,747,558	5,088,212	70,280,808		9,918
05/14/14	Technician		3,108,151	1,987,358	664,278	6,088,597	6,752,874	5,095,509	70,289,540		9,918
05/15/14	*		3,115,748	1,992,767	668,840	6,093,535	6,762,375	5,108,514	70,308,132		9,919
05/16/14	Technician	1	3,124,136	1,998,739	673,877	6,098,988	6,772,865	5,122,875	70,328,660		9,919
05/17/14	*		3,132,523	2,004,793	678,966	6,104,484	6,783,450	5,137,315	70,348,110		9,919
05/18/14	*		3,140,910	2,010,846	684,055	6,109,980	6,794,035	5,151,756	70,367,560		9,919
05/19/14	Technician		3,147,695	2,015,744	688,172	6,114,427	6,802,599	5,163,439	70,383,295		9,919
05/20/14	Technician		3,157,266	2,022,649	693,676	6,120,430	6,814,106	5,179,915	70,405,660		9,920
05/21/14	*		3,165,399	2,028,451	698,540	6,125,790	6,824,331	5,193,849	70,424,841		9,920
05/22/14	Technician		3,172,594	2,033,584	702,844	6,130,533	6,833,377	5,206,178	70,441,810		9,920
05/23/14	*		3,180,945	2,039,480	707,603	6,135,904	6,843,507	5,220,424	70,461,184		9,920
05/24/14	*		3,189,295	2,045,376	712,362	6,141,275	6,853,636	5,234,671	70,480,557		9,921
05/25/14	*		3,197,646	2,051,272	717,121	6,146,645	6,863,766	5,248,918	70,499,931		9,921
05/26/14	*		3,205,997	2,057,168	721,880	6,152,016	6,873,896	5,263,165	70,519,304		9,921
05/27/14	Technician		3,215,107	2,063,601	727,072	6,157,876	6,884,947	5,278,708	70,540,440		9,921
05/28/14	*		3,223,470	2,069,333	731,956	6,163,326	6,895,282	5,292,803	70,559,690		9,922
05/29/14	Technician	1,2,3	3,233,076	2,075,918	737,566	6,169,588	6,907,153	5,308,993	70,581,800		9,922
05/30/14	Off line		3,233,076	2,075,918	737,566	6,169,588	6,907,153	5,308,993	70,581,800		9,922
05/31/14	Off line		3,233,076	2,075,918	737,566	6,169,588	6,907,153	5,308,993	70,581,800		9,922

	Cumulative Groundwater Discharged by the GWETS (gallons)												
Period	May	Quarter 1, 2014	Quarter 2, 2014	Quarter 3, 2014	Quarter 4, 2014	2014	April 1996 to Date						
Volume	548,280	1,950,806	793,785			2,744,591	70,581,800						

Cumulative Mass DRO Removed by the GWETS ^A (Ib)											
Period	May	Quarter 2 to Date	April 1996 to Date								
Mass	6.86	9.94	9,921.97								

Legend / Notes:

1 = Collected effluent GWETS sample for laboratory analysis.

2 = Collected surge tank and pre MX-21 GWETS samples for laboratory analysis. 3 = GWETS manually shut down.

Liquid _Phase DRO Mass[lb]=	Conc	$[\underline{\mu g}]$	3.785 L).($\begin{pmatrix} 1g \end{pmatrix}$	$\begin{pmatrix} 1lb \end{pmatrix}$	•(Volume	[<i>aal</i>])
	Conc.	$\begin{bmatrix} L \end{bmatrix}$	gal		$\left(\overline{1,000,000\mu g}\right)$	$\left(\overline{453.59g}\right)$) ("0"""""""""""""""""""""""""""""""""""	_ ^{gui}])

GWETS = Groundwater extraction and treatment system

lb = Pounds

ug/L - Micrograms per liter DRO = Diesel range organics A = Mass removal is calculated using analytical laboratory results for DRO from samples collected on: 02/07/14.

-- = Not applicable

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

TABLE 2c Groundwater Extraction and Treatment System Summary of Operations - June 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 the North-East Area (gallons)	Groundwater Extracted from the North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed (Ib)
06/01/14	Off line		3,233,076	2,075,918	737,566	6,169,588	6,907,153	5,308,993	70,581,800		9,922
06/02/14	Off line		3,233,076	2,075,918	737,566	6,169,588	6,907,153	5,308,993	70,581,800		9,922
06/03/14	Off line		3,233,076	2,075,918	737,566	6,169,588	6,907,153	5,308,993	70,581,800		9,922
06/04/14	Technician	1	3,233,076	2,075,918	737,566	6,169,588	6,907,153	5,308,993	70,581,800		9,922
06/05/14	Technician	2	3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/06/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/07/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/08/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/09/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/10/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/11/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/12/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066 70,600,20			9,922
06/13/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/14/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/15/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/16/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902 5,322,066		70,600,200		9,922
06/17/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/18/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/19/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/20/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/21/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/22/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/23/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/24/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/25/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/26/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/27/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/28/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922
06/29/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200	70,600,200	
06/30/14	Off line		3,234,516	2,087,551	743,492	6,175,410	6,918,902	5,322,066	70,600,200		9,922

	Cumulative Groundwater Discharged by the GWETS (gallons)													
Period	June	Quarter 1, 2014	Quarter 2, 2014	Quarter 3, 2014	Quarter 4, 2014	2014	April 1996 to Date							
Volume	Volume 18,400 1,950,806 812,185		812,185			2,762,991	70,600,200							

Cumulative Mass DRO Removed by the GWETS ^A (Ib)											
Period	June	Quarter 2 to Date	April 1996 to Date								
Mass	0.23	10.17	9,922.20								

Legend / Notes:

1 = GWETS restarted.

2 = GWETS manually shut down.

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

GWETS = Groundwater extraction and treatment system

ug/L - Micrograms per liter

lb = Pounds DRO = Diesel range organics

A = Mass removal is calculated using analytical laboratory results for DRO from samples collected on: 02/07/14.

-- = Not applicable

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

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

TABLE 3a Soil Vapor Extraction System Summary of Operations - April DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	VES Hour Meter Reading (hours)	VES Process Flow C (scfm)	VES Manifold Vacuum (in. Hg)	Carbon Inlet Temperature (°F)	Laboratory Process Concentration with Dilution A,B (ppmv)	Field Process Concentration with Dilution A,B (ppmv)	Field Effluent Concentration A,B (ppmv)	Cumulative Vapor-Phase TPHg Removed (lb)	
04/01/14	*		21,129	135						2,958.0	
04/02/14	Technician	1	21,133	133	8	86				2,958.0	
04/03/14	*	1	21,157	133						2,958.1	
04/04/14	Technician	1	21,181	140	8	98		1.9	0.0	2,958.2	
04/05/14	*	1	21,205	140						2,958.2	
04/06/14	*	1	21,229	140						2,958.3	
04/07/14	*	1	21,253	140						2,958.4	
04/08/14	*	1	21,277	140						2,958.4	
04/09/14	*		21,301	140						2,958.5	
04/10/14	*	1	21,325	140						2,958.6	
04/11/14	*	1	21,349	140						2,958.6	
04/12/14	*	1	21,373	140						2,958.7	
04/13/14	*	1	21,397	140						2,958.8	
04/14/14	*	1	21,421	140						2,958.9	
04/15/14	*	1	21,445	140						2,958.9	
04/16/14	*	1	21,469	140						2,959.0	
04/17/14	*	1	21,493	140						2,959.1	
04/18/14	*	1	21,517	140						2,959.1	
04/19/14	*	1	21,541	140						2,959.2	
04/20/14	*		21,565	140						2,959.3	
04/21/14	Technician		21,252	135	8	111				2,959.3	
04/22/14	Technician		21,277	133	8	101				2,959.4	
04/23/14	Technician	1	21,301	138	8	104		1.9	0.5	2,959.5	
04/24/14	*		21,325	138						2,959.5	
04/25/14	Technician		21,349	136	8	98				2,959.6	
04/26/14	*		21,373	136						2,959.7	
04/27/14	*		21,397	136						2,959.7	
04/28/14	Technician		21,421	131	8	104				2,959.8	
04/29/14	*	1	21,445	131						2,959.9	
04/30/14	Technician		21.468	151	6	116				2.959.9	

Cum	ulative Mass TPHg	Removed by the VES	6 [^] (lb)	
Period	April	Quarter 2 to Date	April 1996 to Date	$[\mu g] (28.32 L) (-1 g) (1 lb) (-1 g) (60 min) (-1 g) (60 min) (-1 g) (-1 g) (-1 h) (-1 g) (-1 h) ($
Mass	2.1	2.1	2,959.9	$ Vapor-Phase TPHg Mass [lb] = Conc. \frac{R_0}{L} \bullet \frac{COS2 D}{ft^3} \bullet \frac{18}{1000000\mu_{\theta}} \frac{R_0}{453599} \bullet (Flow [scfm]) \bullet \frac{COS2 D}{hr} \bullet (OpTime [hrst]) + COS2 D $

Legend / Notes:

1 = Collected monthly influent, after GAC-1, after GAC-2, and Effluent samples for laboratory analysis.

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

A = Concentrations obtained with a calibrated PID.

B = Concentrations correlated to and expressed as hexane.

C = Reading calculated using Dwyer DS-300 pitot tube conversion from source wells.

D = Hydrocarbon removal is calculated using analytical laboratory results for TPHg (if not detected, half the detection limit is used) from samples collected on: 03/21/14 and 04/23/14 (laboratory reports attached).

-- = Not applicable or not measured

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

Vapor extraction wells on line this month: VEW-32, VEW-33, VEW-34, VEW-35, VEW-36, VEW-37, HW-1, HW-3, HW-5, HW-7

TABLE 3b Soil Vapor Extraction System Summary of Operations - May DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	VES Hour Meter Reading (hours)	VES Process Flow C (scfm)	VES Manifold Vacuum (in. Hg)	Carbon Inlet Temperature (°F)	Laboratory Process Concentration with Dilution A,B (ppmv)	Field Process Concentration with Dilution A,B (ppmv)	Field Effluent Concentration A,B (ppmv)	Cumulative Vapor-Phase TPHg Removed (Ib)
05/01/14	*		21,492	151						2,960.0
05/02/14	Technician		21,515	149	5	120		2.3	0.7	2,960.1
05/03/14	*		21,539	149						2,960.2
05/04/14	*		21,563	149						2,960.2
05/05/14	Technician		21,587	138	8	90				2,960.3
05/06/14	Technician		21,611	140	7	101				2,960.4
05/07/14	Technician		21,635	136	8	100		1.5	0.0	2,960.4
05/08/14	*		21,659	136						2,960.5
05/09/14	Technician		21,683	134	7	115		2.6	0.0	2,960.6
05/10/14	*		21,707	134						2,960.6
05/11/14	*		21,731	134						2,960.7
05/12/14	Technician		21,755	131	8	130				2,960.8
05/13/14	*		21,779	131						2,960.8
05/14/14	Technician		21,803	140	8	110				2,960.9
05/15/14	*		21,827	140						2,961.0
05/16/14	Technician	1	21,851	171	4	118	1.5	1.1	0.0	2,961.1
05/17/14	*		21,875	171						2,961.1
05/18/14	Auto Shutdown		21,885	171						2,961.2
05/19/14	Technician	2	21,900	135	7	74				2,961.2
05/20/14	Technician		21,924	145	8	103				2,961.3
05/21/14	*		21,948	145						2,961.4
05/22/14	Technician		21,972	143	8	96				2,961.4
05/23/14	*		21,996	143						2,961.5
05/24/14	*		22,020	143						2,961.6
05/25/14	*		22,044	143						2,961.7
05/26/14	*		22,068	143						2,961.7
05/27/14	Technician		22,092	135	8	122				2,961.8
05/28/14	*		22,116	135						2,961.9
05/29/14	Technician	3	22,130	135						2,961.9
05/30/14	Off line		22,130	NA						2,961.9
05/31/14	Off line		22,130	NA						2,961.9

Cun	nulative Mass TPHg	Removed by the VES	6 [^] (lb)	$\left(\left[u_{g} \right] \right) \left(28.22 I \right) \left(1.6 \right) \left(1.1b \right) \left(60 \text{ min} \right)$
Period	May	Quarter 2 to Date	April 1996 to Date	$Vapor-Phase TPHg Mass [lb] = Conc. \frac{\mu g}{L} \cdot \frac{26.52 L}{c_{33}} \cdot \frac{1 g}{1.000,000} \frac{1 b}{4.52,50} \cdot (Flow [scfm]) \cdot \frac{1 b}{L} \cdot (OpTime[hrs])$
Mass	1.9	4.0	2,961.9	$[L]/(fr)/(1,000,000\mu g)(453.59g)$

Legend / Notes:

1 = Collected monthly influent, after GAC-1, after GAC-2, and Effluent samples for laboratory analysis.

2 = VES restarted.

3 = VES manually shut down.

VES = Soil vapor extraction system scfm = Standard cubic feet per minute °F = Degrees Fahrenheit

in. Hg = Inches of mercury

ppmv = Parts per million by volume lb = Pounds

A = Concentrations obtained with a calibrated PID.

B = Concentrations correlated to and expressed as hexane.

C = Reading calculated using Dwyer DS-300 pitot tube conversion from source wells.

D = Hydrocarbon removal is calculated using analytical laboratory results for TPHg (if not detected, half the detection limit is used) from samples collected on: 04/23/14 and 05/16/14 (laboratory reports attached).

-- = Not applicable or not measured

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

Vapor extraction wells on line this month: VEW-32, VEW-33, VEW-34, VEW-35, VEW-36, VEW-37, HW-1, HW-3, HW-5, HW-7

TABLE 3c Soil Vapor Extraction System Summary of Operations - June DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	VES Hour Meter Reading (hours)	VES Process Flow C (scfm)	VES Manifold Vacuum (in. Hg)	Carbon Inlet Temperature (°F)	Laboratory Process Concentration with Dilution A,B (ppmv)	Field Process Concentration with Dilution A,B (ppmv)	Field Effluent Concentration A,B (ppmv)	Cumulative Vapor-Phase TPHg Removed (lb)	
06/01/14	Off line		22,130	NA						2,961.9	
06/02/14	Off line		22,130	NA						2,961.9	
06/03/14	Off line		22,130	NA						2,961.9	
06/04/14	Off line		22,130	NA						2,961.9	
06/05/14	Off line		22,130	NA						2,961.9	
06/06/14	Off line		22,130	NA						2,961.9	
06/07/14	Off line		22,130	NA						2,961.9	
06/08/14	Off line		22,130	NA						2,961.9	
06/09/14	Off line		22,130	NA						2,961.9	
06/10/14	Off line		22,130	NA						2,961.9	
06/11/14	Off line		22,130	NA						2,961.9	
06/12/14	Off line		22,130	NA						2,961.9	
06/13/14	Off line		22,130	NA						2,961.9	
06/14/14	Off line		22,130	NA						2,961.9	
06/15/14	Off line		22,130	NA						2,961.9	
06/16/14	Off line		22,130	NA						2,961.9	
06/17/14	Off line		22,130	NA						2,961.9	
06/18/14	Off line		22,130	NA						2,961.9	
06/19/14	Off line		22,130	NA						2,961.9	
06/20/14	Off line		22,130	NA						2,961.9	
06/21/14	Off line		22,130	NA						2,961.9	
06/22/14	Off line		22,130	NA						2,961.9	
06/23/14	Off line		22,130	NA						2,961.9	
06/24/14	Off line		22,130	NA						2,961.9	
06/25/14	Off line		22,130	NA						2,961.9	
06/26/14	Off line		22,130	NA						2,961.9	
06/27/14	Off line		22,130	NA						2,961.9	
06/28/14	Off line		22,130	NA						2,961.9	
06/29/14	Off line		22,130	NA						2,961.9	
06/30/14	Off line		22,130	NA						2,961.9	

Cum	nulative Mass TPHg	Removed by the VES	6 ^ (lb)	
Period	June	Quarter 2 to Date	April 1996 to Date	$[\mu g] (28.32 L) (-1 g) (-1 h) (-5 h) (60 min) (-5 h) (60 min) (-5 h) ($
Mass	0.0	4.0	2,961.9	$Vapor-Phase TPHg Mass [lb] = [Conc. \frac{rs}{L}] \bullet [\frac{\sigma o c 2}{ft^3}] \bullet [\frac{1}{1000000 \mu g}] (\frac{rs}{45359 g}) \bullet [Flow [scfm]] \bullet [\frac{\sigma o mm}{hr}] \bullet [OpTime[hrs$
				$([L]) (Ji) (1,000,000 \mu g) (455.57 g) (III)$

Legend / Notes:

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

A = Concentrations obtained with a calibrated PID.

B = Concentrations correlated to and expressed as hexane.

C = Reading calculated using Dwyer DS-300 pitot tube conversion from source wells.

D = Hydrocarbon removal is calculated using analytical laboratory results for TPHg (if not detected, half the detection limit is used) from samples collected on: Off line

-- = Not applicable or not measured

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

Vapor extraction wells on line this month: Off line

TABLE 4 Historical Summary of Analytical Sampling Results - Influent Vapor DFSP, Norwalk

DF3F, NUIWalk

15306 Norwalk Blvd., Norwalk, CA

Sample Date	Notes	VES Wells On Line	Laboratory Analysis	TPHg Field PID Reading	ТР	Hg	TPHg as	Hexane	Ben	Benzene		Toluene		enzene	zene o-Xy		e m,p-Xylenes		Total Xylenes		MtBE	
			Methods	(ppmv)	(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

TABLE 4

Historical Summary of Analytical Sampling Results - Influent Vapor

DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

Sample Notes	Notes	s VES Wells On Line	Laboratory Analysis	TPHg Field PID Reading	J VID TPHg ng		TPHg as Hexane		Benzene		Toluene		Ethylbenzene		o-Xylene		m,p-Xylenes		Total Xylenes		MtBE	
			Wethods	(ppmv)	(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)
04/23/14		VEW-32, VEW-33, VEW-34, VEW-35, EW-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, EW-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

1 = VES manually shut down on 05/29/14.

Legend / Notes:

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

VES = Soil vapor extraction system

TPHg = Total petroleum hydrocarbons as gasoline

MtBE = Methyl tertiary-butyl ether

ppmv = Parts per million by volume

 $\mu\text{g/L}$ = Micrograms per liter

<1 = Not detected at or above the Method Reporting Limit (MRL) shown.

-- = Not available or not analyzed

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

Sample	Notes	GWETS Wells	Laboratory Analysis	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	ТВА	МТВЕ	DIPE	ETBE	TAME
Date		On Line	Methods	(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

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

Sample	Notes	GWETS Wells	Laboratory Analysis	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	ТВА	MTBE	DIPE	ETBE	TAME
Date		On Line	Methods	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)
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
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

Legend / Notes:

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

1 = GWETS manually shut down. 2 = GWETS restarted on 07/02/14.

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

 μ g/L = Micrograms per liter

<1 = Not detected at or above the Method Reporting Limit (MRL) shown.

-- = Not available or not analyzed

TABLE 6aSummary of LNAPL Removal in GMW-62 - 2nd Quarter 2014DFSP, Norwalk15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Purged with Vac Truck (approx gallons)	Weight of LNAPL Removed with Socks (ounces)	Amount of LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed with Vac Truck ^A (gallons)	Cumulative Weight of LNAPL Removed with Vac Truck 1 ^A (pounds)
4/14/14	NM	NM	NM		No Sock in Well	No Sock in Well	31.00	212.14
4/22/14	30.57	34.69	4.12		No Sock in Well	No Sock in Well	31.00	212.14
5/1/14	30.70	36.90	6.20		No Sock in Well	No Sock in Well	31.00	212.14
5/5/14	30.27	36.52	6.25	10.00	No Sock in Well	No Sock in Well	41.00	280.57
5/19/14	31.01	36.05	5.04	4.00	No Sock in Well	No Sock in Well	45.00	307.95
6/11/14	30.53	35.67	5.14		No Sock in Well	No Sock in Well	45.00	307.95
6/20/14	30.51	35.85	5.34		No Sock in Well	No Sock in Well	45.00	307.95
6/30/14	30.54	36.08	5.54		No Sock in Well	No Sock in Well	45.00	307.95
			Totals	45.00	0.00	0.00	45.00	307.95

Notes: LNAPL = light non-aqueous phase liquids.

feet btc = feel below top of casing.

approx = approximate.

--- = not applicable.

NM = not measured.

Sock = LNAPL absorbent sock.

Vac Truck = vacuum truck used to purge LNAPL from the well.

TABLE 6b Summary of LNAPL Removal in GMW-4 - 2nd Quarter 2014 DFSP, Norwalk 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	Weight of LNAPL Removed with Socks (ounces)	Amount of LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed with Socks ^A (gallons)	Cumulative Weight of LNAPL Removed with Socks ^A (pounds)
4/14/14	31.11	31.17	0.06	No Sock in Well	No Sock in Well	0.00	0.00
4/22/14	31.36	31.41	0.05	No Sock in Well	No Sock in Well	0.00	0.00
5/1/14	31.27	31.32	0.05	No Sock in Well	No Sock in Well	0.00	0.00
5/5/14	31.22	31.27	0.05	No Sock in Well	No Sock in Well	0.00	0.00
5/19/14	31.53	31.59	0.06	No Sock in Well	No Sock in Well	0.00	0.00
6/9/14	31.64	31.73	0.09	No Sock in Well	No Sock in Well	0.00	0.00
6/20/14	31.55	31.61	0.06	No Sock in Well	No Sock in Well	0.00	0.00
6/30/14	31.98	32.07	0.09	No Sock in Well	No Sock in Well	0.00	0.00
			Totals	0.00	0.00	0.00	0.00

LNAPL = light non-aqueous phase liquids. Notes:

feet btc = feel below top of casing.

Sock = LNAPL absorbent sock.

Vac Truck = vacuum truck used to purge LNAPL from the well. A = Cumulative LNAPL removed since January 2014. LNAPL removed prior to January 2014 can be found in previously submitted Remediation Progress Reports.

 TABLE 6c

 Summary of LNAPL Removal in GMW-21 - 2nd Quarter 2014

 DFSP, Norwalk

 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Purged with Vac Truck (approx gallons)	Weight of LNAPL Removed with Socks * (ounces)	Amount of LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed with Vac Truck and Socks ^A (gallons)	Cumulative Weight of LNAPL Removed with Vac Truck and Socks A (pounds)
4/14/14	32.07	32.18	0.11		28	32.73	3.58	24.51
4/22/14	32.00	32.26	0.26		28	32.73	3.84	26.26
5/1/14	32.13	32.45	0.32		28	32.73	4.09	28.01
5/5/14	Sheen	32.18	Sheen		28	32.73	4.35	29.76
5/19/14		32.23	0.00		28	32.73	4.60	31.51
6/9/14		32.24	0.00		28	32.73	4.86	33.26
6/20/14		32.28	0.00		28	32.73	5.12	35.01
6/30/14		32.32	0.00		28	32.73	5.37	36.76
			Totals	5.00	504	589.12	5.37	36.76

Notes: LNAPL = light non-aqueous phase liquids.

feet btc = feel below top of casing.

approx = approximate.

--- = not applicable.

Sock = LNAPL absorbent sock (3" by 18").

Vac Truck = vacuum truck used to purge LNAPL from the well.

* = from 1/7/2014 to 6/30/2014 the weight of used sock was estimated and based on the weight of the socks removed 7/30/2014 and 8/8/2014. Starting 7/30/14, the weight of the used sock was measured in the field during LNAPL recovery.

TABLE 6dSummary of LNAPL Removal in MW-15 - 2nd Quarter 2014DFSP, NorwalkDFSP, Norwalk15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	Weight of LNAPL Removed with Socks (ounces)	Amount of LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed with Socks ^A (gallons)	Cumulative Weight of LNAPL Removed with Socks ^A (pounds)
4/14/14	32.72	32.81	0.09	No Sock in Well	No Sock in Well	0.00	0.00
4/22/14	32.95	33.18	0.23	No Sock in Well	No Sock in Well	0.00	0.00
5/1/14	32.86	33.06	0.20	No Sock in Well	No Sock in Well	0.00	0.00
5/5/14	32.78	32.93	0.15	No Sock in Well	No Sock in Well	0.00	0.00
5/19/14	33.17	33.63	0.46	No Sock in Well	No Sock in Well	0.00	0.00
6/9/14	33.21	33.81	0.60	No Sock in Well	No Sock in Well	0.00	0.00
6/20/14	33.13	33.53	0.40	No Sock in Well	No Sock in Well	0.00	0.00
6/30/14	33.60	34.25	0.65	No Sock in Well	No Sock in Well	0.00	0.00
			Totals	0.00	0.00	0.00	0.00

Notes: LNAPL = light non-aqueous phase liquids.

feet btc = feel below top of casing.

approx = approximate.

--- = not applicable.

NM = not measured.

Sock = LNAPL absorbent sock.

Vac Truck = vacuum truck used to purge LNAPL from the well.

TABLE 6eSummary of LNAPL Removal in PZ-3 - 2nd Quarter 2014DFSP, NorwalkDFSP, Norwalk15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	Weight of LNAPL Removed with Socks (ounces)	Amount of LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed with Socks ^A (gallons)	Cumulative Weight of LNAPL Removed with Socks ^A (pounds)
4/14/14		32.11	0.00	NM	NM	0.00	0.00
4/22/14		32.10	0.00	NM	NM	0.00	0.00
5/1/14		32.25	0.00	NM	NM	0.00	0.00
5/5/14		32.23	0.00	NM	NM	0.00	0.00
5/19/14		32.29	0.00	NM	NM	0.00	0.00
6/9/14		32.29	0.00	NM	NM	0.00	0.00
6/20/14		32.33	0.00	NM	NM	0.00	0.00
6/30/14		32.42	0.00	NM	NM	0.00	0.00
			Totals	0.00	0.00	0.00	0.00

Notes: LNAPL = light non-aqueous phase liquids.

feet btc = feel below top of casing.

approx = approximate.

--- = not applicable.

NM = not measured.

Sock = LNAPL absorbent sock (1" by 18").

Vac Truck = vacuum truck used to purge LNAPL from the well.

 TABLE 6f

 Summary of LNAPL Removal in TF-18 - 2nd Quarter 2014

 DFSP, Norwalk

 15306 Norwalk Blvd., Norwalk, CA

Date	Depth to LNAPL (feet btc)	Depth to Water (feet btc)	Measured LNAPL Thickness (feet)	LNAPL Purged with Vac Truck (approx gallons)	Weight of LNAPL Removed with Socks * (ounces)	Amount of LNAPL Removed with Socks (fluid ounces)	Cumulative LNAPL Removed with Vac Truck and Socks ^A (gallons)	Cumulative Weight of LNAPL Removed with Vac Truck and Socks (pounds)
4/14/14	29.03	31.35	2.32		72	84.16	9.21	62.99
4/22/14	29.25	30.64	1.39		72	84.16	9.86	67.49
5/1/14	29.32	31.00	1.68		72	84.16	10.52	71.99
5/5/14	29.35	30.82	1.47	5.00	72	84.16	16.18	110.71
5/19/14	29.43	30.03	0.60		72	84.16	11.84	80.99
6/9/14	29.18	31.81	2.63		72	84.16	12.49	85.49
6/20/14	29.46	30.98	1.52		72	84.16	13.15	89.99
6/30/14	29.57	31.05	1.48		72	84.16	13.81	94.49
			Totals	28.00	1,512	1,767.37	13.81	94.49

Notes: LNAPL = light non-aqueous phase liquids.

feet btc = feel below top of casing.

approx = approximate.

--- = not applicable.

NM = not measured.

Sock = LNAPL absorbent sock (3" by 18").

Vac Truck = vacuum truck used to purge LNAPL from the well.

* = from 1/7/2014 to 6/30/2014 the weight of used sock was estimated and based on the weight of the socks removed 7/30/2014 and 8/8/2014. Starting 7/30/14, the weight of the used sock was measured in the field during LNAPL recovery.

APPENDIX A

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS


WORK ORDER NUMBER: 14-04-1672

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Parsons Government Services, Inc. Client Project Name: DFSP Norwalk - Monthly Attention: Mary Lucas 100 West Walnut Street Pasadena, CA 91124-0002

Ranjit F. J. Clarke

Approved for release on 04/30/2014 by: Ranjit Clarke Project Manager

ResultLink ▶

Email your PM >



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



10 Lincoln Way, Garden Grove, CA 92841-1432 🔹 TEL: (714) 895-5494 🔹 FAX: (714) 894-7501 🔹 www.calscience.com



Client Project Name: DFSP Norwalk - Monthly Work Order Number: 14-04-1672

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2	Sample Summary	4
3	Client Sample Data	5 5
4	Quality Control Sample Data. 4.1 Sample Duplicate. 4.1 Sample Duplicate. 4.2 LCS/LCSD.	6 6 8
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7	Chain of Custody/Sample Receipt Form	11

Contents

Calscience nvironmental Laboratories, Inc.

Work Order: 14-04-1672

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/23/14. They were assigned to Work Order 14-04-1672.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Ĉ	alscience nvironmental aboratories, Inc.	Sample Summary	U
Client:	Parsons Government Services, Inc.	Work Order:	14-04-1672
	100 West Walnut Street	Project Name:	DFSP Norwalk - Monthly
	Pasadena, CA 91124-0002	PO Number:	
		Date/Time Received:	04/23/14 12:55
		Number of Containers:	2
Attn:	Mary Lucas		
Sample lo	dentification Lab Number	Collection Date and Time	Number of Matrix Containers

04/23/14 10:00

2

14-04-1672-1

Effluent

Page 4 of 12

Aqueous

alscience nvironmental aboratories, Inc.

Date Received:

Work Order:

Parsons Government Services, Inc.

100 West Walnut Street

Pasadena, CA 91124-0002

Project: DFSP Norwalk - Monthly

Client Sample Number			Lab S	Sample Number		Date/Tin	ne Collected	Matrix	
Effluent			14-04	4-1672-1		04/23/14	4 10:00	Aqueous	
Parameter	<u>Results</u>	<u>RL</u>	DF	<u>Qualifiers</u>	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method	
Turbidity	0.62	0.050	1.00		NTU	N/A	04/23/14	SM 2130 B	
рН	7.00	0.01	1.00	BV,BU	pH units	N/A	04/23/14	SM 4500 H+ B	
Oil and Grease	ND	1.0	1.00		mg/L	04/29/14	04/29/14	SM 5520 B	
Method Blank						N/A		Aqueous	
Parameter	Results	<u>RL</u>	DF	<u>Qualifiers</u>	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method	
Oil and Grease	ND	1.0	1.00		mg/L	04/29/14	04/29/14	SM 5520 B	

Page 1 of 1

04/23/14

14-04-1672



Quality Control - Sample Duplicate

Parsons Government Services, Inc.	Date Received:	04/23/14
100 West Walnut Street	Work Order:	14-04-1672
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	SM 2130 B
Project: DFSP Norwalk - Monthly		Page 1 of 2

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
Effluent	Sample	Aqueous	TUR 3	N/A	04/23/14 18:30	E0423TURD1
Effluent	Sample Duplicate	Aqueous	TUR 3	N/A	04/23/14 18:30	E0423TURD1
Parameter		Sample Conc.	DUP Conc.	<u>RPD</u>	RPD CL	Qualifiers
Turbidity		0.6200	0.6300	2	0-25	

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Sample Duplicate

Parsons Government Services, Inc.	Date Received:	04/23/14
100 West Walnut Street	Work Order:	14-04-1672
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	SM 4500 H+ B
Project: DFSP Norwalk - Monthly		Page 2 of 2
Quality Control Sample ID Type	Motrix Instrument Date Bronarad	Data Applyzed Duplicate Ratch Number

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
Effluent	Sample	Aqueous	PH 1	N/A	04/23/14 19:15	E0423PHD1
Effluent	Sample Duplicate	Aqueous	PH 1	N/A	04/23/14 19:15	E0423PHD1
Parameter		Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
рН		7.000	7.020	0	0-25	



Parsons Government Services, Inc.	Date Received:	04/23/14
100 West Walnut Street	Work Order:	14-04-1672
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	SM 5520 B
Project: DFSP Norwalk - Monthly		Page 1 of 1

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Date	e Analyzed	LCS/LCSD Ba	atch Number
099-05-081-2964	LCS	Aqu	leous	N/A	04/29/14	04/2	29/14 16:00	E0429OGL1	
099-05-081-2964	LCSD	Aqu	leous	N/A	04/29/14	04/2	29/14 16:00	E0429OGL1	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	<u>%Rec. CL</u>	RPD	RPD CL	Qualifiers
Oil and Grease	40.00	38.50	96	39.20	98	80-120	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Method	Extraction	Chemist ID	Instrument	Analytical Location
SM 2130 B	N/A	688	TUR 3	1
SM 4500 H+ B	N/A	688	PH 1	1
SM 5520 B	N/A	691	N/A	1

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Page 1 of 1

alscience nvironmental aboratories, Inc.

Work Order: 14-04-1672

Page 1 of 1 Qualifiers Definition * See applicable analysis comment. Less than the indicated value. < Greater than the indicated value. > Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further 1 clarification. 2 Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. 3 Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control. Δ The MS/MSD RPD was out of control due to suspected matrix interference. The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. 5 6 Surrogate recovery below the acceptance limit. 7 Surrogate recovery above the acceptance limit. В Analyte was present in the associated method blank. ΒU Sample analyzed after holding time expired. ΒV Sample received after holding time expired. Е Concentration exceeds the calibration range. FT Sample was extracted past end of recommended max. holding time. HD The chromatographic pattern was inconsistent with the profile of the reference fuel standard. HDH The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected). HDL The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected). Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is J estimated. JA Analyte positively identified but quantitation is an estimate. LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). ME ND Parameter not detected at the indicated reporting limit.

Glossary of Terms and Qualifiers

- Q Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
- SG The sample extract was subjected to Silica Gel treatment prior to analysis.
- Х % Recovery and/or RPD out-of-range.
- Ζ Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

C.alsc	zience												CHA	N O	F CUSTOD	Y RECORD	1345
	vironmental aboratories. Inc.	7440 LINCOLN WAY GARDEN GROVE, CA 928	41-1432										DATE:		4-23-14	Ar Andrews	
		TEL: (714) 895-5494 . FAX	: (714) 894-	7501									PAGE:		1 OF	~	
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Relinqui	shed by: (Signature)				Receive	d by: (Sig	nature)	4	0						Date: (Time:	
Revise	ad: 08/28/08				Ř	sturn to Col	itents										1

\

Calscience ·	W	ORK ORDER #	#: 14-(Page 12 o	f 12 2 7 5
Laboratories, Inc.	PLE REC	EIPT FOR	RM c	ooler /	of /
CLIENT: <u>PARSONS</u>			DATE:	04/23/	14
TEMPERATURE: Thermometer ID: S	SC2 (Criteria: 0.0 °C	– 6.0 °C, not frozen	except se	diment/tissue))
Temperature <u></u> • <u>_</u> 7 °C - 0.:	3°C (CF) =	<u>2.4</u> °C [Blank	Sample	
□ Sample(s) outside temperature crite	ria (PM/APM contact	ed by:)			
□ Sample(s) outside temperature crite	ria but received on ic	e/chilled on same da	ay of sampl	ing.	
□ Received at ambient temperature	, placed on ice for	r transport by Co	urier.		
Ambient Temperature: 🗆 Air 🛛	Filter			Checked by	804
			K 1 / A		8 out
	No (Not Intact)	Not Present	∐ N/A	Checked by:	0070
□ Sample □ L	I NO (NOT INTACT)			Checked by:	<u> 82 4</u>
SAMPLE CONDITION:		Ň	Yes	No	N/A
Chain-Of-Custody (COC) document(s)	received with sam	ples,	Ø		
COC document(s) received complete.			Ø		
□ Collection date/time, matrix, and/or # of c	containers logged in bas	sed on sample labels.			
□ No analysis requested. □ Not relinqui	ished. □ No date/tin	ne relinquished.			
Sampler's name indicated on COC	· · · · · · · · · · · · · · · · · · ·				
Sample container label(s) consistent w	vith COC	(D oupsin	, X	
Sample container(s) intact and good c	ondition		Æ		
Proper containers and sufficient volum	e for analyses requ	uested			
Analyses received within holding time.			ø		
Aqueous samples received within 1	5-minute holding ti	me		_/	
☐ pH □ Residual Chlorine □ Dissolve	ed Sulfides 🛛 Dissol	ved Oxygen		2	
Proper preservation noted on COC or	sample container		لكر		
Unpreserved vials received for Volati	lies analysis		-		
Todler bag(a) free of condensation	eauspace				
CONTAINER TYPE:		······			۲.
Solid:	zCGJ □Sleeve (_) □EnCores	s [®] ⊡Terra	Cores [®] □	
	□125AGB □125A	GBh □125AGBp	□1AGB [∃1AGB na₂∕ ⊄	1AGB s
□500AGB □500AGJ □500AGJs [□250AGB □2500	GB □250CGB s	□1PB	□1PBna ,⊉5	00PB
□250PB □250PBn □125PB □125	PB znna □100PJ	□100PJ na₂ □		□	
Air: DTedlar [®] Canister Other: Container: C: Clear A: Amber P: Plastic G: Glass Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃ na: NaC	Trip Blank J: Jar B: Bottle Z: Ziploc, DH p: H ₃ PO4 s: H ₂ SO4 u: UI	Lot#: /Resealable Bag E: Env tra-pure znna: ZnAc ₂ +NaC	_ Labeled velope F OH f: Filtered	/Checked by: __ Reviewed by: _ Scanned by:_	854 739 739



WORK ORDER NUMBER: 14-04-1676

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Parsons Government Services, Inc. Client Project Name: DFSP Norwalk - Monthly Attention: Mary Lucas 100 West Walnut Street Pasadena, CA 91124-0002

Ranjit F. J. Clarke

Approved for release on 04/30/2014 by: Ranjit Clarke Project Manager

ResultLink ▶

Email your PM >



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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Client Project Name: DFSP Norwalk - Monthly Work Order Number: 14-04-1676

1	Work Order Narrative	3
2	Sample Summary.	4
3	Client Sample Data.3.1 EPA 8015B (M) TPH Diesel (Aqueous).3.2 EPA 8015B (M) TPH Gasoline (Aqueous).3.3 EPA 6020 ICP/MS Metals (Aqueous).3.4 EPA 8260B Volatile Organics (Aqueous).	5 5 6 7 8
4	Quality Control Sample Data.4.1 MS/MSD.4.2 PDS/PDSD.4.3 LCS/LCSD.	14 14 17 18
5	Sample Analysis Summary.	22
6	Glossary of Terms and Qualifiers.	23
7	Chain of Custody/Sample Receipt Form	24

Contents



Work Order: 14-04-1676

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/23/14. They were assigned to Work Order 14-04-1676.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Ĉ	alscience nvironmental aboratories, Inc.	Sample Summary	Ŭ
Client:	Parsons Government Services, Inc.	Work Order:	14-04-1676
	100 West Walnut Street	Project Name:	DFSP Norwalk - Monthly
	Pasadena, CA 91124-0002	PO Number:	
		Date/Time Received:	04/23/14 12:55
		Number of Containers:	7
Attn:	Mary Lucas		
Sample lo	dentification Lab Number	Collection Date and Time	Number of Matrix Containers

04/23/14 10:00

7

14-04-1676-1

Effluent

Page 4 of 25

Aqueous

Analytical Report

Parsons Government Services, Inc.			Date Rece	ived:			04/23/14
100 West Walnut Street			Work Orde	r:			14-04-1676
Pasadena, CA 91124-0002			Preparation	า:			EPA 3510C
			Method:			E	PA 8015B (M)
			Units:				ug/L
Project: DFSP Norwalk - Monthly						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-04-1676-1-H	04/23/14 10:00	Aqueous	GC 47	04/23/14	04/25/14 15:15	140423B10
Parameter		Result	RI	=	DF	Qua	lifiers
TPH as Diesel		ND	10	0	1.00		
Surrogate		<u>Rec. (%)</u>	<u>Cc</u>	ontrol Limits	<u>Qualifiers</u>		
n-Octacosane		90	68	-140			
Method Blank	099-15-282-193	N/A	Aqueous	GC 47	04/23/14	04/24/14 12:27	140423B10
Parameter		Result	RI	=	DF	Qua	lifiers
TPH as Diesel		ND	10	0	1.00		
Surrogate		<u>Rec. (%)</u>	<u>Co</u>	ontrol Limits	<u>Qualifiers</u>		
n-Octacosane		76	68	-140			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents



Parsons Government Services, Inc.			Date Recei	ved:			04/23/14
100 West Walnut Street			Work Orde	r:			14-04-1676
Pasadena, CA 91124-0002			Preparatior	า:			EPA 5030C
			Method:			E	PA 8015B (M)
			Units:				ug/L
Project: DFSP Norwalk - Monthly						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-04-1676-1-D	04/23/14 10:00	Aqueous	GC 1	04/24/14	04/24/14 18:20	140424L011
Parameter		Result	RL	-	DF	Qua	lifiers
TPH as Gasoline		ND	10	0	1.00		
Surrogate		<u>Rec. (%)</u>	<u>Cc</u>	ontrol Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		83	38	-134			
Method Blank	099-15-704-740	N/A	Aqueous	GC 1	04/24/14	04/24/14 11:11	140424L011
Parameter		Result	RL	-	DF	Qua	lifiers
TPH as Gasoline		ND	10	0	1.00		
Surrogate		<u>Rec. (%)</u>	<u>Cc</u>	ontrol Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		82	38	-134			

Analytical Report

Parsons Government Services, Inc.			Date Recei	ved:			04/23/14
100 West Walnut Street		Work Order	r:			14-04-1676	
Pasadena, CA 91124-0002			Preparation	n:		EP.	A 3020A Total
			Method:				EPA 6020
			Units:				mg/L
Project: DFSP Norwalk - Monthly						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-04-1676-1-G	04/23/14 10:00	Aqueous	ICP/MS 03	04/23/14	04/25/14 01:50	140423L06
Parameter		Result	RL	:	DF	Qua	lifiers
Arsenic		0.00222	0.0	00100	1.00		
Method Blank	096-06-003-4404	N/A	Aqueous	ICP/MS 03	04/23/14	04/24/14 21:51	140423L06
Parameter		Result	RL		DF	Qua	lifiers
Arsenic		ND	0.0	0100	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Parsons Government Services, Inc.	Date Received:	04/23/14
100 West Walnut Street	Work Order:	14-04-1676
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP Norwalk - Monthly		Page 1 of 6

Project: DFSP Norwalk - Monthly

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-04-1676-1-A	04/23/14 10:00	Aqueous	GC/MS PP	04/23/14	04/24/14 04:28	140423L034
Comment(s): - Results were evaluated to	the MDL (DL), conc	entrations >=	to the MDL (DL	_) but < RL (LO	Q), if found, are	qualified with	a "J" flag.
Parameter	Resul	<u>t</u>	<u>RL</u>	MDL	DF		<u>Qualifiers</u>
Acetone	ND		20	10	1.00		
Benzene	ND		0.50	0.14	1.00		
Bromobenzene	ND		1.0	0.30	1.00		
Bromochloromethane	ND		1.0	0.48	1.00		
Bromodichloromethane	ND		1.0	0.21	1.00		
Bromoform	ND		1.0	0.50	1.00		
Bromomethane	ND		5.0	3.9	1.00		
2-Butanone	ND		10	2.2	1.00		
n-Butylbenzene	ND		1.0	0.23	1.00		
sec-Butylbenzene	ND		1.0	0.25	1.00		
tert-Butylbenzene	ND		1.0	0.28	1.00		
Carbon Disulfide	ND		10	0.41	1.00		
Carbon Tetrachloride	ND		0.50	0.23	1.00		
Chlorobenzene	ND		1.0	0.17	1.00		
Chloroethane	ND		5.0	2.3	1.00		
Chloroform	ND		1.0	0.46	1.00		
Chloromethane	ND		5.0	1.8	1.00		
2-Chlorotoluene	ND		1.0	0.24	1.00		
4-Chlorotoluene	ND		1.0	0.13	1.00		
Dibromochloromethane	ND		1.0	0.25	1.00		
1,2-Dibromo-3-Chloropropane	ND		5.0	1.2	1.00		
1,2-Dibromoethane	ND		1.0	0.36	1.00		
Dibromomethane	ND		1.0	0.46	1.00		
1,2-Dichlorobenzene	ND		1.0	0.46	1.00		
1,3-Dichlorobenzene	ND		1.0	0.40	1.00		
1,4-Dichlorobenzene	ND		1.0	0.43	1.00		
Dichlorodifluoromethane	ND		1.0	0.46	1.00		
1,1-Dichloroethane	ND		1.0	0.28	1.00		
1,2-Dichloroethane	ND		0.50	0.24	1.00		
1,1-Dichloroethene	ND		1.0	0.43	1.00		
c-1,2-Dichloroethene	ND		1.0	0.48	1.00		
t-1,2-Dichloroethene	ND		1.0	0.37	1.00		
1,2-Dichloropropane	ND		1.0	0.42	1.00		
1,3-Dichloropropane	ND		1.0	0.30	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Parsons Government Services, Inc.		Date Rec	eived:		04/23/14
100 West Walnut Street	Work Ord	14-04-167			
Pasadana CA 91124-0002	Prenarati	EPA 5030			
1 asauena, OA 31124-0002		Method:	011.		EDA 8260B
		Method.			
Drain et: DEOD Manuelle Mandele	Units.	ug/L			
Project: DFSP Norwalk - Monthly					Page 2 of 6
Parameter	<u>Result</u>	<u>RL</u>	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	ND	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	ND	1.0	0.58	1.00	
p-Isopropyltoluene	ND	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	ND	10	2.5	1.00	
n-Propylbenzene	ND	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	ND	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	ND	0.50	0.30	1.00	
o-Xylene	ND	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	
Ethanol	ND	100	50	1.00	
		-	-		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>Calscience</i> <i>nvironmental</i> <i>Laboratories, Inc.</i>	Analy	Analytical Report					
Parsons Government Services, Inc.		Date Received:	04/23/14				
100 West Walnut Street		Work Order:	14-04-1676				
Pasadena, CA 91124-0002		Preparation:	EPA 5030C				
		Method:	EPA 8260B				
		Units:	ug/L				
Project: DFSP Norwalk - Monthly			Page 3 of 6				
Surrogate	<u>Rec. (%)</u>	Control Limits Qualifiers					
1,4-Bromofluorobenzene	95	80-120					
Dibromofluoromethane	105	78-126					

75-135

80-120

103

102

_

1,2-Dichloroethane-d4

Toluene-d8

QC Batch ID

140423L034

Date/Time



Client Sample Number

t-1,2-Dichloroethene

1,2-Dichloropropane

1,3-Dichloropropane

Parsons Government Services, Inc.	Date Received:	04/23/14
100 West Walnut Street	Work Order:	14-04-1676
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP Norwalk - Monthly		Page 4 of 6

Matrix

Instrument

Date

Lab Sample

Date/Time Collected Prepared Analyzed Number 04/24/14 03:10 Method Blank 099-14-001-13847 N/A Aqueous GC/MS PP 04/23/14 Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag. MDL DF Qualifiers Parameter Result RL ND 1.00 Acetone 20 10 1.00 ND 0.14 Benzene 0.50 ND Bromobenzene 0.30 1.00 1.0 ND 0.48 1.00 Bromochloromethane 1.0 Bromodichloromethane ND 1.0 0.21 1.00 Bromoform ND 1.0 0.50 1.00 ND **Bromomethane** 5.0 3.9 1.00 2-Butanone ND 10 2.2 1.00 n-Butylbenzene ND 1.0 0.23 1.00 sec-Butylbenzene ND 1.0 0.25 1.00 tert-Butylbenzene ND 1.0 0.28 1.00 Carbon Disulfide ND 10 0.41 1.00 Carbon Tetrachloride ND 0.50 0.23 1.00 Chlorobenzene ND 1.0 0.17 1.00 Chloroethane ND 2.3 1.00 5.0 Chloroform ND 1.0 0.46 1.00 Chloromethane ND 5.0 1.8 1.00 2-Chlorotoluene ND 0.24 1.00 1.0 4-Chlorotoluene ND 1.0 0.13 1.00 Dibromochloromethane ND 1.0 0.25 1.00 1,2-Dibromo-3-Chloropropane ND 5.0 1.2 1.00 1,2-Dibromoethane ND 1.0 0.36 1.00 Dibromomethane ND 1.0 0.46 1.00 1,2-Dichlorobenzene ND 1.0 0.46 1.00 1,3-Dichlorobenzene ND 1.0 0.40 1.00 0.43 1,4-Dichlorobenzene ND 1.0 1.00 Dichlorodifluoromethane ND 1.0 0.46 1.00 ND 0.28 1,1-Dichloroethane 1.0 1.00 1,2-Dichloroethane ND 0.50 0.24 1.00 1,1-Dichloroethene ND 1.0 0.43 1.00 c-1,2-Dichloroethene ND 0.48 1.00 1.0

MDL: Method Detection Limit. **RL: Reporting Limit.** DF: Dilution Factor.

ND

ND

ND

1.0

1.0

1.0

0.37

0.42

0.30

1.00

1.00

1.00



Parsons Government Services. Inc.		Date Rec	eived:		04/23/14
100 West Walnut Street	Work Ord	14-04-167			
Pasadana CA 91124-0002	Prenarati	EPA 50300			
		Mothod:	011.		
	Units:	ug/L			
Project: DFSP Norwalk - Monthly					Page 5 of 6
Parameter	<u>Result</u>	<u>RL</u>	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	ND	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	ND	1.0	0.58	1.00	
p-Isopropyltoluene	ND	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	ND	10	2.5	1.00	
n-Propylbenzene	ND	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	ND	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	ND	0.50	0.30	1.00	
o-Xylene	ND	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	
Ethanol	ND	100	50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>L</i> alscience <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	rtical Report	
Parsons Government Services, Inc.		Date Received:	04/23/14
100 West Walnut Street		Work Order:	14-04-1676
Pasadena, CA 91124-0002		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: DFSP Norwalk - Monthly			Page 6 of 6
Surrogate	<u>Rec. (%)</u>	Control Limits Qualifiers	
1,4-Bromofluorobenzene	96	80-120	
Dibromofluoromethane	104	78-126	

75-135

80-120

99

100

-

1,2-Dichloroethane-d4

Toluene-d8

0-18

%Rec. CL RPD RPD CL

1

68-122



TPH as Gasoline

Parameter

Quality Control - Spike/Spike Duplicate

Parsons Government Service		Date Received:	04/23/14				
100 West Walnut Street			Work Order:		14-04-1676		
Pasadena, CA 91124-0002			Preparation:	EPA 5030C			
			Method:			EPA 8015B (M)	
Project: DFSP Norwalk - Monthly						Page 1 of 3	
Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number	
14-04-1751-1	Sample	Aqueous	GC 1	04/24/14	04/24/14 12:23	140424S005	
14-04-1751-1	Matrix Spike	Aqueous	GC 1	04/24/14	04/24/14 13:34	140424S005	
14-04-1751-1	Matrix Spike Duplicate	Aqueous	GC 1	04/24/14	04/24/14 14:10	140424S005	

<u>MSD</u> Conc.

1858

<u>MS</u> <u>%Rec.</u>

94

93

<u>MSD</u> <u>%Rec.</u>

<u>Spike</u> Added

2000

<u>MS</u> Conc.

1882

<u>Sample</u> <u>Conc.</u>

ND

1	Г
	Contents
	9
	Return

Qualifiers

RPD: Relative Percent Difference. CL: Control Limits



Arsenic

ND

0.1000

0.09010

Quality Control - Spike/Spike Duplicate

Parsons Government Service	es, Inc.			Dat	te Received:				04/23/14	
100 West Walnut Street				Work Order:				14-04-1676		
Pasadena, CA 91124-0002				Preparation:				EPA	3005A Filt.	
				Me	thod:		EPA 6020			
Project: DFSP Norwalk - Mor	thly							Page	2 of 3	
Quality Control Sample ID	Туре		Matrix		Instrument	Date Prepared	Date Analyze	d MS/MSD B	atch Number	
14-04-1646-2	Sample		Aqueous		ICP/MS 03	04/23/14	04/24/14 22:2	26 140423S06	;	
14-04-1646-2	Matrix Spike		Aqueous		ICP/MS 03	04/23/14	04/24/14 22:	0 140423S06	;	
14-04-1646-2	Matrix Spike	Duplicate	Aqueous		ICP/MS 03	04/23/14	04/24/14 22:	3 140423S06	;	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	<u>MS</u> %Re	<u>MSD</u> c. <u>Conc.</u>	<u>MSD</u> <u>%Rec.</u>	%Rec. CL RF	PD RPD CL	Qualifiers	

90

0.08643

86

80-120

4

0-20

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Spike/Spike Duplicate

Parsons Government Services, Inc.	Date Received:	04/23/14
100 West Walnut Street	Work Order:	14-04-1676
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: DFSP Norwalk - Monthly		Page 3 of 3

Project: DFSP Norwalk - Monthly

Quality Control Sample ID	Туре		Matrix	h	nstrument	Date Prepar	ed Date Ana	lyzed	MS/MSD Bat	ch Number
Effluent	Sample		Aqueous	s (SC/MS PP	04/23/14	04/24/14	04:28	140423S017	
Effluent	Matrix Spike		Aqueous	s (SC/MS PP	04/23/14	04/24/14	05:46	140423S017	
Effluent	Matrix Spike	Duplicate	Aqueous	s 0	SC/MS PP	04/23/14	04/24/14	06:13	140423S017	
Parameter	<u>Sample</u> Conc.	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> %Rec.	MSD Conc.	<u>MSD</u> <u>%Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Benzene	ND	50.00	56.51	113	58.37	117	74-122	3	0-21	
Carbon Tetrachloride	ND	50.00	58.16	116	60.95	122	60-144	5	0-21	
Chlorobenzene	ND	50.00	55.30	111	56.61	113	73-120	2	0-22	
1,2-Dibromoethane	ND	50.00	55.97	112	56.80	114	80-122	1	0-20	
1,2-Dichlorobenzene	ND	50.00	53.86	108	54.89	110	70-120	2	0-26	
1,2-Dichloroethane	ND	50.00	52.63	105	54.93	110	64-142	4	0-20	
1,1-Dichloroethene	ND	50.00	63.23	126	67.27	135	52-136	6	0-21	
Ethylbenzene	ND	50.00	55.03	110	56.27	113	77-125	2	0-24	
Toluene	ND	50.00	57.09	114	59.66	119	72-126	4	0-23	
Trichloroethene	ND	50.00	57.12	114	59.24	118	74-128	4	0-22	
Vinyl Chloride	ND	50.00	52.94	106	55.55	111	67-133	5	0-20	
p/m-Xylene	ND	100.0	107.1	107	110.7	111	63-129	3	0-25	
o-Xylene	ND	50.00	55.96	112	57.89	116	62-128	3	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	62.15	124	63.06	126	68-134	1	0-21	
Tert-Butyl Alcohol (TBA)	ND	250.0	293.5	117	302.9	121	65-143	3	0-30	
Diisopropyl Ether (DIPE)	ND	50.00	63.68	127	63.26	127	61-139	1	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	63.95	128	64.57	129	64-136	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	59.35	119	59.97	120	67-133	1	0-20	
Ethanol	ND	500.0	574.7	115	580.8	116	34-178	1	0-58	

Calscience Invironmenta Laboratories	l s, Inc.	Qua	lity Cont	rol - PDS					
Parsons Government Ser	vices, Inc.		Da	ate Received:			04/23/14		
100 West Walnut Street			W	ork Order:		14-04-1676			
Pasadena, CA 91124-0002			Preparation:				EPA 3005A Filt.		
			М	ethod:			EPA 6020		
Project: DFSP Norwalk -	Monthly						Page 1 of 1		
Quality Control Sample ID	Туре	Μ	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number		
14-04-1646-2	Sample	1	Aqueous	ICP/MS 03	04/23/14 00:00	04/24/14 22:26	140423S06		
14-04-1646-2	PDS	ļ	Aqueous	ICP/MS 03	04/23/14 00:00	04/24/14 22:16	140423S06		
Parameter		Sample Conc.	Spike Adde	ed PDS Conc	. PDS %R	<u>ec. %Rec. (</u>	CL Qualifiers		
Arsenic		ND	0.1000	0.1015	102	75-125			

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RPD: Relative Percent Difference. CL: Control Limits



Parsons Government Services, Inc.	Date Received:	04/23/14
100 West Walnut Street	Work Order:	14-04-1676
Pasadena, CA 91124-0002	Preparation:	EPA 3510C
	Method:	EPA 8015B (M)
Project: DFSP Norwalk - Monthly		Page 1 of 4

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Da	ate Analyzed	LCS/LCSD Ba	atch Number
099-15-282-193	LCS	Aqu	leous	GC 47	04/23/14	04	/24/14 12:44	140423B10	
099-15-282-193	LCSD	Aqu	leous	GC 47	04/23/14	04	/24/14 13:00	140423B10	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	<u>%Rec. C</u>	L RPD	RPD CL	Qualifiers
TPH as Diesel	4000	3508	88	3526	88	75-117	1	0-13	

RPD: Relative Percent Difference. CL: Control Limits

Project: DFSP Norwalk - Monthly		Page 2 of 4
	Method:	EPA 8015B (M)
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
100 West Walnut Street	Work Order:	14-04-1676

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed LC	S Batch Number
099-15-704-740	LCS	Aqueous	GC 1	04/24/14	04/24/14 11:47 14	0424L011
Parameter		Spike Added	Conc. Recove	red LCS %Re	ec. <u>%Rec. CL</u>	Qualifiers
TPH as Gasoline		2000	1922	96	78-120	

RPD: Relative Percent Difference. CL: Control Limits

04/23/14

04/23/14

14-04-1676

EPA 6020

EPA 3020A Total

Page 3 of 4

Pasadena, CA 91124-0002

Date Received:		
Work Order:		
Preparation:		
Method:		

Project: DFSP Norwalk - Monthly

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
096-06-003-4404	LCS	Aqueous	ICP/MS 03	04/23/14	04/24/14 22:07	140423L06	
Parameter		Spike Added	Conc. Recover	red LCS %Re	ec. <u>%Rec</u>	. CL Qualifiers	
Arsenic		0.1000	0.1035	103	80-120	C	

RPD: Relative Percent Difference. CL: Control Limits

alscience aboratories, Inc.

Parsons Government Services, Inc.	Date Received:	04/23/14
100 West Walnut Street	Work Order:	14-04-1676
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: DFSP Norwalk - Monthly		Page 4 of 4

Quality Control - LCS

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-001-13847	LCS	Aqueous	GC/MS PP	04/23/14	04/24/14 02:18	140423L034
Parameter	Spike Ac	ded <u>Conc.</u>	Recovered LCS	<u>%Rec. %Re</u>	ec. CL ME	CL Qualifiers
Benzene	50.00	52.37	105	80-1	20 73-	-127
Carbon Tetrachloride	50.00	54.90	110	67-1	39 55-	-151
Chlorobenzene	50.00	50.81	102	78-1	20 71-	-127
1,2-Dibromoethane	50.00	52.72	105	80-1	20 73-	-127
1,2-Dichlorobenzene	50.00	49.80	100	63-1	29 52-	-140
1,2-Dichloroethane	50.00	50.98	102	70-1	30 60-	-140
1,1-Dichloroethene	50.00	54.70	109	66-1	26 56-	-136
Ethylbenzene	50.00	52.28	105	80-1	23 73-	·130
Toluene	50.00	54.30	109	80-1	20 73-	-127
Trichloroethene	50.00	54.73	109	80-1	22 73-	-129
Vinyl Chloride	50.00	51.89	104	70-1	30 60-	-140
p/m-Xylene	100.0	102.3	102	75-1	23 67-	·131
o-Xylene	50.00	51.85	104	74-1	22 66-	-130
Methyl-t-Butyl Ether (MTBE)	50.00	55.67	111	69-1	29 59-	·139
Tert-Butyl Alcohol (TBA)	250.0	254.9	102	69-1	29 59-	-139
Diisopropyl Ether (DIPE)	50.00	57.24	114	68-1	28 58-	-138
Ethyl-t-Butyl Ether (ETBE)	50.00	56.70	113	63-1	35 51-	-147
Tert-Amyl-Methyl Ether (TAME)	50.00	54.07	108	67-1	33 56-	-144
Ethanol	500.0	498.2	100	42-1	68 21-	·189

Total number of LCS compounds: 19 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass

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Work Order: 14-04-1676

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 6020	EPA 3020A Total	598	ICP/MS 03	1
EPA 8015B (M)	EPA 3510C	682	GC 47	1
EPA 8015B (M)	EPA 5030C	902	GC 1	2
EPA 8260B	EPA 5030C	510	GC/MS PP	2

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841 Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

alscience nvironmental aboratories, Inc.

Work Order: 14-04-1676

ork Order:	14-04-1676	Page 1 of 1
Qualifiers	Definition	
*	See applicable analysis comment.	
<	Less than the indicated value.	
>	Greater than the indicated value.	
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data clarification.	was reported without further
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrous in control and, therefore, the sample data was reported without further clarification.	ogate spike compound was
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspec associated LCS recovery was in control.	ted matrix interference. The
4	The MS/MSD RPD was out of control due to suspected matrix interference.	
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix	interference.
6	Surrogate recovery below the acceptance limit.	
7	Surrogate recovery above the acceptance limit.	
В	Analyte was present in the associated method blank.	
BU	Sample analyzed after holding time expired.	
BV	Sample received after holding time expired.	
Е	Concentration exceeds the calibration range.	
ET	Sample was extracted past end of recommended max. holding time.	
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.	
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard bu were also present (or detected).	t heavier hydrocarbons
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard bu also present (or detected).	t lighter hydrocarbons were
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection lim estimated.	it. Reported value is
JA	Analyte positively identified but quantitation is an estimate.	
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).	
ND	Parameter not detected at the indicated reporting limit.	
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample ex concentration by a factor of four or greater.	ceeding the spike
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.	
Х	% Recovery and/or RPD out-of-range.	

Glossary of Terms and Qualifiers

Ζ Analyte presence was not confirmed by second column or GC/MS analysis.

> Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

> Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Calscience .										CHAI	VOF CUSTOR	DY RECORD	
Lahomental	GARDEN GROVE, CA 92	841-1432								DATE:	4-23-14		
	TEL: (714) 895-5494 . FA	X: (714) 894-7501				(,			PAGE:	1 OF	-	
LABORATORY CLIENT: Parsons, Inc.				CLIE	UT PROJE	CT NAM	E / NUMBER:				P.O. NO.:		
100 W. Walnut Stree	et				ECT CON		k - Montl	۲			CY757	05000	
спу: Paasadena. CA 911.	24			Same Same		V C & SIGNATL	LC.ind	y Zic	la c		LAB USE ON	LY	··· · · · ·
TEL:	FAX:	E-MAIL			Ale	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Queles	ahe				1-1676	
TURNAROUND TIME	HR 🗌 48HR 🔲 72 HF	۲. X] 5 DAYS		5 5 5			REC	NEST	ED AN	ALYSIS		
	TIONAL COSTS MAY APPLY) NG 🗍 ARCHIVE SAMPLI	ES UNTIL /	-		10	h1/5							-
SPECIAL INSTRUCTIONS				((M)88108 A93)	EPA 8260B)								
		SAMPLING	NO. G	seD'	3) s/								
LAB SAMPLE ID USE ONLY	LOCATION/ DESCRIPTION	DATE	MAT- RIX	ləsəid-HqT	VOCs + OXy						Con	nments	
t Effloent		4-23-14 1000	W 87	×	×								
			•										
			4 5	ŝ									
						<u> </u>							Pa
Relinquished by: (Signature)	A. A. Water		Received by:						-		Date:	Time: 11. 20 AU	<u>9e 24 o</u>
Relinquished by: (Signature)			Received by:	(Signatu	() (V	10	X	2			Date: /23/14	Time:	25
Relinquished by: (Signature)			Received by:	(Signatu	(e)						Date: (Jime:	
Revised: 08/28/08			Return	o Content									1
Calscience -		. 11 0	Page 25 of	25 7 77 17									
--	---	-----------------------	--	-------------------									
Environmental	WORK ORDER #	f: 14-U		μμe									
SAMPLE R	ECEIPT FOR		ooler (_	of _									
CLIENT: PARSONS		DATE:	04/23/	14									
TEMPERATURE: Thermometer ID: SC2 (Criteria: 0	0.0 °C – 6.0 °C, not frozen	except sed	iment/tissue)										
Temperature $2 \cdot 7 \circ C - 0.3 \circ C$ (CF) =	2.4°C 2	Blank	□ Sample										
Sample(s) outside temperature criteria (PM/APM co	ontacted by:)		·										
Sample(s) outside temperature criteria but received	on ice/chilled on same da	v of samplin	a										
\square Received at ambient temperature, placed on it	ce for transport by Cou	rior	.9.										
	te for transport by Cot			804									
			Checked by:										
CUSTODY SEALS INTACT:													
🗆 Cooler 🛛 🛄 🗆 No (Not Inta	ct) Ø Not Present	D N/A	Checked by:	804									
□ Sample □ □ No (Not Inta	ct) .⊒∕Not Present	ar seas e su se angle	Checked by:	854									
SAMPLE CONDITION:	Y	'es	No	N/A									
Chain-Of-Custody (COC) document(s) received with	samples												
COC document(s) received complete		5											
Collection date/time, matrix, and/or # of containers logged	in based on sample labels.												
□ No analysis requested. □ Not relinquished. □ No d	ate/time relinquished.												
Sampler's name indicated on COC	· · · · · · · · · · · · · · · · · · ·	Der te											
Sample container label(s) consistent with COC	(D outralit	X										
Sample container(s) intact and good condition	•••••••••••••••••••••••••••••••	8 "											
Proper containers and sufficient volume for analyses	; requested	Ø											
Analyses received within holding time		2											
Aqueous samples received within 15-minute hold	ing time												
□ pH □ Residual Chlorine □ Dissolved Sulfides □	Dissolved Oxygen			6									
Proper preservation noted on COC or sample contai	ner	Ð											
Unpreserved vials received for Volatiles analysis													
Volatile analysis container(s) free of headspace		6											
Tedlar bag(s) free of condensation				×									
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Slee	ve () □EnCores [®]	[®] □TerraC	ores [®] □										
Aqueous: □VOA ∠VOAh □VOAna₂ □125AGB □	125AGBh □125AGBp [⊐1AGB 🗆	1AGB na₂ □ ⁻	1AGB s									
□500AGB 2500AGJ □500AGJs □250AGB □	250CGB □250CGB s		1 1PBna □5	00PB									
□250PB 2250PBnu□125PB □125PBznna □10	0PJ □100PJ na₂ □												
Air: □Tedlar [®] □Canister Other: □ Trip B Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃ na: NaOH p: H ₃ PO ₄ s: H ₂ SO	Iank Lot#: Ziploc/Resealable Bag E: Envi o₄ u: Ultra-pure znna: ZnAc₂+NaO	Labeled/C elope Re	hecked by: _ eviewed by: _ Scanned by: _	854 739 739									



WORK ORDER NUMBER: 14-04-2246

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Parsons Government Services, Inc. Client Project Name: DFSP - Norwalk Attention: Mary Lucas 100 West Walnut Street Pasadena, CA 91124-0002

Ranjit F. J. Clarke

Approved for release on 05/01/2014 by: Ranjit Clarke Project Manager

ResultLink >

Email your PM >



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



7440 Lincoln Way, Garden Grove, CA 92841-1432 * TEL: (714) 895-5494 * FAX: (714) 894-7501 * www.calscience.com

NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830



Client Project Name: DFSP - Norwalk Work Order Number: 14-04-2246

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4	Quality Control Sample Data. 4.1 Sample Duplicate. 4.2 LCS/LCSD.	6 6 7
5	Sample Analysis Summary	8
6	Glossary of Terms and Qualifiers.	9
7	Chain of Custody/Sample Receipt Form	10

Contents

Calscience nvironmental Laboratories, Inc.

Work Order: 14-04-2246

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/30/14. They were assigned to Work Order 14-04-2246.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Ć	alscience nvironmental aboratories, Inc.	Sample Summary	
Client:	Parsons Government Services, Inc.	Work Order:	14-04-2246
	100 West Walnut Street	Project Name:	DFSP - Norwalk
	Pasadena, CA 91124-0002	PO Number:	747577-05000
		Date/Time Received:	04/30/14 16:45
		Number of Containers:	2
Attn:	Mary Lucas		
Sample l	dentification Lab Number	Collection Date and Time	Number of Matrix Containers

04/30/14 14:45

2

14-04-2246-1

Effluent

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Aqueous

Analytical Report

Parsons Government Services, Inc.			Date Receiv	ved:			04/30/14
100 West Walnut Street			Work Order	:			14-04-2246
Pasadena, CA 91124-0002			Preparation	:			N/A
			Method:				SM 2540 D
			Units:				mg/L
Project: DFSP - Norwalk						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-04-2246-1-AB	04/30/14 14:45	Aqueous	N/A	05/01/14	05/01/14 13:30	E0501TSSB1
Parameter	-	Result	RL		DF	Qua	lifiers
Solids, Total Suspended		ND	1.0		1.00		
Method Blank	099-09-010-6670	N/A	Aqueous	N/A	05/01/14	05/01/14 13:30	E0501TSSB1
Parameter		Result	RL		DF	Qua	lifiers
Solids, Total Suspended		ND	1.0		1.00		

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Quality Control - Sample Duplicate

Parsons Government Services, Inc. Date Received: 04/30/14 100 West Walnut Street Work Order: 14-04-2246 Pasadena, CA 91124-0002 Preparation: N/A Project: DFSP - Norwalk SM 2540 D Quality Control Sample ID Type Matrix Instrument Date Prepared Date Analyzed Duplicate Batch Number	14-04-2093-2	Sample	Aqueous	N/A	05/01/14 00:00 05/0	1/14 13:30 E0501TSSD1
Parsons Government Services, Inc.Date Received:04/30/14100 West Walnut StreetWork Order:14-04-2246Pasadena, CA 91124-0002Preparation:N/AMethod:SM 2540 DProject: DFSP - NorwalkPage 1 of 1	Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared Date	Analyzed Duplicate Batch Number
Parsons Government Services, Inc.Date Received:04/30/14100 West Walnut StreetWork Order:14-04-2246Pasadena, CA 91124-0002Preparation:N/AMethod:SM 2540 D	Project: DFSP - Norwalk					Page 1 of 1
Parsons Government Services, Inc.Date Received:04/30/14100 West Walnut StreetWork Order:14-04-2246Pasadena, CA 91124-0002Preparation:N/A			I	Method:		SM 2540 D
Parsons Government Services, Inc.Date Received:04/30/14100 West Walnut StreetWork Order:14-04-2246	Pasadena, CA 91124-000	02	I	Preparation:		N/A
Parsons Government Services, Inc. Date Received: 04/30/14	100 West Walnut Street		,	Work Order:		14-04-2246
	Parsons Government Ser	vices, Inc.	I	Date Receive	d:	04/30/14

14 04 2000 2	oumpie	Ацисоцо	NVA	00/01/14 0	0.00 00/01/14 10.00 1		
14-04-2093-2	Sample Duplicate	Aqueous	N/A	05/01/14 0	0:00 05/01/14 13:30 E	E0501TSSD1	
Parameter		Sample Conc.	DUP Conc.	RPD	RPD CL	<u>Qualifiers</u>	
Solids, Total Suspended		163.0	167.0	2	0-20		

Quality Control - LCS/LCSD

Parsons Government Services, Inc.
100 West Walnut Street
Pasadena, CA 91124-0002

Date Received:	04/30/14
Work Order:	14-04-2246
Preparation:	N/A
Method:	SM 2540 D
	Page 1 of 1

Project: DFSP - Norwalk

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Prep	bared Date	e Analyzed	LCS/LCSD Ba	tch Number
099-09-010-6670	LCS	Aqu	leous	N/A	05/01/14	05/0	01/14 13:30	E0501TSSB1	
099-09-010-6670	LCSD	Αqι	leous	N/A	05/01/14	05/0	01/14 13:30	E0501TSSB1	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Solids, Total Suspended	100.0	92.00	92	91.00	91	80-120	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Work Order: 14-04-2246

Method SM 2540 D **Extraction** N/A

Chemist ID N/A

722

Instrument

Analytical Location 1

Page 1 of 1



Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

alscience nvironmental aboratories, Inc.

Work Order: 14-04-2246

ork Order:	: 14-04-2246	Page 1 of 1
Qualifiers	Definition	
*	See applicable analysis comment.	
<	Less than the indicated value.	
>	Greater than the indicated value.	
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data w clarification.	vas reported without further
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrog in control and, therefore, the sample data was reported without further clarification.	ate spike compound was
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspecte associated LCS recovery was in control.	d matrix interference. The
4	The MS/MSD RPD was out of control due to suspected matrix interference.	
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix in	nterference.
6	Surrogate recovery below the acceptance limit.	
7	Surrogate recovery above the acceptance limit.	
В	Analyte was present in the associated method blank.	
BU	Sample analyzed after holding time expired.	
BV	Sample received after holding time expired.	
Е	Concentration exceeds the calibration range.	
ET	Sample was extracted past end of recommended max. holding time.	
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.	
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but were also present (or detected).	heavier hydrocarbons
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but also present (or detected).	lighter hydrocarbons were
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit estimated.	Reported value is
JA	Analyte positively identified but quantitation is an estimate.	
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).	
ND	Parameter not detected at the indicated reporting limit.	
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exce concentration by a factor of four or greater.	eeding the spike
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.	
Х	% Recovery and/or RPD out-of-range.	

Glossary of Terms and Qualifiers

Ζ Analyte presence was not confirmed by second column or GC/MS analysis.

> Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

> Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Please note that pages 1 and 2 of 2 of our 1/Cs are printed on the reverse side of the Green and Yellow copies respectively.

CLIENT: <u>Parson</u>		EIPT FOR	M C DATE: _	ooler 04	<u>}_</u> of _ /_ ≶ / 14
TEMPERATURE: Thermomet Temperature ° Sample(s) outside temperature Sample(s) outside temperature Received at ambient temperature Ambient Temperature: Air	er ID: SC2 (Criteria: 0.0 °C C - 0.3 °C (CF) = ure criteria (PM/APM contac ure criteria but received on ic erature, placed on ice fo □ Filter	E – 6.0 °C, not frozen 	except sed Blank y of sampli irier.	diment/tiss	sue) ole by: <u>820</u>
CUSTODY SEALS INTACT:					
□ Cooler □ □ Sample □	_ □ No (Not Intact) _ □ No (Not Intact)	☑ Not Present ☑ Not Present	□ N/A	Checked Checked	by: <u>820</u> by: <u>739</u>
Chain-Of-Custody (COC) docur COC document(s) received con Collection date/time, matrix, and No analysis requested.	nent(s) received with sam nplete /or # of containers logged in ba t relinquished. □ No date/tir	nples sed on sample labels. me relinquished.			
Sampler's name indicated on C Sample container label(s) consi Sample container(s) intact and	OC istent with COC good condition	· · · · · · · · · · · · · · · · · · ·	2 2		
Sampler's name indicated on C Sample container label(s) consi Sample container(s) intact and Proper containers and sufficient Analyses received within holdin	OC istent with COC good condition <u>t volume f</u> or analyses req g time	uested			
Sampler's name indicated on C Sample container label(s) cons Sample container(s) intact and Proper containers and <u>sufficien</u> Analyses received within holdin Aqueous samples received v DPH CRESIDIAL Chlorine C Proper preservation noted on C Unpreserved vials received for	OC stent with COC good condition <u>t volume f</u> or analyses req g time within 15-minute holding t Dissolved Sulfides	uested ime Ived Oxygen			
Sampler's name indicated on C Sample container label(s) cons Sample container(s) intact and Proper containers and <u>sufficien</u> Analyses received within holdin Aqueous samples received v pH Residual Chlorine Proper preservation noted on C Unpreserved vials received for Volatile analysis container(s) free Tedlar bag(s) free of condensat	OC stent with COC good condition <u>t volume f</u> or analyses req g time within 15-minute holding t Dissolved Sulfides	uested ime Ived Oxygen			

Page	12	of	12

Calscience Environmental Laboratories, Inc. SAMPLE AN	work order #: 14-04-22296
SAMPLES - CONTAINERS & LABELS:	Comments:
 SAMPLES - CONTAINERS & LABELS: Sample(s) NOT RECEIVED but listed on COC Sample(s) received but NOT LISTED on COC Holding time expired – list sample ID(s) and test Insufficient quantities for analysis – list test Improper container(s) used – list test Improper preservative used – list test Sample labels illegible – note test/container type Sample label(s) do not match COC – Note in com Sample ID Date and/or Time Collected Project Information # of Container(s) Analysis Sample container(s) compromised – Note in com Water present in sample container Broken Sample container(s) compromised – Note in com Elat Very low in volume Leaking (Not transferred - duplicate bag su Leaking (transferred into Client's Tedlar[®] E 	Comments:
□ Other:	

HEADSPACE – Containers with Bubble > 6mm or $\frac{1}{4}$ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis
				,					
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ropofor							 ,	nitial / Date:	735 NA BO11

SOP T100_090 (08/31/11)

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WORK ORDER NUMBER: 14-05-0177

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Parsons Government Services, Inc. Client Project Name: DFSP - Norwalk Attention: Mary Lucas 100 West Walnut Street Pasadena, CA 91124-0002

Ranjit F. J. Clarke

Approved for release on 05/05/2014 by: Ranjit Clarke Project Manager

ResultLink)

Email your PM >



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



7440 Lincoln Way, Garden Grove, CA 92841-1432 * TEL: (714) 895-5494 * FAX: (714) 894-7501 * www.calscience.com

NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830



Client Project Name: DFSP - Norwalk Work Order Number: 14-05-0177

1	Work Order Narrative	3
2	Sample Summary.	4
3	Client Sample Data	5 5
4	Quality Control Sample Data.4.1 MS/MSD.4.2 PDS/PDSD.4.3 LCS/LCSD.	6 6 7 8
5	Sample Analysis Summary	9
6	Glossary of Terms and Qualifiers.	10
7	Chain of Custody/Sample Receipt Form	11

Contents



Work Order: 14-05-0177

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/02/14. They were assigned to Work Order 14-05-0177.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Ĉ	alscience nvironmental aboratories, Inc.	Sample Summary	ŭ
Client:	Parsons Government Services, Inc.	Work Order:	14-05-0177
	100 West Walnut Street	Project Name:	DFSP - Norwalk
	Pasadena, CA 91124-0002	PO Number:	
		Date/Time Received:	05/02/14 17:58
		Number of Containers:	1
Attn:	Mary Lucas		
Sample lo	dentification Lab Number	Collection Date and Time	Number of Matrix Containers

05/02/14 13:15

14-05-0177-1

Effluent

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Aqueous

1

Parsons Government Services, Inc.			Date Receiv	ved:			05/02/14
100 West Walnut Street			Work Order	:			14-05-0177
Pasadena, CA 91124-0002			Preparation	1:	EPA 3020A Total		
			Method:				EPA 6020
			Units:				mg/L
Project: DFSP - Norwalk						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-05-0177-1-A	05/02/14 13:15	Aqueous	ICP/MS 04	05/02/14	05/05/14 12:51	140502L03
Parameter		<u>Result</u>	RL		DF	Qua	lifiers
Arsenic		0.00383	0.0	0100	1.00		

Method Blank	096-06-003-4416	N/A	Aqueous	ICP/MS 04	05/02/14	05/05/14 12:44	140502L03
Parameter		<u>Result</u>	RI	=	<u>DF</u>	Quali	fiers
Arsenic		ND	0.	00100	1.00		

3,4



Arsenic

0.01001

0.1000

0.08193

Quality Control - Spike/Spike Duplicate

Parsons Government Service	es, Inc.			Date	Received:					05/02/14
100 West Walnut Street				Work	c Order:				14	4-05-0177
Pasadena, CA 91124-0002				Preparation:					EPA 3	005A Filt.
				Meth	iod:				I	EPA 6020
Project: DFSP - Norwalk									Page 1	of 1
Quality Control Sample ID	Туре		Matrix	In	strument	Date Prepared	Date Anal	yzed	MS/MSD Bat	tch Number
14-05-0001-5	Sample		Aqueous	IC	P/MS 04	05/02/14	05/05/14 1	3:01	140502S03	
14-05-0001-5	Matrix Spike		Aqueous	IC	P/MS 04	05/02/14	05/05/14 1	3:22	140502S03	
14-05-0001-5	Matrix Spike	Duplicate	Aqueous	IC	P/MS 04	05/02/14	05/05/14 1	3:26	140502S03	
Parameter	Sample Conc.	<u>Spike</u> Added	MS Conc.	MS %Rec.	MSD Conc	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers

72

0.09273

83

73-127

12

0-11

RPD: Relative Percent Difference. CL: Control Limits

alscience nvironmenta aboratories	l s, Inc.	Qua	lity Cont	rol - PDS			
Parsons Government Se	rvices, Inc.		Da	ate Received:			05/02/14
100 West Walnut Street			W	ork Order:			14-05-0177
Pasadena, CA 91124-00	02		Pi	reparation:			EPA 3005A Filt.
			М	ethod:			EPA 6020
Project: DFSP - Norwalk							Page 1 of 1
Quality Control Sample ID	Туре	Ν	<i>l</i> atrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-05-0001-5	Sample	4	Aqueous	ICP/MS 04	05/02/14 00:00	05/05/14 13:01	140502S03
14-05-0001-5	PDS	A	Aqueous	ICP/MS 04	05/02/14 00:00	05/05/14 13:19	140502S03
Parameter		Sample Conc.	Spike Adde	ed PDS Conc	PDS %Re	<u>c. %Rec. (</u>	<u>CL</u> <u>Qualifiers</u>
Arsenic		0.01001	0.1000	0.09798	88	75-125	

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alscience nvironmental aboratories, Inc.	Quality Control - LCS				
Parsons Government Services, Inc.	Date Received:	05/02/14			
100 West Walnut Street	Work Order:	14-05-0177			
Pasadena, CA 91124-0002	Preparation:	EPA 3020A Total			
	Method:	EPA 6020			
Project: DFSP - Norwalk		Page 1 of 1			

Project: DFSP - Norwalk						Page 1 of 1
Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
096-06-003-4416	LCS	Aqueous	ICP/MS 04	05/02/14	05/05/14 12:48	140502L03
Parameter		Spike Added	Conc. Recov	vered LCS %Re	ec. <u>%Rec</u>	. CL Qualifiers

0.09928

99

80-120

0.1000

-

Page 8 of 12

RPD: Relative Percent Difference. CL: Control Limits



Work Order: 14-05-0177

Method EPA 6020 Extraction EPA 3020A Total Chemist IDIn598IC

Instrument ICP/MS 04 Analytical Location

Page 1 of 1

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

alscience nvironmental aboratories, Inc.

Work Order: 14-05-0177

Page 1 of 1 Qualifiers Definition * See applicable analysis comment. Less than the indicated value. < Greater than the indicated value. > Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further 1 clarification. 2 Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. 3 Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control. Δ The MS/MSD RPD was out of control due to suspected matrix interference. The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. 5 6 Surrogate recovery below the acceptance limit. 7 Surrogate recovery above the acceptance limit. В Analyte was present in the associated method blank. ΒU Sample analyzed after holding time expired. ΒV Sample received after holding time expired.

Glossary of Terms and Qualifiers

- Е Concentration exceeds the calibration range.
- FT Sample was extracted past end of recommended max. holding time.
- HD The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
- HDH The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
- HDL The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
- Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is J estimated.
- JA Analyte positively identified but quantitation is an estimate.
- LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). ME
- ND Parameter not detected at the indicated reporting limit.
- Q Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
- SG The sample extract was subjected to Silica Gel treatment prior to analysis.
- Х % Recovery and/or RPD out-of-range.
- Ζ Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

Calscience				2 of 12
Laboratories, Inc.	WORK ORDER	(#: 14-)	U3-L(2) Ľ	
SAMPLE	RECEIPT FO	RM c	ooler <u>1</u>	of
CLIENT: PARSON'S		DATE:	05/2/	<u> </u>
TEMPERATURE: Thermometer ID: SC2 (Crite Temperature 2 ? °C - 0.3 °C (CF Sample(s) outside temperature criteria (PM/A	PM contacted by:)	en except se Blank	ediment/tissue	2)
Sample(s) outside temperature criteria but rec	Lon ico for transport by C	ourior	ing.	
Ambient Temperature: Air Filter	on ice for transport by C	ouner.	Checked by	1: <u>678</u>
CUSTODY SEALS INTACT: Cooler No (No Sample No (No	t Intact) ☐ Not Present t Intact)	t ⊡ N/A t	Checked by Checked by	: <u>678</u> : <u>87</u>
SAMPLE CONDITION:		Yes	No	N/A
Chain-Of-Custody (COC) document(s) received	d with samples	Ø		
COC document(s) received complete	logged in based on sample labels	, 🗹 s.		
Sampler's name indicated on COC		А		
Sample container label(s) consistent with COC	·····	/ <u>_</u>		
Sample container(s) intact and good condition	·····			
Proper containers and sufficient volume for an	alvses requested			
Analyses received within holding time		Ø		
Aqueous samples received within 15-minut	e holdina time	/		
Det Residual Chlorine Dissolved Sulfide:	s 🗆 Dissolved Oxvaen	🗆		Ø
Proper preservation noted on COC or sample	container	🗹		
Unpreserved vials received for Volatiles analy	SIS	-	F 7	and the second
volatile analysis container(s) free of neadspac	E			
CONTAINER TYPE:				لعر
Solid: 40zCGJ 80zCGJ 160zCGJ	∃Sleeve () □EnCor	res [∞] ⊡Terra	aCores [™] □_	
	GB □125AGB h □125AGB	p □1AGB	□1AGB na ₂ □]1AGB s
□500AGB □500AGJ □500AGJs □250AG	B □250CGB □250CGE	B s □1PB	□1PBna □	500PB
□250PB □250PB n u□125PB □125PB znna	□100PJ □100PJna ₂ □_		□	
Air: DTedlar [®] Canister Other: C Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bo Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃ na: NaOH p: H ₃ PO	Trip Blank Lot#: httle Z: Ziploc/Resealable Bag E: E ₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+I	Labeled Envelope NaOH f: Filtered	/Checked by: Reviewed by: Scanned by:	82 842 802

SOP T100_090 (07/31/13)

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WORK ORDER NUMBER: 14-05-1338

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Parsons Government Services, Inc. Client Project Name: DFSP Norwalk - Quarterly Attention: Mary Lucas 100 West Walnut Street Pasadena, CA 91124-0002

Ranjit F. J. Clarke

Approved for release on 05/28/2014 by: Ranjit Clarke Project Manager

ResultLink ▶

Email your PM >



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830



Client Project Name: DFSP Norwalk - Quarterly Work Order Number: 14-05-1338

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Work Order: 14-05-1338

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/16/14. They were assigned to Work Order 14-05-1338.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Ĉ	alscience nvironmental aboratories, Inc.	Sample Summary	
Client:	Parsons Government Services, Inc.	Work Order:	14-05-1338
	100 West Walnut Street	Project Name:	DFSP Norwalk - Quarterly
	Pasadena, CA 91124-0002	PO Number:	
		Date/Time Received:	05/16/14 18:00
		Number of Containers:	7
Attn:	Mary Lucas		
Sample le	dentification Lab Number	Collection Date and Time	Number of Matrix

Effluent

14-05-1338-1

05/16/14 13:05

Containers 7

Aqueous



Parsons Government Services, Inc.		Date Recei	ved:	05/16/14			
100 West Walnut Street		Work Order	r:	14-05-1338			
Pasadena, CA 91124-0002			Preparation	ו:		EP	A 3020A Total
			Method:				EPA 6020
			Units:				mg/L
Project: DFSP Norwalk - Quarterly						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-05-1338-1-B	05/16/14 13:05	Aqueous	ICP/MS 04	05/19/14	05/20/14 17:34	140519L06
Parameter		Result	RL	:	DF	Qua	lifiers
Arsenic		ND	0.0	00100	1.00		
Copper		0.00148	0.0	00100	1.00		
Method Blank	096-06-003-4429	N/A	Aqueous	ICP/MS 03	05/19/14	05/19/14 21:41	140519L06

				21:41
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qualifiers</u>
Arsenic	ND	0.00100	1.00	
Copper	ND	0.00100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Date Received:

Work Order:

Parsons Government Services, Inc.

nvironmental

aboratories, Inc.

100 West Walnut Street

alscience

Pasadena, CA 91124-0002

Project: DFSP Norwalk - Quarterly

Client Sample Number			Lab S	Sample Number		Date/Tin	ne Collected	Matrix
Effluent			14-0	5-1338-1		05/16/14	13:05	Aqueous
Parameter	<u>Results</u>	<u>RL</u>	DF	<u>Qualifiers</u>	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method
Turbidity	0.10	0.050	1.00		NTU	N/A	05/16/14	SM 2130 B
Solids, Total Suspended	2.4	1.0	1.00		mg/L	05/20/14	05/20/14	SM 2540 D
Solids, Settleable	ND	0.10	1.00		mL/L/hr	N/A	05/16/14	SM 2540 F
Sulfide, Total	ND	0.050	1.00		mg/L	05/21/14	05/21/14	SM 4500 S2 - D
Chlorine, Total Residual	ND	0.10	1.00	BV,BU	mg/L	N/A	05/16/14	SM 4500-CI F
Biochemical Oxygen Demand	1.7	1.0	1.00		mg/L	05/17/14	05/22/14	SM 5210 B
Oil and Grease	ND	1.0	1.00		mg/L	05/28/14	05/28/14	SM 5520 B
MBAS	ND	0.10	1.00		mg/L	05/16/14	05/16/14	SM 5540C
Method Blank						N/A		Aqueous
Parameter	<u>Results</u>	<u>RL</u>	DF	<u>Qualifiers</u>	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method
Solids, Total Suspended	ND	1.0	1.00		mg/L	05/20/14	05/20/14	SM 2540 D
Sulfide, Total	ND	0.050	1.00		mg/L	05/21/14	05/21/14	SM 4500 S2 - D
Chlorine, Total Residual	ND	0.10	1.00		mg/L	N/A	05/16/14	SM 4500-CI F
Biochemical Oxygen Demand	ND	1.0	1.00		mg/L	05/17/14	05/22/14	SM 5210 B
Oil and Grease	ND	1.0	1.00		mg/L	05/28/14	05/28/14	SM 5520 B
MBAS	ND	0.10	1.00		mg/L	05/16/14	05/16/14	SM 5540C

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05/16/14

14-05-1338

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Parameter

MBAS

<u>Sample</u> <u>Conc.</u>

ND

<u>Spike</u> <u>Added</u>

1.000

<u>MS</u> Conc.

0.9300

Quality Control - Spike/Spike Duplicate

Parsons Government Service	s, Inc.		Date Received			05/16/14
100 West Walnut Street		Work Order:			14-05-1338	
Pasadena, CA 91124-0002 Prepa						N/A
			Method:			SM 5540C
Project: DFSP Norwalk - Qua	rterly					Page 1 of 2
Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1327-1	Sample	Aqueous	UV 9	05/16/14	05/16/14 19:32	E0516SURS1
14-05-1327-1	Matrix Spike	Aqueous	UV 9	05/16/14	05/16/14 19:32	E0516SURS1
14-05-1327-1	Matrix Spike Duplicate	Aqueous	UV 9	05/16/14	05/16/14 19:32	E0516SURS1

<u>MS</u> <u>%Rec.</u>

93

<u>MSD</u> Conc.

0.9500

<u>MSD</u> <u>%Rec.</u>

95

%Rec. CL RPD RPD CL

2

70-130

0-25

Qualifiers

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1338
Pasadena, CA 91124-0002	Preparation:	EPA 3005A Filt.
	Method:	EPA 6020
Project: DFSP Norwalk - Quarterly		Page 2 of 2

Quality Control Sample ID	Туре		Matrix	Inst	rument	Date Prepared	Date Anal	yzed	MS/MSD Bat	ch Number
14-05-1386-1	Sample		Aqueous	ICP	/MS 03	05/19/14	05/19/14	20:59	140519S06	
14-05-1386-1	Matrix Spike		Aqueous	ICP	/MS 03	05/19/14	05/19/14	20:50	140519S06	
14-05-1386-1	Matrix Spike D	ouplicate	Aqueous	ICP	/MS 03	05/19/14	05/19/14	20:52	140519S06	
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> %Rec.	<u>MSD</u> Conc.	<u>MSD</u> %Rec.	%Rec. CL	<u>RPD</u>	RPD CL	Qualifiers
Arsenic	ND	0.05000	0.04658	93	0.04597	92	73-127	1	0-11	
Copper	ND	0.05000	0.05146	103	0.05113	102	72-108	1	0-10	

Calscience nvironmental Laboratories, l	nc.	Quality Co	ontrol - PDS			
Parsons Government Servic	es, Inc.		Date Received	d:	05/16/1	4
100 West Walnut Street			Work Order:		14-05-133	3
Pasadena, CA 91124-0002			Preparation:		EPA 3005A Fil	ί.
			Method:		EPA 602	С
Project: DFSP Norwalk - Qua	arterly				Page 1 of 1	
Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed PDS/PDSD Batch	

ICP/MS 03

ICP/MS 03

PDS Conc.

0.09102

0.09956

Aqueous

Aqueous

0.1000

0.1000

Spike Added

Sample Conc.

ND

ND

PDS

Sample

14-05-1386-1

14-05-1386-1

Parameter Arsenic

Copper

Page 9 of 23

Number

<u>Qualifiers</u>

05/19/14 00:00 05/19/14 20:59 140519S06

05/19/14 00:00 05/19/14 20:54 140519S06

<u>%Rec. CL</u>

75-125

75-125

PDS %Rec.

91

100



Quality Control - Sample Duplicate

Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1338
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	SM 2130 B
Project: DFSP Norwalk - Quarterly		Page 1 of 5

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
Effluent	Sample	Aqueous	TUR 3	N/A	05/16/14 18:52	E0516TURD1
Effluent	Sample Duplicate	Aqueous	TUR 3	N/A	05/16/14 18:52	E0516TURD1
Parameter		Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Turbidity		0.1000	0.1100	10	0-25	

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Sample Duplicate

Data Dagaiyadı	05/16/14	
Date Received:	05/16/14	
Work Order:	14-05-1338	
Preparation:	N/A	
Method:	SM 2540 D	
Project: DFSP Norwalk - Quarterly		
	Date Received: Work Order: Preparation: Method:	

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-05-1395-2	Sample	Aqueous	N/A	05/20/14 00:00	05/20/14 14:00	E0520TSSD1
14-05-1395-2	Sample Duplicate	Aqueous	N/A	05/20/14 00:00	05/20/14 14:00	E0520TSSD1
Parameter		Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total Suspended		418.0	394.0	6	0-20	

RPD: Relative Percent Difference. CL: Control Limits


Quality Control - Sample Duplicate

Parsons Government Services, Inc.		Date Received	d:		05/16/14	
100 West Walnut Street		Work Order:			14-05-1338	
Pasadena, CA 91124-0002		Preparation:		N/		
		Method:			SM 4500 S2 - D	
Project: DFSP Norwalk - Quarterly					Page 3 of 5	
Quality Control Sample ID Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number	

	туре	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-05-1344-6	Sample	Aqueous	N/A	05/21/14 00:00	05/21/14 19:11	E0521SD2
14-05-1344-6	Sample Duplicate	Aqueous	N/A	05/21/14 00:00	05/21/14 19:11	E0521SD2
Parameter		Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Sulfide, Total		ND	ND	N/A	0-25	



Quality Control - Sample Duplicate

Parsons Government Services, Inc.		Date Received:	:		05/16/14
100 West Walnut Street		Work Order:			14-05-1338
Pasadena, CA 91124-0002		Preparation:			
		Method:			SM 4500-CI F
Project: DFSP Norwalk - Quarterly					Page 4 of 5
Quality Control Sample ID Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
Effluent	Sample	Aqueous	BUR16	N/A	05/16/14 18:56	E0516CLFD2
Effluent	Sample Duplicate	Aqueous	BUR16	N/A	05/16/14 18:56	E0516CLFD2
Parameter		Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Chlorine, Total Residual		ND	ND	N/A	0-25	



Quality Control - Sample Duplicate

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
Project: DFSP Norwalk - Quar	rterly					Page 5 of 5
			Method:			SM 5210 B
Pasadena, CA 91124-0002			Preparation:			N/A
100 West Walnut Street			Work Order:			14-05-1338
Parsons Government Service	s, Inc.		Date Received	:		05/16/14

14-00-1327-1	Sample	Aqueous	BODI	05/17/14 00	0.00 05/22/14 15.40 E	051760001	
14-05-1327-1	Sample Duplicate	Aqueous	BOD 1	05/17/14 00	0:00 05/22/14 13:40 E	0517BODD1	
Parameter		Sample Conc.	DUP Conc.	RPD	RPD CL	<u>Qualifiers</u>	
Biochemical Oxygen Demand		ND	ND	N/A	0-25		



Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1338
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	SM 2540 D
Project: DFSP Norwalk - Quarterly		Page 1 of 5

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Date	e Analyzed	LCS/LCSD Ba	tch Number
099-09-010-6689	LCS	Aqu	ieous	N/A	05/20/14	05/2	20/14 14:00	E0520TSSL1	
099-09-010-6689	LCSD	Αqι	ieous	N/A	05/20/14	05/2	20/14 14:00	E0520TSSL1	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	LCSD %Rec.	<u>%Rec. CL</u>	RPD	RPD CL	<u>Qualifiers</u>
Solids, Total Suspended	100.0	98.00	98	101.0	101	80-120	3	0-20	



Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1338
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	SM 4500 S2 - D
Project: DFSP Norwalk - Quarterly		Page 2 of 5

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Date	e Analyzed	LCS/LCSD Ba	atch Number
099-15-853-294	LCS	Aqu	ieous	N/A	05/21/14	05/2	21/14 19:11	E0521SL2	
099-15-853-294	LCSD	Αqι	ieous	N/A	05/21/14	05/2	21/14 19:11	E0521SL2	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Sulfide, Total	1.000	0.8500	85	0.8500	85	80-120	0	0-20	



Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1338
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	SM 5520 B
Project: DFSP Norwalk - Quarterly		Page 3 of 5

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Dat	te Analyzed	LCS/LCSD Ba	tch Number
099-05-081-2967	LCS	Aqu	ieous	N/A	05/28/14	05/	/28/14 15:00	E0528OGL1	
099-05-081-2967	LCSD	Αqι	ieous	N/A	05/28/14	05/	/28/14 15:00	E0528OGL1	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	LCSD %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Oil and Grease	40.00	38.10	95	39.50	99	80-120	4	0-20	

<i>Calscience</i> <i>nvironmental</i> <i>Laboratories, Inc.</i>	Quality Control - LCS	
Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1338
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	SM 5540C
Project: DFSP Norwalk - Quarterly		Page 4 of 5

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-05-093-2681	LCS	Aqueous	UV 9	05/16/14	05/16/14 19:32	E0516SURL1
Parameter		Spike Added	Conc. Recove	red LCS %Re	<u>ec. %Rec</u>	. CL Qualifiers
MBAS		1.000	0.9400	94	80-120	0



Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1338
Pasadena, CA 91124-0002	Preparation:	EPA 3020A Total
	Method:	EPA 6020
Project: DFSP Norwalk - Quarterly		Page 5 of 5

Quality Control Sample ID	Туре	Mati	rix	Instrument	Date Pre	pared Date	e Analyzed	LCS/LCSD Ba	atch Number
096-06-003-4429	LCS	Aqu	eous	ICP/MS 03	05/19/14	05/1	19/14 21:51	140519L06	
096-06-003-4429	LCSD	Aqu	eous	ICP/MS 03	05/19/14	05/2	20/14 16:31	140519L06	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	LCSD %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Arsenic	0.1000	0.1028	103	0.09601	96	80-120	7	0-20	
Copper	0.1000	0.1026	103	0.09945	99	80-120	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Work Order: 14-05-1338

Work Order: 14-05-1338				Page 1 of 1
Method	Extraction	Chemist ID	<u>Instrument</u>	Analytical Location
EPA 6020	EPA 3020A Total	598	ICP/MS 04	1
SM 2130 B	N/A	688	TUR 3	1
SM 2540 D	N/A	722	N/A	1
SM 2540 F	N/A	691	N/A	1
SM 4500 S2 - D	N/A	880	N/A	1
SM 4500-CI F	N/A	688	BUR16	1
SM 5210 B	N/A	691	BOD 1	1
SM 5520 B	N/A	691	N/A	1
SM 5540C	N/A	735	UV 9	1

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

alscience nvironmental aboratories, Inc.

Work Order: 14-05-1338

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ork Order:	14-05-1338	Page 1 of 1
<u>Qualifiers</u>	Definition	
*	See applicable analysis comment.	
<	Less than the indicated value.	
>	Greater than the indicated value.	
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample da clarification.	ata was reported without further
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank su in control and, therefore, the sample data was reported without further clarification.	urrogate spike compound was
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to susp associated LCS recovery was in control.	ected matrix interference. The
4	The MS/MSD RPD was out of control due to suspected matrix interference.	
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected mat	trix interference.
6	Surrogate recovery below the acceptance limit.	
7	Surrogate recovery above the acceptance limit.	
В	Analyte was present in the associated method blank.	
BU	Sample analyzed after holding time expired.	
BV	Sample received after holding time expired.	
Е	Concentration exceeds the calibration range.	
ET	Sample was extracted past end of recommended max. holding time.	
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.	
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard were also present (or detected).	but heavier hydrocarbons
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard also present (or detected).	but lighter hydrocarbons were
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection estimated.	limit. Reported value is
JA	Analyte positively identified but quantitation is an estimate.	
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean)	
ND	Parameter not detected at the indicated reporting limit.	
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample concentration by a factor of four or greater.	exceeding the spike

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero

The sample extract was subjected to Silica Gel treatment prior to analysis.

Analyte presence was not confirmed by second column or GC/MS analysis.

% Recovery and/or RPD out-of-range.

reported on a wet weight basis.

concentrations.

Glossary of Terms and Qualifiers

Call	galence .	7440 LINCOLN WAY												E C	AIN	C C	5 N	Ž Z	-COKD	
Ū M	pvironmental ∞aboratories. Inc.	GARDEN GROVE, CA 928	41-1432											DAT	 نن		5-16	-14		1
		TEL: (714) 895-5494 . FAX	: (714) 894-7	501										PAG	ا ش	~	10		~	
LABOR/	NTORY CLIENT: sons, Inc.							ROJECT	NAME ,		K: A					<u>0.</u>	.0. NO.:			1
100	W. Walnut Street						PROJECT	CONTA	CT:	ק ק	Jarren	2			20000000000000000000000000000000000000		UOTE NO.:		00000	1
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TEL:	······	FAX:		E-MAIL			R	Len	9	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	an	hr						E		
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SPECIA	L INSTRUCTIONS						2250B) 	(:	(nϽ,ϩA :02	(D0482 MS) sbiloS	M 4200 2-3)	6 (SW 4200 CI E)								
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Revis	ed: 08/28/08																			

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WORK ORDER #: 14-05- []]]] aboratories, Inc. SAMPLERECEIPT FORM Cooler [of] CLIENT: PA2SONS DATE: 05/16/14 TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0°C - 6.0°C, not frozen except sediment/tissue) Temperature 3 , 2 °C - 0.3°C (CF) = 2 .9 °C Sample(s) outside temperature criteria (PMAPM contacted by:) Sample(s) outside temperature criteria (PMAPM contacted by:) Sample(s) outside temperature, placed on ice for transport by Courier. Ambient Temperature: Air Cooler		Page 23 of 23
SAMPLE RECEIPT FORM Cooler of CLENT: PARSONS TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C - 6.0 °C, not frozen except sediment/tissue) Temperature 3. 2. °C - 0.3 °C (CF) = 2. 9 °C Sample(s) outside temperature criteria (PM/APM contacted by:) Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling. Received at ambient temperature, placed on ice for transport by Courrier. Ambient Temperature: Air	WORK ORDER #: 1	4-05-1] 3 🛛
LIENT: PARSONS DATE: O5/16/14 TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0°C - 6.0°C, not frozen except sediment/tissue) Temperature 32°C - 0.3°C (CF) = 29°C Ø Blank Sample Sample(s) outside temperature criteria (PM/APM contacted by:	Laboratorles, Inc.	Coolor of
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□ No analysis requested. □ Not relinquished. □ No date/time relinquished. Sampler's name indicated on COC	□ Collection date/time, matrix, and/or # of containers logged in based on sample labels.	
Sampler's name indicated on COC	□ No analysis requested. □ Not relinquished. □ No date/time relinquished.	
Sample container label(s) consistent with COC	Sampler's name indicated on COC	
Sample container(s) intact and good condition	Sample container label(s) consistent with COC	
Proper containers and sufficient volume for analyses requested	Sample container(s) intact and good condition	
Analyses received within holding time	Proper containers and sufficient volume for analyses requested	
Aqueous samples received within 15-minute holding time pH Residual Chlorine Dissolved Sulfides Dissolved Oxygen Proper preservation noted on COC or sample container I I Unpreserved vials received for Volatiles analysis I I Volatile analysis container(s) free of headspace I I Tedlar bag(s) free of condensation I I CONTAINER TYPE: I I Solid: I4ozCGJ I8ozCGJ I I25AGB I25AGBh I250AGB I250CGBs I1PBna I500AGB I500AGJ I500AGJs	Analyses received within holding time	
pH Residual Chlorine Dissolved Sulfides Dissolved Oxygen Proper preservation noted on COC or sample container I Unpreserved vials received for Volatiles analysis Volatile analysis container(s) free of headspace Tedlar bag(s) free of condensation Image: Container Type: Solid: Image: I	Aqueous samples received within 15-minute holding time	<u>,</u>
Proper preservation noted on COC or sample container	□ pH 🖉 Residual Chlorine □ Dissolved Sulfides □ Dissolved Oxygen □	
□ Unpreserved vials received for Volatiles analysis Volatile analysis container(s) free of headspace□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□	Proper preservation noted on COC or sample container	
Volatile analysis container(s) free of headspace	Unpreserved vials received for Volatiles analysis	
Tedlar bag(s) free of condensation I I I CONTAINER TYPE: Solid: I 4ozCGJ I 8ozCGJ I 16ozCGJ I Sleeve () IEnCores® ITerraCores® I IEncores® ITerraCores® I Aqueous: IVOA IVOAh IVOAna2 I 125AGB I 125AGBh I 125AGBp I 1AGB I 1AGBna2 I 1AGBs IAGBB I 10000000000000000000000000000000000	Volatile analysis container(s) free of headspace	
Solid: 402CGJ B02CGJ 1602CGJ Sleeve () EnCores [®] TerraCores [®] Aqueous: VOA VOAh VOAna ₂ 125AGB 125AGBh 125AGBp 14GB 14GBna ₂ 14GBs 500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 14PB 1PBna 500PB	Tedlar bag(s) free of condensation	
Aqueous: DVOA DVOAh DVOAna ₂ D125AGB D125AGBh D125AGBp D1AGB D1AGBa ₂ D1AGBs D500AGB D500AGJ D500AGJs D250AGB D250CGB D250CGBs D1PB D1PBna D500PB	Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores [®] □	TerraCores [®]
□500AGB □500AGJ □500AGJS □250AGB □250CGB □250CGBS □1PBna □500PB	Aqueous: VOA VOAh VOAna ₂ 125AGB 125AGBh 125AGBp 1A	6 த⊓1AGBna₂ ⁄⊠1AGBs
	□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs	PB □1PBna □500PB
□250PB Ø250PBn, □125PB Ø125PBznna □100PJ □100PJna2 □ □ □	□250PB 🖉 250PBn д □ 125PB 🖉 125PBznna □ 100PJ □ 100PJna₂ □	_ □ □
Air: □Tedlar [®] □Canister Other: □ Trip Blank Lot#: Labeled/Checked by: <u>%</u>	Air: □Tedlar [®] □Canister Other: □ Trip Blank Lot#: Lal	beled/Checked by: $\underline{\&\mathcal{V}}$
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 776	Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope	Reviewed by: 776

SOP T100_090 (07/31/13)

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CALSCIENCE WORK ORDER NUMBER: 14-05-1351

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Parsons Government Services, Inc. Client Project Name: DFSP Norwalk - Quarterly Attention: Mary Lucas 100 West Walnut Street Pasadena, CA 91124-0002

Ranjit F. J. Clarke

Approved for release on 05/28/2014 by: Ranjit Clarke Project Manager

ResultLink >

Email your PM >



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



7440 Lincoln Way, Garden Grove, CA 92841-1432 * TEL: (714) 895-5494 * FAX: (714) 894-7501 * www.calscience.com

NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830



Client Project Name: DFSP Norwalk - Quarterly Work Order Number: 14-05-1351

1	Work Order Narrative	3
2	Sample Summary	4
3	Client Sample Data.3.1 EPA 8015B (M) TPH Diesel (Aqueous).3.2 EPA 8015B (M) TPH Gasoline (Aqueous).3.3 EPA 8260B Volatile Organics (Aqueous).3.4 Combined Inorganic Tests.	5 5 6 7 13
4	Quality Control Sample Data. 4.1 MS/MSD. 4.1 MS/MSD. 4.2 LCS/LCSD.	14 14 16
5	Sample Analysis Summary	20
6	Glossary of Terms and Qualifiers.	21
7	Chain of Custody/Sample Receipt Form	22





Work Order: 14-05-1351

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/16/14. They were assigned to Work Order 14-05-1351.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Ć	alscience nvironmental aboratories, Inc.	Sample Summary	
Client:	Parsons Government Services, Inc.	Work Order:	14-05-1351
	100 West Walnut Street	Project Name:	DFSP Norwalk - Quarterly
	Pasadena, CA 91124-0002	PO Number:	
		Date/Time Received:	05/16/14 18:00
		Number of Containers:	8
Attn:	Mary Lucas		
Sample lo	dentification Lab Number	Collection Date and Time	Number of Matrix Containers

05/16/14 13:05

8

14-05-1351-1

Effluent

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Aqueous

Analytical Report

Parsons Government Services, Inc.			Date Recei	ved:			05/16/14
100 West Walnut Street			Work Order	r:			14-05-1351
Pasadena, CA 91124-0002			Preparatior	ı:			EPA 3510C
			Method:			E	PA 8015B (M)
			Units:				uq/L
Project: DFSP Norwalk - Quarterly						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-05-1351-1-H	05/16/14 13:05	Aqueous	GC 47	05/19/14	05/20/14 15:12	140519B14
Parameter		Result	RL	:	DF	Qua	lifiers
TPH as Diesel		ND	98		1.00		
Surrogate		<u>Rec. (%)</u>	Co	ntrol Limits	<u>Qualifiers</u>		
n-Octacosane		100	68	-140			
Method Blank	099-15-282-196	N/A	Aqueous	GC 47	05/19/14	05/20/14 14:20	140519B14
Parameter		Result	RL	:	DF	Qua	lifiers
TPH as Diesel		ND	10	0	1.00		
Surrogate		<u>Rec. (%)</u>	Co	ntrol Limits	<u>Qualifiers</u>		
n-Octacosane		96	68 [.]	-140			



Parsons Government Services, Inc.			Date Recei	ved:			05/16/14
100 West Walnut Street			Work Orde	r:			14-05-1351
Pasadena, CA 91124-0002			Preparation	ו:			EPA 5030C
			Method:			E	PA 8015B (M)
			Units:				ug/L
Project: DFSP Norwalk - Quarterly						Pa	ge 1 of 1
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-05-1351-1-E	05/16/14 13:05	Aqueous	GC 42	05/22/14	05/23/14 04:24	140522L054
Parameter		Result	RL		DF	Qua	lifiers
TPH as Gasoline		ND	10	0	1.00		
Surrogate		<u>Rec. (%)</u>	Co	ontrol Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		73	38	-134			
Method Blank	099-15-704-768	N/A	Aqueous	GC 42	05/22/14	05/23/14 03:13	140522L054
Parameter		Result	RL		DF	Qua	lifiers
TPH as Gasoline		ND	10	0	1.00		
Surrogate		<u>Rec. (%)</u>	Co	ontrol Limits	<u>Qualifiers</u>		
1,4-Bromofluorobenzene		69	38	-134			

alscience nvironmental aboratories, Inc.

Anal	vtical	Report
	,	

Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1351
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP Norwalk - Quarterly		Page 1 of 6

Project: DFSP Norwalk - Quarterly

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-05-1351-1-A	05/16/14 13:05	Aqueous	GC/MS JJ	05/20/14	05/20/14 14:46	140520L016
Comment(s): - Results were evaluated to	the MDL (DL), conc	entrations >=	to the MDL (DL	_) but < RL (LO	Q), if found, are	qualified with a	a "J" flag.
Parameter	Resul	<u>t</u>	<u>RL</u>	MDL	DF	<u>(</u>	Qualifiers
Acetone	ND		20	10	1.00		
Benzene	ND		0.50	0.14	1.00		
Bromobenzene	ND		1.0	0.30	1.00		
Bromochloromethane	ND		1.0	0.48	1.00		
Bromodichloromethane	ND		1.0	0.21	1.00		
Bromoform	ND		1.0	0.50	1.00		
Bromomethane	ND		5.0	3.9	1.00		
2-Butanone	ND		10	2.2	1.00		
n-Butylbenzene	ND		1.0	0.23	1.00		
sec-Butylbenzene	ND		1.0	0.25	1.00		
tert-Butylbenzene	ND		1.0	0.28	1.00		
Carbon Disulfide	ND		10	0.41	1.00		
Carbon Tetrachloride	ND		0.50	0.23	1.00		
Chlorobenzene	ND		1.0	0.17	1.00		
Chloroethane	ND		5.0	2.3	1.00		
Chloroform	ND		1.0	0.46	1.00		
Chloromethane	ND		5.0	1.8	1.00		
2-Chlorotoluene	ND		1.0	0.24	1.00		
4-Chlorotoluene	ND		1.0	0.13	1.00		
Dibromochloromethane	ND		1.0	0.25	1.00		
1,2-Dibromo-3-Chloropropane	ND		5.0	1.2	1.00		
1,2-Dibromoethane	ND		1.0	0.36	1.00		
Dibromomethane	ND		1.0	0.46	1.00		
1,2-Dichlorobenzene	ND		1.0	0.46	1.00		
1,3-Dichlorobenzene	ND		1.0	0.40	1.00		
1,4-Dichlorobenzene	ND		1.0	0.43	1.00		
Dichlorodifluoromethane	ND		1.0	0.46	1.00		
1,1-Dichloroethane	ND		1.0	0.28	1.00		
1,2-Dichloroethane	ND		0.50	0.24	1.00		
1,1-Dichloroethene	ND		1.0	0.43	1.00		
c-1,2-Dichloroethene	ND		1.0	0.48	1.00		
t-1,2-Dichloroethene	ND		1.0	0.37	1.00		
1,2-Dichloropropane	ND		1.0	0.42	1.00		
1,3-Dichloropropane	ND		1.0	0.30	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents



Parsons Government Services, Inc.		Date Rec	eived:		05/16/14
100 West Walnut Street		Work Ord	ler:		14-05-1351
Pasadena CA 91124-0002		Prenarati	on:		EPA 5030C
1 asadena, OA 31124-0002		Method:	011.		EPA 8260B
		lucito:			
		Units.			uy/L
Project: DFSP Norwalk - Quarterly					Page 2 of 6
Parameter	<u>Result</u>	<u>RL</u>	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	ND	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	ND	1.0	0.58	1.00	
p-Isopropyltoluene	ND	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	ND	10	2.5	1.00	
n-Propylbenzene	ND	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	ND	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	ND	0.50	0.30	1.00	
o-Xylene	ND	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	4.8	10	4.6	1.00	J
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	
Ethanol	ND	100	50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>Calscience</i> <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	rtical Report	
Parsons Government Services, Inc.		Date Received:	05/16/14
100 West Walnut Street		Work Order:	14-05-1351
Pasadena, CA 91124-0002		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: DFSP Norwalk - Quarterly			Page 3 of 6
Surrogate	<u>Rec. (%)</u>	Control Limits Qualifiers	
1,4-Bromofluorobenzene	97	80-120	
Dibromofluoromethane	96	78-126	

75-135

80-120

106

102

-

1,2-Dichloroethane-d4

Toluene-d8



Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1351
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP Norwalk - Quarterly		Page 4 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-14132	N/A	Aqueous	GC/MS JJ	05/20/14	05/20/14 14:16	140520L016
Comment(s): - Results were evaluated to	the MDL (DL), conc	entrations >=	to the MDL (DL) but < RL (LO	Q), if found, are	qualified with a	a "J" flag.
Parameter	Resul	<u>t</u>	<u>RL</u>	MDL	DF	(Qualifiers
Acetone	ND		20	10	1.00		
Benzene	ND		0.50	0.14	1.00		
Bromobenzene	ND		1.0	0.30	1.00		
Bromochloromethane	ND		1.0	0.48	1.00		
Bromodichloromethane	ND		1.0	0.21	1.00		
Bromoform	ND		1.0	0.50	1.00		
Bromomethane	ND		5.0	3.9	1.00		
2-Butanone	ND		10	2.2	1.00		
n-Butylbenzene	ND		1.0	0.23	1.00		
sec-Butylbenzene	ND		1.0	0.25	1.00		
tert-Butylbenzene	ND		1.0	0.28	1.00		
Carbon Disulfide	ND		10	0.41	1.00		
Carbon Tetrachloride	ND		0.50	0.23	1.00		
Chlorobenzene	ND		1.0	0.17	1.00		
Chloroethane	ND		5.0	2.3	1.00		
Chloroform	ND		1.0	0.46	1.00		
Chloromethane	ND		5.0	1.8	1.00		
2-Chlorotoluene	ND		1.0	0.24	1.00		
4-Chlorotoluene	ND		1.0	0.13	1.00		
Dibromochloromethane	ND		1.0	0.25	1.00		
1,2-Dibromo-3-Chloropropane	ND		5.0	1.2	1.00		
1,2-Dibromoethane	ND		1.0	0.36	1.00		
Dibromomethane	ND		1.0	0.46	1.00		
1,2-Dichlorobenzene	ND		1.0	0.46	1.00		
1,3-Dichlorobenzene	ND		1.0	0.40	1.00		
1,4-Dichlorobenzene	ND		1.0	0.43	1.00		
Dichlorodifluoromethane	ND		1.0	0.46	1.00		
1,1-Dichloroethane	ND		1.0	0.28	1.00		
1,2-Dichloroethane	ND		0.50	0.24	1.00		
1,1-Dichloroethene	ND		1.0	0.43	1.00		
c-1,2-Dichloroethene	ND		1.0	0.48	1.00		
t-1,2-Dichloroethene	ND		1.0	0.37	1.00		
1,2-Dichloropropane	ND		1.0	0.42	1.00		
1,3-Dichloropropane	ND		1.0	0.30	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Parsons Government Services, Inc.		Date Rec	eived:		05/16/14
100 West Walnut Street		Work Ord	er:		14-05-1351
Pasadena CA 91124-0002		Preparatio	n.		EPA 5030C
		Method:	511.		EPA 8260B
		Units:			ug/L
Project: DESP Norwalk - Quarterly					Page 5 of 6
Parameter	<u>Result</u>	<u>RL</u>	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	ND	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	ND	1.0	0.58	1.00	
p-Isopropyltoluene	ND	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	ND	10	2.5	1.00	
n-Propylbenzene	ND	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	ND	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	ND	0.50	0.30	1.00	
o-Xylene	ND	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	
Ethanol	ND	100	50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>L</i> alscience <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	rtical Report	
Parsons Government Services, Inc.		Date Received:	05/16/14
100 West Walnut Street		Work Order:	14-05-1351
Pasadena, CA 91124-0002		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: DFSP Norwalk - Quarterly			Page 6 of 6
Surrogate	<u>Rec. (%)</u>	Control Limits Qualifiers	
1,4-Bromofluorobenzene	98	80-120	
Dibromofluoromethane	98	78-126	

75-135

80-120

104

101

-

1,2-Dichloroethane-d4

Toluene-d8

Calscience nvironme Laborato	ental pries, Inc.		Ana	lytical Re	oort				
Parsons Government	t Services, Inc.			Date F	Received:				05/16/14
100 West Walnut Stre	eet			Work	Order:			-	4-05-1351
Pasadena, CA 91124	1-0002								
Project: DFSP Norwa	alk - Quarterly							Page	1 of 1
Client Sample Number			Lab	Sample Number		Date/Tin	ne Collected	Matrix	
Effluent			14-0	5-1351-1		05/16/14	13:05	Aqueous	
Parameter	<u>Results</u>	<u>RL</u>	DF	<u>Qualifiers</u>	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method	
Phenolics, Total	ND	0.10	1.00		mg/L	05/22/14	05/22/14	EPA 420.1	
Method Blank						N/A		Aqueous	

						IV/A		Aqueous
Parameter	<u>Results</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method
Phenolics, Total	ND	0.10	1.00		mg/L	05/22/14	05/22/14	EPA 420.1

0-18

5



TPH as Gasoline

ND

2000

1773

Quality Control - Spike/Spike Duplicate

Parsons Government Service	s, Inc.		D	ate Received:				05/16/14
100 West Walnut Street			V	Vork Order:			14-	05-1351
Pasadena, CA 91124-0002			Р	reparation:			EP	A 5030C
			Ν	lethod:			EPA 80	015B (M)
Project: DFSP Norwalk - Qua	rterly						Page 1 o	of 2
Quality Control Sample ID	Туре		Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batc	h Number
Quality Control Sample ID Effluent	Type Sample		Matrix Aqueous	Instrument GC 42	Date Prepared 05/22/14	Date Analyzed 05/23/14 04:24	MS/MSD Batc 140522S035	h Number
Quality Control Sample ID Effluent Effluent	Type Sample Matrix Spike		Matrix Aqueous Aqueous	Instrument GC 42 GC 42	Date Prepared 05/22/14 05/22/14	Date Analyzed 05/23/14 04:24 05/23/14 04:59	MS/MSD Batc 140522S035 140522S035	h Number
Quality Control Sample ID Effluent Effluent Effluent	Type Sample Matrix Spike Matrix Spike	Duplicate	Matrix Aqueous Aqueous Aqueous	Instrument GC 42 GC 42 GC 42	Date Prepared 05/22/14 05/22/14 05/22/14	Date Analyzed 05/23/14 04:24 05/23/14 04:59 05/23/14 05:34	MS/MSD Batc 140522S035 140522S035 140522S035	h Number

89

1687

84

68-122

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Spike/Spike Duplicate

Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1351
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: DFSP Norwalk - Quarterly		Page 2 of 2

Quality Control Sample ID	Туре		Matrix	h	nstrument	Date Prepare	d Date Ana	lyzed	MS/MSD Bat	ch Number
Effluent	Sample		Aqueous	; C	GC/MS JJ	05/20/14	05/20/14	14:46	140520S026	
Effluent	Matrix Spike		Aqueous	; C	GC/MS JJ	05/20/14	05/20/14	15:16	140520S026	
Effluent	Matrix Spike	Duplicate	Aqueous	; C	GC/MS JJ	05/20/14	05/20/14	15:46	140520S026	
Parameter	<u>Sample</u> Conc.	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> %Rec	<u>MSD</u> Conc.	<u>MSD</u> %Rec.	%Rec. CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Benzene	ND	50.00	53.61	107	54.90	110	74-122	2	0-21	
Carbon Tetrachloride	ND	50.00	52.29	105	54.07	108	60-144	3	0-21	
Chlorobenzene	ND	50.00	53.95	108	55.22	110	73-120	2	0-22	
1,2-Dibromoethane	ND	50.00	53.59	107	54.53	109	80-122	2	0-20	
1,2-Dichlorobenzene	ND	50.00	54.20	108	54.96	110	70-120	1	0-26	
1,2-Dichloroethane	ND	50.00	56.71	113	57.53	115	64-142	1	0-20	
1,1-Dichloroethene	ND	50.00	59.72	119	60.97	122	52-136	2	0-21	
Ethylbenzene	ND	50.00	53.81	108	54.76	110	77-125	2	0-24	
Toluene	ND	50.00	53.55	107	54.98	110	72-126	3	0-23	
Trichloroethene	ND	50.00	53.46	107	54.11	108	74-128	1	0-22	
Vinyl Chloride	ND	50.00	57.62	115	59.89	120	67-133	4	0-20	
p/m-Xylene	ND	100.0	111.6	112	113.9	114	63-129	2	0-25	
o-Xylene	ND	50.00	57.30	115	58.30	117	62-128	2	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	52.54	105	54.21	108	68-134	3	0-21	
Tert-Butyl Alcohol (TBA)	ND	250.0	261.6	105	267.7	107	65-143	2	0-30	
Diisopropyl Ether (DIPE)	ND	50.00	54.40	109	56.19	112	61-139	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	52.86	106	54.60	109	64-136	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	50.15	100	51.59	103	67-133	3	0-20	
Ethanol	ND	500.0	568.0	114	573.4	115	34-178	1	0-58	



Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1351
Pasadena, CA 91124-0002	Preparation:	N/A
	Method:	EPA 420.1
Project: DFSP Norwalk - Quarterly		Page 1 of 4

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Dat	ate Analyzed	LCS/LCSD Ba	tch Number
099-05-085-2764	LCS	Aqu	ieous	UV 8	05/22/14	05/	/22/14 15:17	E0522PHEL1	
099-05-085-2764	LCSD	Aqu	ieous	UV 8	05/22/14	05/	/22/14 15:17	E0522PHEL1	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	<u>L</u> <u>RPD</u>	RPD CL	Qualifiers
Phenolics, Total	0.5000	0.4700	94	0.4500	90	80-120	4	0-20	



Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1351
Pasadena, CA 91124-0002	Preparation:	EPA 3510C
	Method:	EPA 8015B (M)
Project: DFSP Norwalk - Quarterly		Page 2 of 4

Quality Control Sample ID	Туре	Mat	rix	Instrument	Date Pre	pared Dat	te Analyzed	LCS/LCSD Ba	atch Number
099-15-282-196	LCS	Aqu	Jeous	GC 47	05/19/14	05/	/20/14 14:38	140519B14	
099-15-282-196	LCSD	Αqι	leous	GC 47	05/19/14	05/	/20/14 14:55	140519B14	
Parameter	Spike Added	LCS Conc.	<u>LCS</u> <u>%Rec.</u>	LCSD Conc.	LCSD %Rec.	%Rec. CL	<u>L</u> <u>RPD</u>	RPD CL	Qualifiers
TPH as Diesel	4000	4405	110	4467	112	75-117	1	0-13	

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-704-768	LCS	Aqueous	GC 42	05/22/14	05/23/14 03:49	140522L054
Parameter		Spike Added	Conc. Recovered	ed LCS %Re	<u>%Rec.</u>	<u>CL</u> <u>Qualifiers</u>
TPH as Gasoline		2000	1733	87	78-120)

Method:

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EPA 8015B (M)

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Parsons Government Services, Inc.	Date Received:	05/16/14
100 West Walnut Street	Work Order:	14-05-1351
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: DFSP Norwalk - Quarterly		Page 4 of 4

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared D	Date Analyzed	LCS Batch Number
099-14-001-14132	LCS	Aqueous	GC/MS JJ	05/20/14 0	5/20/14 12:36	140520L016
Parameter	<u>Spike Ad</u>	Ided <u>Conc.</u> I	Recovered LCS	%Rec. <u>%Rec</u>	<u>CL ME</u>	CL Qualifiers
Benzene	50.00	53.52	107	80-12	20 73-	127
Carbon Tetrachloride	50.00	52.23	104	67-13	39 55- ⁻	151
Chlorobenzene	50.00	54.00	108	78-12	20 71-	127
1,2-Dibromoethane	50.00	53.49	107	80-12	20 73-	127
1,2-Dichlorobenzene	50.00	54.27	109	63-12	29 52- ⁻	140
1,2-Dichloroethane	50.00	55.28	111	70-13	80 60- ⁻	140
1,1-Dichloroethene	50.00	54.74	109	66-12	26 56- ⁻	136
Ethylbenzene	50.00	53.23	106	80-12	23 73-	130
Toluene	50.00	53.27	107	80-12	20 73-	127
Trichloroethene	50.00	52.63	105	80-12	22 73- ⁻	129
Vinyl Chloride	50.00	53.23	106	70-13	30 60- ⁻	140
p/m-Xylene	100.0	110.7	111	75-12	23 67- ⁻	131
o-Xylene	50.00	56.49	113	74-12	22 66- ⁻	130
Methyl-t-Butyl Ether (MTBE)	50.00	52.20	104	69-12	29 59- ⁻	139
Tert-Butyl Alcohol (TBA)	250.0	252.6	101	69-12	29 59- ⁻	139
Diisopropyl Ether (DIPE)	50.00	53.08	106	68-12	28 58-	138
Ethyl-t-Butyl Ether (ETBE)	50.00	52.69	105	63-13	35 51- ⁻	147
Tert-Amyl-Methyl Ether (TAME)	50.00	51.16	102	67-13	33 56- ⁻	144
Ethanol	500.0	526.6	105	42-16	8 21- ⁻	189

Total number of LCS compounds: 19 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass

Page 1 of 1



Work Order: 14-05-1351

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 420.1	N/A	686	UV 8	1
EPA 8015B (M)	EPA 3510C	682	GC 47	1
EPA 8015B (M)	EPA 5030C	797	GC 42	2
EPA 8260B	EPA 5030C	876	GC/MS JJ	2

alscience nvironmental aboratories, Inc.

Work Order: 14-05-1351

Page 1 of 1 Qualifiers Definition * See applicable analysis comment. Less than the indicated value. < > Greater than the indicated value. Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further 1 clarification. 2 Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. З Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.

Glossary of Terms and Qualifiers

- 4 The MS/MSD RPD was out of control due to suspected matrix interference.
- The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. 5
- 6 Surrogate recovery below the acceptance limit.
- 7 Surrogate recovery above the acceptance limit.
- В Analyte was present in the associated method blank.
- ΒU Sample analyzed after holding time expired.
- ΒV Sample received after holding time expired.
- Е Concentration exceeds the calibration range.
- FT Sample was extracted past end of recommended max. holding time.
- HD The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
- HDH The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
- HDL The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
- Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is J estimated.
- JA Analyte positively identified but quantitation is an estimate.
- LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). ME
- Parameter not detected at the indicated reporting limit. ND
- Q Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
- SG The sample extract was subjected to Silica Gel treatment prior to analysis.
- Х % Recovery and/or RPD out-of-range.
- Ζ Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, forthote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Calscio		7440 LINCOLN WAY											U	L	0	- CUSTO	DY RE	CORD	
Envir Lab	ronmental soratories. Inc.	GARDEN GROVE, CA 928	41-1432										/O	ле: -		5-16-14			
2		TEL: (714) 895-5494 . FAX	: (714) 894-:	7501									ΡA	l GE			14.	-	,
LABORATOR Parson	RY CLIENT: IS, Inc.					о ———	CIENT PF	OJECT 1	MAME / NU	MBER:	-					P.O. NO.:	Ì		8
100 W.	Walnut Street						ROJECT		/alk - (Juarte	sriy					QUOTE NO.	0-2	5000	
CITY: Docodo	10110 V 01101						AMPI FRI	S) (SIG	AS ATLIRET							I ARTICE ON	N II		-
TEL:	ella, UA 31124	FAX:		E-MAIL			Hen) hard	green	ľr.								
	ND TIME E DAY	48HR 72 HR		R	5 DAYS	<u></u>					RE	QUE	STED	AN/	alys	SIS			
	CCB REPORTING	AL COSTS MAY APPLY)	S UNTIL	,															
SPECIAL IN:	STRUCTIONS					82108 AGT) (5261h	PA 8260B)	(1.024											
LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMF	LING	MAT-	NONT.	VOCs + Oxys (Phenolics (EPA				:				ů.	mments		
E	floent		S-16-14	1205	W	8	×	×											
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Relinquish	ed by: (Signature)				Received	by: (Sigi	lature)									laté: 📝 /	Time:		1
Revised.	- <u>08/28/08</u>														_		-		-1

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Kevised: U8/28/U8

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	Ŵ	ORK ORDER	#: 14	Page -05-	e 23 of 23
Laboratories, Inc. SAMP	LE REC	EIPT FOR	RM	Cooler	of
CLIENT: PARSONS			DATE:	05/16	/14
TEMPERATURE: Thermometer ID: SC2 (Temperature 3 • 2 • °C - 0.3 °C Sample(s) outside temperature criteria (F Sample(s) outside temperature criteria but Received at ambient temperature, plat Ambient Temperature: Air	Criteria: 0.0 °C (CF) = M/APM contact ut received on ic aced on ice fo	- 6.0 °C, not frozer	ay of sam	sediment/tiss Samp pling. Checked	ue) Ie by: <u>&04</u>
CUSTODY SEALS INTACT: Cooler Image: No Sample Image: No	(Not Intact) (Not Intact)	☑ Not Present ☑ Not Present	□ N//	A Checked Checked	by: <u>804</u> by: <u>(42</u>
SAMPLE CONDITION:			Yes	No	N/A
Chain-Of-Custody (COC) document(s) rec	eived with sam	ples	. 🖵		
COC document(s) received complete	ners logged in ba . □ No date/tir	sed on sample labels. ne relinquished.	. 🖵		
Sampler's name indicated on COC					
Sample container label(s) consistent with 0	COC	······	9		
Sample container(s) intact and good condi	tion				
Proper containers and sufficient volume for	r analyses req	uested			
Analyses received within holding time Aqueous samples received within 15-m	inute holding t	ime			
□ pH □ Residual Chlorine □ Dissolved Su	Ilfides 🗆 Disso	lved Oxygen			9-
Proper preservation noted on COC or sam	ple container				
Volatile analysis container(s) free of heads	pace		. 🕑		
Tedlar bag(s) free of condensation	•		. 🗆		B
Solid: □4ozCGJ □8ozCGJ □16ozCG	J □Sleeve () □EnCore	s [®] □Ter	raCores [®] □	
Aqueous: UVOA	25AGB □125A	GBh □125AGBp	□1AGB	□1AGB na ₂	□1AGB s
	0AGB □2500	CGB T250CGBs	□1PR	□1PBna □]500PB
□250PB □250PBn □125PB □125PBz	nna 🗆 100 PJ	□100PJna ₂ □]
Air: Tedlar [®] Canister Other: C Container: C: Clear A: Amber P: Plastic G: Glass J: Jar Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃ na: NaOH p: H	Trip Blank B: Bottle Z : Ziploc H ₃ PO ₄ s : H ₂ SO ₄ u : U	Kot#:/Resealable Bag E: En Itra-pure znna: ZnAc ₂ +Na	Labele	ed/Checked b Reviewed by Scanned b	y: <u>147</u> 1: <u>644</u> y: <u>644</u>

×.



WORK ORDER NUMBER: 14-05-2132

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Parsons Government Services, Inc. Client Project Name: DFSP - Norwalk Attention: Mary Lucas 100 West Walnut Street Pasadena, CA 91124-0002

Ranjit F. J. Clarke

Approved for release on 06/02/2014 by: Ranjit Clarke Project Manager

ResultLink ▶

Email your PM >



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



7440 Lincoln Way, Garden Grove, CA 92841-1432 * TEL: (714) 895-5494 * FAX: (714) 894-7501 * www.calscience.com

NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830


Client Project Name: DFSP - Norwalk Work Order Number: 14-05-2132

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4	Quality Control Sample Data. 4.1 MS/MSD. 4.2 LCS/LCSD.	17 17 19
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Contents

Calscience nvironmental Laboratories, Inc.

Work Order: 14-05-2132

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/29/14. They were assigned to Work Order 14-05-2132.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Ċ	alscience nvironmental aboratories, Inc.	Sample Summary	
Client:	Parsons Government Services, Inc.	Work Order:	14-05-2132
	100 West Walnut Street	Project Name:	DFSP - Norwalk
	Pasadena, CA 91124-0002	PO Number:	
		Date/Time Received:	05/29/14 16:20
		Number of Containers:	9
Attn:	Mary Lucas		
Sample lo	dentification Lab Number	Collection Date and Time	Number of Matrix Containers

05/29/14 14:41

05/29/14 14:37

05/29/14 14:35

Surge Tank

After MX-21

Effluent

14-05-2132-1

14-05-2132-2

14-05-2132-3

Aqueous

Aqueous

Aqueous

3

3

3

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP - Norwalk		Page 1 of 12

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Surge Tank	14-05-2132-1-A	05/29/14 14:41	Aqueous	GC/MS JJ	05/29/14	05/29/14 23:54	140529L047
Comment(s): - Results were evaluated to	the MDL (DL), conc	entrations >=	to the MDL (DL) but < RL (LO	Q), if found, are o	qualified with a	"J" flag.
Parameter	Resul	<u>t</u>	<u>RL</u>	MDL	DF	<u>Q</u>	ualifiers
Acetone	ND		20	10	1.00		
Benzene	29		0.50	0.14	1.00		
Bromobenzene	ND		1.0	0.30	1.00		
Bromochloromethane	ND		1.0	0.48	1.00		
Bromodichloromethane	ND		1.0	0.21	1.00		
Bromoform	ND		1.0	0.50	1.00		
Bromomethane	ND		5.0	3.9	1.00		
2-Butanone	ND		10	2.2	1.00		
n-Butylbenzene	3.7		1.0	0.23	1.00		
sec-Butylbenzene	2.6		1.0	0.25	1.00		
tert-Butylbenzene	0.35		1.0	0.28	1.00	J	
Carbon Disulfide	ND		10	0.41	1.00		
Carbon Tetrachloride	ND		0.50	0.23	1.00		
Chlorobenzene	ND		1.0	0.17	1.00		
Chloroethane	ND		5.0	2.3	1.00		
Chloroform	ND		1.0	0.46	1.00		
Chloromethane	ND		5.0	1.8	1.00		
2-Chlorotoluene	ND		1.0	0.24	1.00		
4-Chlorotoluene	ND		1.0	0.13	1.00		
Dibromochloromethane	ND		1.0	0.25	1.00		
1,2-Dibromo-3-Chloropropane	ND		5.0	1.2	1.00		
1,2-Dibromoethane	ND		1.0	0.36	1.00		
Dibromomethane	ND		1.0	0.46	1.00		
1,2-Dichlorobenzene	ND		1.0	0.46	1.00		
1,3-Dichlorobenzene	ND		1.0	0.40	1.00		
1,4-Dichlorobenzene	ND		1.0	0.43	1.00		
Dichlorodifluoromethane	ND		1.0	0.46	1.00		
1,1-Dichloroethane	ND		1.0	0.28	1.00		
1,2-Dichloroethane	2.9		0.50	0.24	1.00		
1,1-Dichloroethene	ND		1.0	0.43	1.00		
c-1,2-Dichloroethene	ND		1.0	0.48	1.00		
t-1,2-Dichloroethene	ND		1.0	0.37	1.00		
1,2-Dichloropropane	ND		1.0	0.42	1.00		
1,3-Dichloropropane	ND		1.0	0.30	1.00		

Parsons Government Services, Inc.	Date Rec	eived:		05/29/14	
100 West Walnut Street		Work Ord	14-05-2132 EPA 50300		
Pasadena CA 91124-0002		Preparati			
		Method:	••••		EPA 8260B
		Linite:			
Project: DFSP - Norwalk		Units.			Page 2 of 12
-					
Parameter	<u>Result</u>	<u>RL</u>	MDL	DF	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	30	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	8.5	1.0	0.58	1.00	
p-lsopropyltoluene	3.1	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	9.1	10	2.5	1.00	J
n-Propylbenzene	7.7	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	1.0	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1.2.3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	60	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	28	1.0	0.28	1.00	
Vinvl Acetate	ND	10	2.8	1.00	
Vinvl Chloride	ND	0.50	0.30	1.00	
p/m-Xvlene	180	0.50	0.30	1.00	
o-Xvlene	45	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	1.0	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.55	1.00	
		2.0	0.22	1.00	
		2.0	50	1.00	
LunariUl		100	50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>Calscience</i> <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	Analytical Report					
Parsons Government Services, Inc.		Date Receive	05/29/14				
100 West Walnut Street		Work Order:	14-05-2132				
Pasadena, CA 91124-0002		Preparation:	EPA 5030C				
		Method:		EPA 8260B			
		Units:		ug/L			
Project: DFSP - Norwalk				Page 3 of 12			
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>				
1,4-Bromofluorobenzene	111	80-120					
Dibromofluoromethane	106	78-126					
1,2-Dichloroethane-d4	117	75-135					

80-120

99

Toluene-d8

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP - Norwalk		Page 4 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID	
After MX-21	14-05-2132-2-A	05/29/14 14:37	Aqueous	GC/MS JJ	05/29/14	05/29/14 23:23	140529L047	
Comment(s): - Results were evaluated to	Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are gualified with a "J" flag.							
Parameter	Resul	<u>t</u>	RL	MDL	DF	<u>Q</u>	<u>ualifiers</u>	
Acetone	ND	:	20	10	1.00			
Benzene	30	(0.50	0.14	1.00			
Bromobenzene	ND		1.0	0.30	1.00			
Bromochloromethane	ND		1.0	0.48	1.00			
Bromodichloromethane	ND		1.0	0.21	1.00			
Bromoform	ND		1.0	0.50	1.00			
Bromomethane	ND	4	5.0	3.9	1.00			
2-Butanone	ND		10	2.2	1.00			
n-Butylbenzene	2.4		1.0	0.23	1.00			
sec-Butylbenzene	2.4		1.0	0.25	1.00			
tert-Butylbenzene	0.29		1.0	0.28	1.00	J		
Carbon Disulfide	ND		10	0.41	1.00			
Carbon Tetrachloride	ND	(0.50	0.23	1.00			
Chlorobenzene	ND		1.0	0.17	1.00			
Chloroethane	ND	:	5.0	2.3	1.00			
Chloroform	ND		1.0	0.46	1.00			
Chloromethane	ND	:	5.0	1.8	1.00			
2-Chlorotoluene	ND		1.0	0.24	1.00			
4-Chlorotoluene	ND		1.0	0.13	1.00			
Dibromochloromethane	ND		1.0	0.25	1.00			
1,2-Dibromo-3-Chloropropane	ND	:	5.0	1.2	1.00			
1,2-Dibromoethane	ND		1.0	0.36	1.00			
Dibromomethane	ND		1.0	0.46	1.00			
1,2-Dichlorobenzene	ND		1.0	0.46	1.00			
1,3-Dichlorobenzene	ND		1.0	0.40	1.00			
1,4-Dichlorobenzene	ND		1.0	0.43	1.00			
Dichlorodifluoromethane	ND		1.0	0.46	1.00			
1,1-Dichloroethane	ND		1.0	0.28	1.00			
1,2-Dichloroethane	2.3		0.50	0.24	1.00			
1,1-Dichloroethene	ND		1.0	0.43	1.00			
c-1,2-Dichloroethene	ND		1.0	0.48	1.00			
t-1,2-Dichloroethene	ND		1.0	0.37	1.00			
1,2-Dichloropropane	ND		1.0	0.42	1.00			
1,3-Dichloropropane	ND		1.0	0.30	1.00			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Parsons Government Services. Inc.		Date Rec	eived:		05/29/14
100 West Walnut Street		Work Orc	14-05-2132		
Pasadana CA 91124-0002		Prenarati	EPA 50300		
rasadena, CA 91124-0002		Mothod:	011.		EDA 8260B
		Units:			ug/L
Project: DFSP - Norwalk					Page 5 of 12
Parameter	Result	<u>RL</u>	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	26	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	7.6	1.0	0.58	1.00	
p-Isopropyltoluene	2.8	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	8.5	10	2.5	1.00	J
n-Propylbenzene	5.6	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	0.96	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	56	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	24	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	150	0.50	0.30	1.00	
o-Xylene	44	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	1.0	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	5.4	10	4.6	1.00	J
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	
Ethanol	ND	100	50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>Calscience</i> <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	Analytical Report					
Parsons Government Services, Inc.		Date Received:	05/29/14				
100 West Walnut Street		Work Order:	14-05-2132				
Pasadena, CA 91124-0002		Preparation:	EPA 5030C				
		Method:	EPA 8260B				
		Units:	ug/L				
Project: DFSP - Norwalk			Page 6 of 12				
Surrogate	<u>Rec. (%)</u>	Control Limits Qualifiers					
1,4-Bromofluorobenzene	111	80-120					
Dibromofluoromethane	107	78-126					
1,2-Dichloroethane-d4	119	75-135					

80-120

100

Toluene-d8

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP - Norwalk		Page 7 of 12

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-05-2132-3-A	05/29/14 14:35	Aqueous	GC/MS JJ	05/29/14	05/29/14 22:53	140529L047
Comment(s): - Results were evaluated to	the MDL (DL), conce	entrations >=	to the MDL (DI	_) but < RL (LO	Q), if found, are	qualified with a	"J" flag.
Parameter	Result		<u>RL</u>	MDL	DF	<u>c</u>	Qualifiers
Acetone	ND		20	10	1.00		
Benzene	ND		0.50	0.14	1.00		
Bromobenzene	ND		1.0	0.30	1.00		
Bromochloromethane	ND		1.0	0.48	1.00		
Bromodichloromethane	ND		1.0	0.21	1.00		
Bromoform	ND		1.0	0.50	1.00		
Bromomethane	ND		5.0	3.9	1.00		
2-Butanone	ND		10	2.2	1.00		
n-Butylbenzene	ND		1.0	0.23	1.00		
sec-Butylbenzene	ND		1.0	0.25	1.00		
tert-Butylbenzene	ND		1.0	0.28	1.00		
Carbon Disulfide	ND		10	0.41	1.00		
Carbon Tetrachloride	ND		0.50	0.23	1.00		
Chlorobenzene	ND		1.0	0.17	1.00		
Chloroethane	ND		5.0	2.3	1.00		
Chloroform	ND		1.0	0.46	1.00		
Chloromethane	ND		5.0	1.8	1.00		
2-Chlorotoluene	ND		1.0	0.24	1.00		
4-Chlorotoluene	ND		1.0	0.13	1.00		
Dibromochloromethane	ND		1.0	0.25	1.00		
1,2-Dibromo-3-Chloropropane	ND		5.0	1.2	1.00		
1,2-Dibromoethane	ND		1.0	0.36	1.00		
Dibromomethane	ND		1.0	0.46	1.00		
1,2-Dichlorobenzene	ND		1.0	0.46	1.00		
1,3-Dichlorobenzene	ND		1.0	0.40	1.00		
1,4-Dichlorobenzene	ND		1.0	0.43	1.00		
Dichlorodifluoromethane	ND		1.0	0.46	1.00		
1,1-Dichloroethane	ND		1.0	0.28	1.00		
1,2-Dichloroethane	ND		0.50	0.24	1.00		
1,1-Dichloroethene	ND		1.0	0.43	1.00		
c-1,2-Dichloroethene	ND		1.0	0.48	1.00		
t-1,2-Dichloroethene	ND		1.0	0.37	1.00		
1,2-Dichloropropane	ND		1.0	0.42	1.00		
1,3-Dichloropropane	ND		1.0	0.30	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents



Parsons Government Services, Inc.		Date Rec	eived:		05/29/14
100 West Walnut Street	Work Orc	ler:	14-05-2132		
Pasadona CA 01124 0002		FPA 50300			
Fasadella, CA 91124-0002		Mothod	011.		
		Method.			EFA 02000
		Units:			ug/L
Project: DFSP - Norwalk					Page 8 of 12
Parameter	Result	<u>RL</u>	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	ND	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	ND	1.0	0.58	1.00	
p-Isopropyltoluene	ND	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	ND	10	2.5	1.00	
n-Propylbenzene	ND	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	ND	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	ND	0.50	0.30	1.00	
o-Xvlene	ND	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	
Ethanol	ND	100	50	1.00	
	-				

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>L</i> alscience <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	rtical Report		
Parsons Government Services, Inc.		Date Receive	ed:	05/29/14
100 West Walnut Street		Work Order:		14-05-2132
Pasadena, CA 91124-0002		Preparation:	EPA 5030C	
		Method:		EPA 8260B
		Units:		ug/L
Project: DFSP - Norwalk				Page 9 of 12
Surrogate	<u>Rec. (%)</u>	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	106	80-120		
Dibromofluoromethane	105	78-126		
1,2-Dichloroethane-d4	119	75-135		

80-120

100

Page 13 of 23

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Toluene-d8

Client Sample Number

aboratories, Inc.	
overnment Services, Inc.	Date Received:

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP - Norwalk		Page 10 of 12

Matrix

Instrument

<u>MDL</u>

0.14

0.30

0.48

10

Date Prepared

05/29/14

DF

1.00

1.00

1.00

1.00

Date/Time Analyzed

05/29/14 14:51

Date/Time Collected

Method Blank 099-14-001-14243 GC/MS JJ N/A Aqueous Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag. Parameter Result <u>RL</u> ND 20 Acetone ND Benzene 0.50 Bromobenzene ND 1.0 Bromochloromethane ND 1.0 ND Bromodichloromethane 1.0

Lab Sample Number

Bromodichloromethane	ND	1.0	0.21	1.00	
Bromoform	ND	1.0	0.50	1.00	
Bromomethane	ND	5.0	3.9	1.00	
2-Butanone	ND	10	2.2	1.00	
n-Butylbenzene	ND	1.0	0.23	1.00	
sec-Butylbenzene	ND	1.0	0.25	1.00	
tert-Butylbenzene	ND	1.0	0.28	1.00	
Carbon Disulfide	ND	10	0.41	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.17	1.00	
Chloroethane	ND	5.0	2.3	1.00	
Chloroform	ND	1.0	0.46	1.00	
Chloromethane	ND	5.0	1.8	1.00	
2-Chlorotoluene	ND	1.0	0.24	1.00	
4-Chlorotoluene	ND	1.0	0.13	1.00	
Dibromochloromethane	ND	1.0	0.25	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.2	1.00	
1,2-Dibromoethane	ND	1.0	0.36	1.00	
Dibromomethane	ND	1.0	0.46	1.00	
1,2-Dichlorobenzene	ND	1.0	0.46	1.00	
1,3-Dichlorobenzene	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	1.0	0.43	1.00	
Dichlorodifluoromethane	ND	1.0	0.46	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.24	1.00	
1,1-Dichloroethene	ND	1.0	0.43	1.00	
c-1,2-Dichloroethene	ND	1.0	0.48	1.00	
t-1,2-Dichloroethene	ND	1.0	0.37	1.00	
1,2-Dichloropropane	ND	1.0	0.42	1.00	
1,3-Dichloropropane	ND	1.0	0.30	1.00	

QC Batch ID

140529L047

Return to Contents

Qualifiers

RL: Reporting Limit. DF: Dilution Factor.

MDL: Method Detection Limit.

aboratories, inc.					
Parsons Government Services, Inc.		Date Rec	eived:		05/29/14
100 West Walnut Street		Work Ord	ler:		14-05-2132
Pasadena, CA 91124-0002		Preparati	on:		EPA 5030C
		Method:			EPA 8260B
		Linits:			
Project: DFSP - Norwalk		ornitä.			Page 11 of 12
Parameter	Result	RL	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	ND	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	ND	1.0	0.58	1.00	
p-Isopropyltoluene	ND	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	ND	10	2.5	1.00	
n-Propylbenzene	ND	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	ND	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	ND	0.50	0.30	1.00	
o-Xylene	ND	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

ND

Ethanol

50

1.00

100

<i>Calscience</i> <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	rtical Report		
Parsons Government Services, Inc.		Date Receive	ed:	05/29/14
100 West Walnut Street		Work Order:		14-05-2132
Pasadena, CA 91124-0002		Preparation:	EPA 5030C	
		Method:		EPA 8260B
		Units:		ug/L
Project: DFSP - Norwalk				Page 12 of 12
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	105	80-120		
Dibromofluoromethane	100	78-126		
1,2-Dichloroethane-d4	108	75-135		

80-120

100

Toluene-d8

Return to Contents



Parsons Government Services, Inc.	Date Received:	05/29/14		
100 West Walnut Street	Work Order:	14-05-2132		
Pasadena, CA 91124-0002	Preparation:	EPA 5030C		
	Method:	EPA 8260B		
Project: DFSP - Norwalk		Page 1 of 2		

Project: DFSP - Norwalk

Quality Control Sample ID	Туре		Matrix	Ins	strument	Date Prepared	Date Anal	yzed	MS/MSD Bat	ch Number
14-05-2041-1	Sample		Aqueous	G	C/MS JJ	05/29/14	05/29/14	15:21	140529S005	
14-05-2041-1	Matrix Spike		Aqueous	G	C/MS JJ	05/29/14	05/29/14	15:51	140529S005	
14-05-2041-1	Matrix Spike	Duplicate	Aqueous	G	C/MS JJ	05/29/14	05/29/14	16:22	140529S005	
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> %Rec.	<u>MSD</u> Conc.	<u>MSD</u> %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Acetone	ND	50.00	51.10	102	51.20	102	51-171	0	0-20	
Benzene	ND	50.00	50.41	101	48.98	98	80-120	3	0-20	
Bromobenzene	ND	50.00	51.24	102	50.34	101	54-150	2	0-20	
Bromochloromethane	ND	50.00	49.08	98	48.17	96	77-125	2	0-20	
Bromodichloromethane	ND	50.00	57.78	116	56.67	113	78-126	2	0-20	
Bromoform	ND	50.00	57.02	114	56.81	114	41-155	0	0-20	
Bromomethane	ND	50.00	34.41	69	35.39	71	30-152	3	0-20	
2-Butanone	ND	50.00	49.80	100	48.63	97	52-160	2	0-20	
n-Butylbenzene	ND	50.00	53.52	107	51.71	103	50-164	3	0-20	
sec-Butylbenzene	ND	50.00	53.28	107	51.71	103	49-157	3	0-20	
tert-Butylbenzene	ND	50.00	55.95	112	54.80	110	48-156	2	0-20	
Carbon Disulfide	ND	50.00	47.89	96	47.00	94	69-123	2	0-20	
Carbon Tetrachloride	ND	50.00	56.78	114	56.29	113	62-140	1	0-20	
Chlorobenzene	ND	50.00	50.90	102	50.11	100	52-148	2	0-20	
Chloroethane	ND	50.00	63.59	127	71.93	144	66-132	12	0-20	3
Chloroform	ND	50.00	53.83	108	52.56	105	80-122	2	0-20	
Chloromethane	ND	50.00	44.77	90	45.98	92	45-147	3	0-20	
2-Chlorotoluene	ND	50.00	55.99	112	54.97	110	51-153	2	0-20	
4-Chlorotoluene	ND	50.00	52.53	105	52.11	104	49-151	1	0-20	
Dibromochloromethane	ND	50.00	57.14	114	58.26	117	48-150	2	0-20	
1,2-Dibromo-3-Chloropropane	ND	50.00	55.04	110	53.35	107	46-142	3	0-20	
1,2-Dibromoethane	ND	50.00	51.12	102	49.53	99	51-147	3	0-20	
Dibromomethane	ND	50.00	52.83	106	51.41	103	80-123	3	0-20	
1,2-Dichlorobenzene	ND	50.00	51.09	102	50.59	101	51-147	1	0-20	
1,3-Dichlorobenzene	ND	50.00	51.65	103	50.90	102	49-151	1	0-20	
1,4-Dichlorobenzene	ND	50.00	48.61	97	47.71	95	51-147	2	0-20	
Dichlorodifluoromethane	ND	50.00	54.97	110	54.01	108	30-170	2	0-20	
1,1-Dichloroethane	ND	50.00	49.04	98	48.66	97	67-127	1	0-20	
1,2-Dichloroethane	ND	50.00	59.57	119	57.36	115	73-133	4	0-20	
1,1-Dichloroethene	15.41	50.00	76.20	122	73.41	116	68-128	4	0-20	
c-1,2-Dichloroethene	13.58	50.00	64.42	102	62.94	99	77-125	2	0-20	
t-1,2-Dichloroethene	1.687	50.00	53.74	104	52.24	101	71-131	3	0-20	
1,2-Dichloropropane	ND	50.00	48.12	96	46.12	92	80-120	4	0-20	
1,3-Dichloropropane	ND	50.00	49.32	99	48.90	98	50-146	1	0-20	
2,2-Dichloropropane	ND	50.00	57.34	115	56.18	112	30-170	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Parsons Government Services, Inc. 100 West Walnut Street				Date Received: Work Order:						05/29/14 4-05-2132
Pasadena CA 91124-0002				Prepa	ration:				E	EPA 5030C
				Metho	d.				-	EPA 8260B
Project: DFSP - Norwalk				Wetho	u.				Page	2 of 2
Parameter	<u>Sample</u> Conc.	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> <u>%Rec.</u>	MSD Conc.	<u>MSD</u> %Rec.	<u>%Rec. CL</u>	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
1,1-Dichloropropene	ND	50.00	52.44	105	51.88	104	75-129	1	0-20	
c-1,3-Dichloropropene	ND	50.00	52.53	105	51.49	103	80-124	2	0-20	
t-1,3-Dichloropropene	ND	50.00	60.18	120	59.87	120	47-143	1	0-20	
Ethylbenzene	ND	50.00	52.30	105	51.63	103	54-150	1	0-20	
2-Hexanone	ND	50.00	48.69	97	49.84	100	44-152	2	0-20	
Isopropylbenzene	ND	50.00	55.27	111	54.63	109	52-154	1	0-20	
p-Isopropyltoluene	ND	50.00	49.74	99	48.51	97	49-151	2	0-20	
Methylene Chloride	ND	50.00	48.02	96	48.19	96	73-127	0	0-20	
4-Methyl-2-Pentanone	ND	50.00	52.04	104	49.40	99	70-124	5	0-20	
Naphthalene	ND	50.00	50.91	102	49.97	100	39-153	2	0-20	
n-Propylbenzene	ND	50.00	53.97	108	53.08	106	49-157	2	0-20	
Styrene	ND	50.00	51.23	102	51.03	102	54-150	0	0-20	
1,1,1,2-Tetrachloroethane	ND	50.00	53.78	108	54.47	109	50-152	1	0-20	
1,1,2,2-Tetrachloroethane	ND	50.00	48.32	97	46.68	93	44-146	3	0-20	
Tetrachloroethene	1.021	50.00	40.32	79	39.52	77	34-170	2	0-20	
Toluene	ND	50.00	50.77	102	49.42	99	80-120	3	0-20	
1,2,3-Trichlorobenzene	ND	50.00	53.72	107	52.70	105	41-161	2	0-20	
1,2,4-Trichlorobenzene	ND	50.00	54.23	108	53.31	107	41-161	2	0-20	
1,1,1-Trichloroethane	ND	50.00	56.97	114	54.85	110	75-129	4	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50.00	58.59	117	57.01	114	54-156	3	0-20	
1,1,2-Trichloroethane	ND	50.00	48.11	96	47.37	95	51-147	2	0-20	
Trichloroethene	19.82	50.00	69.74	100	67.15	95	80-120	4	0-20	
Trichlorofluoromethane	ND	50.00	57.49	115	55.89	112	61-145	3	0-20	
1,2,3-Trichloropropane	ND	50.00	52.97	106	52.60	105	51-147	1	0-20	
1,2,4-Trimethylbenzene	ND	50.00	53.27	107	52.11	104	56-152	2	0-20	
1,3,5-Trimethylbenzene	ND	50.00	56.68	113	55.54	111	56-158	2	0-20	
Vinyl Acetate	ND	50.00	57.68	115	54.32	109	35-167	6	0-20	
Vinyl Chloride	ND	50.00	55.63	111	57.31	115	67-133	3	0-20	
p/m-Xylene	ND	100.0	107.8	108	106.8	107	51-153	1	0-20	
o-Xylene	ND	50.00	55.52	111	54.87	110	51-153	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	51.92	104	51.52	103	64-130	1	0-20	
Tert-Butyl Alcohol (TBA)	ND	250.0	258.1	103	252.7	101	76-124	2	0-20	
Diisopropyl Ether (DIPE)	ND	50.00	48.47	97	48.20	96	67-133	1	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	52.62	105	52.87	106	69-129	0	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	52.22	104	49.80	100	75-123	5	0-20	
Ethanol	ND	500.0	520.6	104	521.2	104	53-161	0	0-20	
							-			

RPD: Relative Percent Difference. CL: Control Limits

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alscience nvironmental aboratories, Inc.

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: DFSP - Norwalk		Page 1 of 1

Quality Control - LCS

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Nu	mber
099-14-001-14243	LCS	Aqueous	GC/MS JJ	05/29/14	05/29/14 13:15	140529L047	
Parameter	Spike Ac	dded <u>Conc.</u>	Recovered LCS	<u>%Rec. %R</u>	ec. CL MI	<u>E CL</u>	Qualifiers
Benzene	50.00	52.08	104	80-	120 73	3-127	
Carbon Tetrachloride	50.00	58.99	118	67-1	139 55	5-151	
Chlorobenzene	50.00	52.52	105	78-	120 71	-127	
1,2-Dibromoethane	50.00	51.77	104	80-	120 73	3-127	
1,2-Dichlorobenzene	50.00	52.50	105	63-	129 52	2-140	
1,2-Dichloroethane	50.00	60.97	122	70-	130 60)-140	
1,1-Dichloroethene	50.00	61.44	123	66-	126 56	6-136	
Ethylbenzene	50.00	53.79	108	80-	123 73	3-130	
Toluene	50.00	52.43	105	80-	120 73	3-127	
Trichloroethene	50.00	52.98	106	80-	122 73	3-129	
Vinyl Chloride	50.00	60.37	121	70-7	130 60)-140	
p/m-Xylene	100.0	111.3	111	75-7	123 67	7-131	
o-Xylene	50.00	57.38	115	74-′	122 66	6-130	
Methyl-t-Butyl Ether (MTBE)	50.00	52.55	105	69-1	129 59	9-139	
Tert-Butyl Alcohol (TBA)	250.0	260.2	104	69-1	129 59	9-139	
Diisopropyl Ether (DIPE)	50.00	49.81	100	68-	128 58	3-138	
Ethyl-t-Butyl Ether (ETBE)	50.00	52.31	105	63-1	135 51	-147	
Tert-Amyl-Methyl Ether (TAME)	50.00	50.76	102	67-	133 56	6-144	
Ethanol	500.0	573.9	115	42-	168 21	-189	

Total number of LCS compounds: 19 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Work Order: 14-05-2132

Method EPA 8260B **Extraction** EPA 5030C Chemist ID

316

Instrument GC/MS JJ

Analytical Location 2

Page 1 of 1



Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

alscience nvironmental aboratories, Inc.

Work Order: 14-05-2132

Page 1 of 1 Qualifiers Definition * See applicable analysis comment. Less than the indicated value. < Greater than the indicated value. > Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further 1 clarification. 2 Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. 3 Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control. Δ The MS/MSD RPD was out of control due to suspected matrix interference. The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. 5 6 Surrogate recovery below the acceptance limit. 7 Surrogate recovery above the acceptance limit. В Analyte was present in the associated method blank. ΒU Sample analyzed after holding time expired. ΒV Sample received after holding time expired. Е Concentration exceeds the calibration range. FT Sample was extracted past end of recommended max. holding time. HD The chromatographic pattern was inconsistent with the profile of the reference fuel standard. HDH The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected). HDL The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected). Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is J estimated. JA Analyte positively identified but quantitation is an estimate. LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). ME

Glossary of Terms and Qualifiers

- ND Parameter not detected at the indicated reporting limit.
- Q Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
- SG The sample extract was subjected to Silica Gel treatment prior to analysis.
- Х % Recovery and/or RPD out-of-range.
- Ζ Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

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Calscience Environmental Laboratories, Inc.	W	ORK ORDER #	: 14-05- —	Page 23 of 23
CLIENT: Parson	SAMPLE REC		M Coole DATE: <u>05</u>	er <u></u> of <u></u> /29 / 14
TEMPERATURE: Thermome	ter ID: SC2 (Criteria: 0.0 °C	– 6.0 °C, not frozen e	except sedimer	nt/tissue)
Temperature 2.70	'C - 0.3 °C (CF) = _2	<u>4</u> °C 🛛	Blank 🗆 🛛	Sample
□ Sample(s) outside temperat	ure criteria (PM/APM contac	ted by:)		
□ Sample(s) outside temperat	ure criteria but received on ic	ce/chilled on same day	of sampling.	
□ Received at ambient temp	erature, placed on ice fo	r transport by Cou	rier.	
Ambient Temperature: 🗆 Air	□ Filter		Che	ecked by: <u>15</u>
			n an an Andrea an Anna Anna Anna Anna Anna Anna Anna Anna Anna	ingi an Andri an Antonia An Indiana ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang Ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang ingi ang
		M Nict Drospert		akad by: 15
			LIN/A Che	
		D Not Present		скеа by: <u>///</u>
SAMPLE CONDITION:		Ye	es No	o N/A
Chain-Of-Custody (COC) docu	nent(s) received with sam	nples		
COC document(s) received cor	nplete	· · · · · · · · · · · · · · · · · C	, z	
Collection date/time, matrix, and	/or # of containers logged in ba	sed on sample labels.		и
□ No analysis requested. □ No	t relinquished. 🛛 🗆 No date/tir	ne relinquished.		
Sampler's name indicated on C	юс		3 0	
Sample container label(s) cons	istent with COC	E	í –	
Sample container(s) intact and	good condition	Æ	3 0	
Proper containers and sufficien	t volume for analyses requ	uested <	ם ב	
Analyses received within holdin	g time	٢	í 0	
Aqueous samples received	within 15-minute holding t	ime		
pH Residual Chlorine	Dissolved Sulfides Disso	Ived Oxygen		Ð
Proper preservation noted on C	OC or sample container or Volatiles analysis	£	3 🗆	
Volatile analysis container(s) fr	ee of headspace	Į	2 0	
Tedlar bag(s) free of condensa CONTAINER TYPE:	lion	[Ð
Solid:	□16ozCGJ □Sleeve (_) □EnCores®	□TerraCores	s [®] □
Aqueous: □VOA ⊉VOAh □V	OA na₂ □125AGB □125A	AGBh □125AGBp □	IAGB □1AG	Bna₂ □1AGBs
□500AGB □500AGJ □500A	.GJ s □250AGB □2500	CGB □250CGB s		3 na □500PB
□250PB □250PBn □125PB	□125PB znna □100PJ	□100PJ na₂ □	🗋	
Air: DTedlar [®] Canister Oth Container: C: Clear A: Amber P: Plastic Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ C	er:Trip Blank G: Glass J: Jar B: Bottle Z: Ziploc 93 na: NaOH p: H3PO4 s: H2SO4 u: U	K Lot#: Kesealable Bag E: Envel Itra-pure znna: ZnAc ₂ +NaOH	Labeled/Chec ope Review f: Filtered Scan	ked by: <u>778</u> ved by: <u>8%</u> med by: <u>%</u>

SOP T100_090 (07/31/13)



WORK ORDER NUMBER: 14-05-2132

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For Client: Parsons Government Services, Inc. Client Project Name: DFSP - Norwalk Attention: Mary Lucas 100 West Walnut Street Pasadena, CA 91124-0002

Ranjit F. J. Clarke

Approved for release on 06/02/2014 by: Ranjit Clarke Project Manager

ResultLink ▶

Email your PM >



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



7440 Lincoln Way, Garden Grove, CA 92841-1432 * TEL: (714) 895-5494 * FAX: (714) 894-7501 * www.calscience.com

NELAP ID: 03220CA | ACLASS DoD-ELAP ID: ADE-1864 (ISO/IEC 17025:2005) | CSDLAC ID: 10109 | SCAQMD ID: 93LA0830



Client Project Name: DFSP - Norwalk Work Order Number: 14-05-2132

1	Work Order Narrative	3
2	Sample Summary	4
3	Client Sample Data	5 5
4	Quality Control Sample Data. 4.1 MS/MSD. 4.2 LCS/LCSD.	17 17 19
5	Sample Analysis Summary	20
6	Glossary of Terms and Qualifiers.	21
7	Chain of Custody/Sample Receipt Form	22

Contents

Calscience nvironmental Laboratories, Inc.

Work Order: 14-05-2132

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/29/14. They were assigned to Work Order 14-05-2132.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Ċ	alscience nvironmental aboratories, Inc.	Sample Summary	
Client:	Parsons Government Services, Inc.	Work Order:	14-05-2132
	100 West Walnut Street	Project Name:	DFSP - Norwalk
	Pasadena, CA 91124-0002	PO Number:	
		Date/Time Received:	05/29/14 16:20
		Number of Containers:	9
Attn:	Mary Lucas		
Sample lo	dentification Lab Number	Collection Date and Time	Number of Matrix Containers

05/29/14 14:41

05/29/14 14:37

05/29/14 14:35

Surge Tank

After MX-21

Effluent

14-05-2132-1

14-05-2132-2

14-05-2132-3

Aqueous

Aqueous

Aqueous

3

3

3

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP - Norwalk		Page 1 of 12

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Surge Tank	14-05-2132-1-A	05/29/14 14:41	Aqueous	GC/MS JJ	05/29/14	05/29/14 23:54	140529L047
Comment(s): - Results were evaluated to	the MDL (DL), conc	entrations >=	to the MDL (DL) but < RL (LO	Q), if found, are o	qualified with a	"J" flag.
Parameter	Resul	<u>t</u>	<u>RL</u>	MDL	DF	<u>Q</u>	ualifiers
Acetone	ND		20	10	1.00		
Benzene	29		0.50	0.14	1.00		
Bromobenzene	ND		1.0	0.30	1.00		
Bromochloromethane	ND		1.0	0.48	1.00		
Bromodichloromethane	ND		1.0	0.21	1.00		
Bromoform	ND		1.0	0.50	1.00		
Bromomethane	ND		5.0	3.9	1.00		
2-Butanone	ND		10	2.2	1.00		
n-Butylbenzene	3.7		1.0	0.23	1.00		
sec-Butylbenzene	2.6		1.0	0.25	1.00		
tert-Butylbenzene	0.35		1.0	0.28	1.00	J	
Carbon Disulfide	ND		10	0.41	1.00		
Carbon Tetrachloride	ND		0.50	0.23	1.00		
Chlorobenzene	ND		1.0	0.17	1.00		
Chloroethane	ND		5.0	2.3	1.00		
Chloroform	ND		1.0	0.46	1.00		
Chloromethane	ND		5.0	1.8	1.00		
2-Chlorotoluene	ND		1.0	0.24	1.00		
4-Chlorotoluene	ND		1.0	0.13	1.00		
Dibromochloromethane	ND		1.0	0.25	1.00		
1,2-Dibromo-3-Chloropropane	ND		5.0	1.2	1.00		
1,2-Dibromoethane	ND		1.0	0.36	1.00		
Dibromomethane	ND		1.0	0.46	1.00		
1,2-Dichlorobenzene	ND		1.0	0.46	1.00		
1,3-Dichlorobenzene	ND		1.0	0.40	1.00		
1,4-Dichlorobenzene	ND		1.0	0.43	1.00		
Dichlorodifluoromethane	ND		1.0	0.46	1.00		
1,1-Dichloroethane	ND		1.0	0.28	1.00		
1,2-Dichloroethane	2.9		0.50	0.24	1.00		
1,1-Dichloroethene	ND		1.0	0.43	1.00		
c-1,2-Dichloroethene	ND		1.0	0.48	1.00		
t-1,2-Dichloroethene	ND		1.0	0.37	1.00		
1,2-Dichloropropane	ND		1.0	0.42	1.00		
1,3-Dichloropropane	ND		1.0	0.30	1.00		

Parsons Government Services, Inc.		Date Rec	eived:		05/29/14
100 West Walnut Street		Work Ord	ler:		14-05-2132
Pasadena CA 91124-0002		Preparati	on:		EPA 5030C
		Method:	••••		EPA 8260B
		Linite:			
Project: DFSP - Norwalk		Units.			Page 2 of 12
-					
Parameter	<u>Result</u>	<u>RL</u>	MDL	DF	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	30	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	8.5	1.0	0.58	1.00	
p-lsopropyltoluene	3.1	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	9.1	10	2.5	1.00	J
n-Propylbenzene	7.7	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	1.0	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1.2.3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	60	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	28	1.0	0.28	1.00	
Vinvl Acetate	ND	10	2.8	1.00	
Vinvl Chloride	ND	0.50	0.30	1.00	
p/m-Xvlene	180	0.50	0.30	1.00	
o-Xvlene	45	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	1.0	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.33	1.00	
		2.0	0.22	1.00	
		2.0	50	1.00	
LunariUl		100	50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>Calscience</i> <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	rtical Report		
Parsons Government Services, Inc.		Date Receive	d:	05/29/14
100 West Walnut Street		Work Order:		14-05-2132
Pasadena, CA 91124-0002		Preparation:		EPA 5030C
		Method:		EPA 8260B
		Units:		ug/L
Project: DFSP - Norwalk				Page 3 of 12
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	111	80-120		
Dibromofluoromethane	106	78-126		
1,2-Dichloroethane-d4	117	75-135		

80-120

99

Toluene-d8

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP - Norwalk		Page 4 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
After MX-21	14-05-2132-2-A	05/29/14 14:37	Aqueous	GC/MS JJ	05/29/14	05/29/14 23:23	140529L047
Comment(s): - Results were evaluated to	the MDL (DL), conc	entrations >= t	o the MDL (DL) but < RL (LOC	Q), if found, are o	qualified with a	"J" flag.
Parameter	Resul	<u>t</u>	RL	MDL	DF	<u>Q</u>	<u>ualifiers</u>
Acetone	ND	:	20	10	1.00		
Benzene	30	(0.50	0.14	1.00		
Bromobenzene	ND		1.0	0.30	1.00		
Bromochloromethane	ND		1.0	0.48	1.00		
Bromodichloromethane	ND		1.0	0.21	1.00		
Bromoform	ND		1.0	0.50	1.00		
Bromomethane	ND	4	5.0	3.9	1.00		
2-Butanone	ND		10	2.2	1.00		
n-Butylbenzene	2.4		1.0	0.23	1.00		
sec-Butylbenzene	2.4		1.0	0.25	1.00		
tert-Butylbenzene	0.29		1.0	0.28	1.00	J	
Carbon Disulfide	ND		10	0.41	1.00		
Carbon Tetrachloride	ND	(0.50	0.23	1.00		
Chlorobenzene	ND		1.0	0.17	1.00		
Chloroethane	ND	:	5.0	2.3	1.00		
Chloroform	ND		1.0	0.46	1.00		
Chloromethane	ND	:	5.0	1.8	1.00		
2-Chlorotoluene	ND		1.0	0.24	1.00		
4-Chlorotoluene	ND		1.0	0.13	1.00		
Dibromochloromethane	ND		1.0	0.25	1.00		
1,2-Dibromo-3-Chloropropane	ND	:	5.0	1.2	1.00		
1,2-Dibromoethane	ND		1.0	0.36	1.00		
Dibromomethane	ND		1.0	0.46	1.00		
1,2-Dichlorobenzene	ND		1.0	0.46	1.00		
1,3-Dichlorobenzene	ND		1.0	0.40	1.00		
1,4-Dichlorobenzene	ND		1.0	0.43	1.00		
Dichlorodifluoromethane	ND		1.0	0.46	1.00		
1,1-Dichloroethane	ND		1.0	0.28	1.00		
1,2-Dichloroethane	2.3		0.50	0.24	1.00		
1,1-Dichloroethene	ND		1.0	0.43	1.00		
c-1,2-Dichloroethene	ND		1.0	0.48	1.00		
t-1,2-Dichloroethene	ND		1.0	0.37	1.00		
1,2-Dichloropropane	ND		1.0	0.42	1.00		
1,3-Dichloropropane	ND		1.0	0.30	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Parsons Government Services. Inc.		Date Rec	eived:		05/29/14
100 West Walnut Street		Work Orc	ler:		14-05-2132
Pasadana CA 91124-0002		Prenarati	on:		EPA 5030C
rasadena, CA 91124-0002		Mothod:	011.		EDA 8260B
		Units:			ug/L
Project: DFSP - Norwalk					Page 5 of 12
Parameter	Result	<u>RL</u>	MDL	DF	Qualifiers
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	26	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	7.6	1.0	0.58	1.00	
p-Isopropyltoluene	2.8	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	8.5	10	2.5	1.00	J
n-Propylbenzene	5.6	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	0.96	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	56	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	24	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	150	0.50	0.30	1.00	
o-Xylene	44	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	1.0	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	5.4	10	4.6	1.00	J
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	
Ethanol	ND	100	50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>Calscience</i> <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	rtical Report	
Parsons Government Services, Inc.		Date Received:	05/29/14
100 West Walnut Street		Work Order:	14-05-2132
Pasadena, CA 91124-0002		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: DFSP - Norwalk			Page 6 of 12
Surrogate	<u>Rec. (%)</u>	Control Limits Qualifiers	
1,4-Bromofluorobenzene	111	80-120	
Dibromofluoromethane	107	78-126	
1,2-Dichloroethane-d4	119	75-135	

80-120

100

Toluene-d8

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP - Norwalk		Page 7 of 12

Project: DFSP - Norwalk

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	14-05-2132-3-A	05/29/14 14:35	Aqueous	GC/MS JJ	05/29/14	05/29/14 22:53	140529L047
Comment(s): - Results were evaluated to	the MDL (DL), conce	entrations >=	to the MDL (DI	_) but < RL (LC	Q), if found, are	qualified with a	ı "J" flag.
Parameter	Result	<u>t</u>	<u>RL</u>	MDL	DF	<u>c</u>	Qualifiers
Acetone	ND		20	10	1.00		
Benzene	ND		0.50	0.14	1.00		
Bromobenzene	ND		1.0	0.30	1.00		
Bromochloromethane	ND		1.0	0.48	1.00		
Bromodichloromethane	ND		1.0	0.21	1.00		
Bromoform	ND		1.0	0.50	1.00		
Bromomethane	ND		5.0	3.9	1.00		
2-Butanone	ND		10	2.2	1.00		
n-Butylbenzene	ND		1.0	0.23	1.00		
sec-Butylbenzene	ND		1.0	0.25	1.00		
tert-Butylbenzene	ND		1.0	0.28	1.00		
Carbon Disulfide	ND		10	0.41	1.00		
Carbon Tetrachloride	ND		0.50	0.23	1.00		
Chlorobenzene	ND		1.0	0.17	1.00		
Chloroethane	ND		5.0	2.3	1.00		
Chloroform	ND		1.0	0.46	1.00		
Chloromethane	ND		5.0	1.8	1.00		
2-Chlorotoluene	ND		1.0	0.24	1.00		
4-Chlorotoluene	ND		1.0	0.13	1.00		
Dibromochloromethane	ND		1.0	0.25	1.00		
1,2-Dibromo-3-Chloropropane	ND		5.0	1.2	1.00		
1,2-Dibromoethane	ND		1.0	0.36	1.00		
Dibromomethane	ND		1.0	0.46	1.00		
1,2-Dichlorobenzene	ND		1.0	0.46	1.00		
1,3-Dichlorobenzene	ND		1.0	0.40	1.00		
1,4-Dichlorobenzene	ND		1.0	0.43	1.00		
Dichlorodifluoromethane	ND		1.0	0.46	1.00		
1,1-Dichloroethane	ND		1.0	0.28	1.00		
1,2-Dichloroethane	ND		0.50	0.24	1.00		
1,1-Dichloroethene	ND		1.0	0.43	1.00		
c-1,2-Dichloroethene	ND		1.0	0.48	1.00		
t-1,2-Dichloroethene	ND		1.0	0.37	1.00		
1,2-Dichloropropane	ND		1.0	0.42	1.00		
1,3-Dichloropropane	ND		1.0	0.30	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Return to Contents



Parsons Government Services, Inc.		Date Rec	eived:		05/29/14	
		Work Ord	14-05-213			
Pasadona CA 01124 0002		Prenaration				
Fasadella, CA 91124-0002		Mathadi	011.			
		lvietnou.				
		Units:			ug/L	
Project: DFSP - Norwalk					Page 8 of 12	
Parameter	Result	<u>RL</u>	MDL	DF	Qualifiers	
2,2-Dichloropropane	ND	1.0	0.36	1.00		
1,1-Dichloropropene	ND	1.0	0.46	1.00		
c-1,3-Dichloropropene	ND	0.50	0.25	1.00		
t-1,3-Dichloropropene	ND	0.50	0.25	1.00		
Ethylbenzene	ND	0.50	0.14	1.00		
2-Hexanone	ND	10	2.1	1.00		
Isopropylbenzene	ND	1.0	0.58	1.00		
p-Isopropyltoluene	ND	1.0	0.16	1.00		
Methylene Chloride	ND	5.0	0.64	1.00		
4-Methyl-2-Pentanone	ND	10	4.4	1.00		
Naphthalene	ND	10	2.5	1.00		
n-Propylbenzene	ND	1.0	0.17	1.00		
Styrene	ND	1.0	0.17	1.00		
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00		
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00		
Tetrachloroethene	ND	1.0	0.39	1.00		
Toluene	ND	0.50	0.24	1.00		
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00		
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00		
1,1,1-Trichloroethane	ND	1.0	0.30	1.00		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00		
1,1,2-Trichloroethane	ND	1.0	0.38	1.00		
Trichloroethene	ND	1.0	0.37	1.00		
Trichlorofluoromethane	ND	10	1.7	1.00		
1,2,3-Trichloropropane	ND	5.0	0.64	1.00		
1,2,4-Trimethylbenzene	ND	1.0	0.36	1.00		
1,3,5-Trimethylbenzene	ND	1.0	0.28	1.00		
Vinyl Acetate	ND	10	2.8	1.00		
Vinyl Chloride	ND	0.50	0.30	1.00		
p/m-Xylene	ND	0.50	0.30	1.00		
o-Xylene	ND	0.50	0.23	1.00		
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1.00		
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00		
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00		
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00		
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00		
Ethanol	ND	100	50	1.00		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>L</i> alscience <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	Analytical Report				
Parsons Government Services, Inc.		Date Receive	ed:	05/29/14		
100 West Walnut Street		Work Order:		14-05-2132		
Pasadena, CA 91124-0002		Preparation:	EPA 5030C			
		Method:		EPA 8260B		
		Units:		ug/L		
Project: DFSP - Norwalk				Page 9 of 12		
Surrogate	<u>Rec. (%)</u>	Control Limits	Qualifiers			
1,4-Bromofluorobenzene	106	80-120				
Dibromofluoromethane	105	78-126				
1,2-Dichloroethane-d4	119	75-135				

80-120

100

Page 13 of 23

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Toluene-d8

Client Sample Number

aboratories, Inc.	
overnment Services, Inc.	Date Received:

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: DFSP - Norwalk		Page 10 of 12

Matrix

Instrument

<u>MDL</u>

0.14

0.30

0.48

10

Date Prepared

05/29/14

DF

1.00

1.00

1.00

1.00

Date/Time Analyzed

05/29/14 14:51

Date/Time Collected

Method Blank 099-14-001-14243 GC/MS JJ N/A Aqueous Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag. Parameter Result <u>RL</u> ND 20 Acetone ND Benzene 0.50 Bromobenzene ND 1.0 Bromochloromethane ND 1.0 ND Bromodichloromethane 1.0

Lab Sample Number

Bromodichloromethane	ND	1.0	0.21	1.00	
Bromoform	ND	1.0	0.50	1.00	
Bromomethane	ND	5.0	3.9	1.00	
2-Butanone	ND	10	2.2	1.00	
n-Butylbenzene	ND	1.0	0.23	1.00	
sec-Butylbenzene	ND	1.0	0.25	1.00	
tert-Butylbenzene	ND	1.0	0.28	1.00	
Carbon Disulfide	ND	10	0.41	1.00	
Carbon Tetrachloride	ND	0.50	0.23	1.00	
Chlorobenzene	ND	1.0	0.17	1.00	
Chloroethane	ND	5.0	2.3	1.00	
Chloroform	ND	1.0	0.46	1.00	
Chloromethane	ND	5.0	1.8	1.00	
2-Chlorotoluene	ND	1.0	0.24	1.00	
4-Chlorotoluene	ND	1.0	0.13	1.00	
Dibromochloromethane	ND	1.0	0.25	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.2	1.00	
1,2-Dibromoethane	ND	1.0	0.36	1.00	
Dibromomethane	ND	1.0	0.46	1.00	
1,2-Dichlorobenzene	ND	1.0	0.46	1.00	
1,3-Dichlorobenzene	ND	1.0	0.40	1.00	
1,4-Dichlorobenzene	ND	1.0	0.43	1.00	
Dichlorodifluoromethane	ND	1.0	0.46	1.00	
1,1-Dichloroethane	ND	1.0	0.28	1.00	
1,2-Dichloroethane	ND	0.50	0.24	1.00	
1,1-Dichloroethene	ND	1.0	0.43	1.00	
c-1,2-Dichloroethene	ND	1.0	0.48	1.00	
t-1,2-Dichloroethene	ND	1.0	0.37	1.00	
1,2-Dichloropropane	ND	1.0	0.42	1.00	
1,3-Dichloropropane	ND	1.0	0.30	1.00	

QC Batch ID

140529L047

Return to Contents

Qualifiers

RL: Reporting Limit. DF: Dilution Factor.

MDL: Method Detection Limit.
Parsons Government Services, Inc.		Date Rec	eived:		05/29/14
100 West Walnut Street		Work Ord	ler:		14-05-2132
Pasadena CA 91124-0002		Preparatio	on:		EPA 5030C
		Method:			EPA 8260B
		Linite:			
		Units.			uy/∟
Project: DFSP - Norwalk					Page 11 of 12
Parameter	Result	<u>RL</u>	MDL	DF	<u>Qualifiers</u>
2,2-Dichloropropane	ND	1.0	0.36	1.00	
1,1-Dichloropropene	ND	1.0	0.46	1.00	
c-1,3-Dichloropropene	ND	0.50	0.25	1.00	
t-1,3-Dichloropropene	ND	0.50	0.25	1.00	
Ethylbenzene	ND	0.50	0.14	1.00	
2-Hexanone	ND	10	2.1	1.00	
Isopropylbenzene	ND	1.0	0.58	1.00	
p-Isopropyltoluene	ND	1.0	0.16	1.00	
Methylene Chloride	ND	5.0	0.64	1.00	
4-Methyl-2-Pentanone	ND	10	4.4	1.00	
Naphthalene	ND	10	2.5	1.00	
n-Propylbenzene	ND	1.0	0.17	1.00	
Styrene	ND	1.0	0.17	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1.00	
Tetrachloroethene	ND	1.0	0.39	1.00	
Toluene	ND	0.50	0.24	1.00	
1,2,3-Trichlorobenzene	ND	1.0	0.51	1.00	
1,2,4-Trichlorobenzene	ND	1.0	0.50	1.00	
1,1,1-Trichloroethane	ND	1.0	0.30	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1.00	
1,1,2-Trichloroethane	ND	1.0	0.38	1.00	
Trichloroethene	ND	1.0	0.37	1.00	
Trichlorofluoromethane	ND	10	1.7	1.00	
1,2,3-Trichloropropane	ND	5.0	0.64	1.00	
1,2,4-Trimethylbenzene	ND	1.0	0.36	1.00	
1,3,5-Trimethylbenzene	ND	1.0	0.28	1.00	
Vinyl Acetate	ND	10	2.8	1.00	
Vinyl Chloride	ND	0.50	0.30	1.00	
p/m-Xylene	ND	0.50	0.30	1.00	
o-Xylene	ND	0.50	0.23	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	4.6	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	0.33	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1.00	
Ethanol	ND	100	50	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

<i>Calscience</i> <i>nvironmental</i> <i>aboratories, Inc.</i>	Analy	rtical Report		
Parsons Government Services, Inc.		Date Receive	ed:	05/29/14
100 West Walnut Street		Work Order:		14-05-2132
Pasadena, CA 91124-0002		Preparation:		EPA 5030C
		Method:		EPA 8260B
		Units:		ug/L
Project: DFSP - Norwalk				Page 12 of 12
Surrogate	<u>Rec. (%)</u>	Control Limits	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	105	80-120		
Dibromofluoromethane	100	78-126		
1,2-Dichloroethane-d4	108	75-135		

80-120

100

Toluene-d8

Return to Contents



Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: DFSP - Norwalk		Page 1 of 2

Project: DFSP - Norwalk

Quality Control Sample ID	Туре		Matrix	Ir	nstrument	Date Prepared	Date Ana	lyzed	MS/MSD Bat	ch Number
14-05-2041-1	Sample		Aqueous	G	SC/MS JJ	05/29/14	05/29/14	15:21	140529S005	
14-05-2041-1	Matrix Spike		Aqueous	G	SC/MS JJ	05/29/14	05/29/14	15:51	140529S005	
14-05-2041-1	Matrix Spike	Duplicate	Aqueous	G	SC/MS JJ	05/29/14	05/29/14	16:22	140529S005	
Parameter	<u>Sample</u> <u>Conc.</u>	<u>Spike</u> Added	MS Conc.	<u>MS</u> %Rec.	MSD Conc.	<u>MSD</u> <u>%Rec.</u>	%Rec. CL	<u>RPD</u>	RPD CL	Qualifiers
Acetone	ND	50.00	51.10	102	51.20	102	51-171	0	0-20	
Benzene	ND	50.00	50.41	101	48.98	98	80-120	3	0-20	
Bromobenzene	ND	50.00	51.24	102	50.34	101	54-150	2	0-20	
Bromochloromethane	ND	50.00	49.08	98	48.17	96	77-125	2	0-20	
Bromodichloromethane	ND	50.00	57.78	116	56.67	113	78-126	2	0-20	
Bromoform	ND	50.00	57.02	114	56.81	114	41-155	0	0-20	
Bromomethane	ND	50.00	34.41	69	35.39	71	30-152	3	0-20	
2-Butanone	ND	50.00	49.80	100	48.63	97	52-160	2	0-20	
n-Butylbenzene	ND	50.00	53.52	107	51.71	103	50-164	3	0-20	
sec-Butylbenzene	ND	50.00	53.28	107	51.71	103	49-157	3	0-20	
tert-Butylbenzene	ND	50.00	55.95	112	54.80	110	48-156	2	0-20	
Carbon Disulfide	ND	50.00	47.89	96	47.00	94	69-123	2	0-20	
Carbon Tetrachloride	ND	50.00	56.78	114	56.29	113	62-140	1	0-20	
Chlorobenzene	ND	50.00	50.90	102	50.11	100	52-148	2	0-20	
Chloroethane	ND	50.00	63.59	127	71.93	144	66-132	12	0-20	3
Chloroform	ND	50.00	53.83	108	52.56	105	80-122	2	0-20	
Chloromethane	ND	50.00	44.77	90	45.98	92	45-147	3	0-20	
2-Chlorotoluene	ND	50.00	55.99	112	54.97	110	51-153	2	0-20	
4-Chlorotoluene	ND	50.00	52.53	105	52.11	104	49-151	1	0-20	
Dibromochloromethane	ND	50.00	57.14	114	58.26	117	48-150	2	0-20	
1,2-Dibromo-3-Chloropropane	ND	50.00	55.04	110	53.35	107	46-142	3	0-20	
1,2-Dibromoethane	ND	50.00	51.12	102	49.53	99	51-147	3	0-20	
Dibromomethane	ND	50.00	52.83	106	51.41	103	80-123	3	0-20	
1,2-Dichlorobenzene	ND	50.00	51.09	102	50.59	101	51-147	1	0-20	
1,3-Dichlorobenzene	ND	50.00	51.65	103	50.90	102	49-151	1	0-20	
1,4-Dichlorobenzene	ND	50.00	48.61	97	47.71	95	51-147	2	0-20	
Dichlorodifluoromethane	ND	50.00	54.97	110	54.01	108	30-170	2	0-20	
1,1-Dichloroethane	ND	50.00	49.04	98	48.66	97	67-127	1	0-20	
1,2-Dichloroethane	ND	50.00	59.57	119	57.36	115	73-133	4	0-20	
1,1-Dichloroethene	15.41	50.00	76.20	122	73.41	116	68-128	4	0-20	
c-1,2-Dichloroethene	13.58	50.00	64.42	102	62.94	99	77-125	2	0-20	
t-1,2-Dichloroethene	1.687	50.00	53.74	104	52.24	101	71-131	3	0-20	
1,2-Dichloropropane	ND	50.00	48.12	96	46.12	92	80-120	4	0-20	
1,3-Dichloropropane	ND	50.00	49.32	99	48.90	98	50-146	1	0-20	
2,2-Dichloropropane	ND	50.00	57.34	115	56.18	112	30-170	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Parsons Government Services,	Inc.			Date F	Received:					05/29/14
100 West Walnut Street				Work	Order:					4-05-2132
Pasadena, CA 91124-0002				Prepa	ration:				E	EPA 5030C
				Metho	q.				F	PA 8260B
Project: DFSP - Norwalk				Would					Page	2 of 2
Parameter	<u>Sample</u> Conc.	<u>Spike</u> Added	<u>MS</u> Conc.	<u>MS</u> %Rec.	MSD Conc.	<u>MSD</u> <u>%Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	50.00	52.44	105	51.88	104	75-129	1	0-20	
c-1,3-Dichloropropene	ND	50.00	52.53	105	51.49	103	80-124	2	0-20	
t-1,3-Dichloropropene	ND	50.00	60.18	120	59.87	120	47-143	1	0-20	
Ethylbenzene	ND	50.00	52.30	105	51.63	103	54-150	1	0-20	
2-Hexanone	ND	50.00	48.69	97	49.84	100	44-152	2	0-20	
Isopropylbenzene	ND	50.00	55.27	111	54.63	109	52-154	1	0-20	
p-Isopropyltoluene	ND	50.00	49.74	99	48.51	97	49-151	2	0-20	
Methylene Chloride	ND	50.00	48.02	96	48.19	96	73-127	0	0-20	
4-Methyl-2-Pentanone	ND	50.00	52.04	104	49.40	99	70-124	5	0-20	
Naphthalene	ND	50.00	50.91	102	49.97	100	39-153	2	0-20	
n-Propylbenzene	ND	50.00	53.97	108	53.08	106	49-157	2	0-20	
Styrene	ND	50.00	51.23	102	51.03	102	54-150	0	0-20	
1,1,1,2-Tetrachloroethane	ND	50.00	53.78	108	54.47	109	50-152	1	0-20	
1,1,2,2-Tetrachloroethane	ND	50.00	48.32	97	46.68	93	44-146	3	0-20	
Tetrachloroethene	1.021	50.00	40.32	79	39.52	77	34-170	2	0-20	
Toluene	ND	50.00	50.77	102	49.42	99	80-120	3	0-20	
1,2,3-Trichlorobenzene	ND	50.00	53.72	107	52.70	105	41-161	2	0-20	
1,2,4-Trichlorobenzene	ND	50.00	54.23	108	53.31	107	41-161	2	0-20	
1,1,1-Trichloroethane	ND	50.00	56.97	114	54.85	110	75-129	4	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50.00	58.59	117	57.01	114	54-156	3	0-20	
1,1,2-Trichloroethane	ND	50.00	48.11	96	47.37	95	51-147	2	0-20	
Trichloroethene	19.82	50.00	69.74	100	67.15	95	80-120	4	0-20	
Trichlorofluoromethane	ND	50.00	57.49	115	55.89	112	61-145	3	0-20	
1,2,3-Trichloropropane	ND	50.00	52.97	106	52.60	105	51-147	1	0-20	
1,2,4-Trimethylbenzene	ND	50.00	53.27	107	52.11	104	56-152	2	0-20	
1,3,5-Trimethylbenzene	ND	50.00	56.68	113	55.54	111	56-158	2	0-20	
Vinyl Acetate	ND	50.00	57.68	115	54.32	109	35-167	6	0-20	
Vinyl Chloride	ND	50.00	55.63	111	57.31	115	67-133	3	0-20	
p/m-Xylene	ND	100.0	107.8	108	106.8	107	51-153	1	0-20	
o-Xylene	ND	50.00	55.52	111	54.87	110	51-153	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	51.92	104	51.52	103	64-130	1	0-20	
Tert-Butyl Alcohol (TBA)	ND	250.0	258.1	103	252.7	101	76-124	2	0-20	
Diisopropyl Ether (DIPE)	ND	50.00	48.47	97	48.20	96	67-133	1	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	52.62	105	52.87	106	69-129	0	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	52.22	104	49.80	100	75-123	5	0-20	
Ethanol	ND	500.0	520.6	104	521.2	104	53-161	0	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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alscience nvironmental aboratories, Inc.

Parsons Government Services, Inc.	Date Received:	05/29/14
100 West Walnut Street	Work Order:	14-05-2132
Pasadena, CA 91124-0002	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: DFSP - Norwalk		Page 1 of 1

Quality Control - LCS

Quality Control Sample ID	Туре	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Nu	ımber
099-14-001-14243	LCS	Aqueous	GC/MS JJ	05/29/14	05/29/14 13:15	140529L047	
Parameter	Spike Ac	ded <u>Conc.</u>	Recovered LCS	<u>%Rec. %R</u>	ec. CL M	<u>E CL</u>	Qualifiers
Benzene	50.00	52.08	104	80-1	120 73	3-127	
Carbon Tetrachloride	50.00	58.99	118	67-1	139 55	5-151	
Chlorobenzene	50.00	52.52	105	78-2	120 71	-127	
1,2-Dibromoethane	50.00	51.77	104	80-1	120 73	3-127	
1,2-Dichlorobenzene	50.00	52.50	105	63-7	129 52	2-140	
1,2-Dichloroethane	50.00	60.97	122	70-2	130 60)-140	
1,1-Dichloroethene	50.00	61.44	123	66-1	126 56	6-136	
Ethylbenzene	50.00	53.79	108	80-1	123 73	3-130	
Toluene	50.00	52.43	105	80-1	120 73	3-127	
Trichloroethene	50.00	52.98	106	80-1	122 73	3-129	
Vinyl Chloride	50.00	60.37	121	70-1	130 60)-140	
p/m-Xylene	100.0	111.3	111	75-1	123 67	7-131	
o-Xylene	50.00	57.38	115	74-′	122 66	6-130	
Methyl-t-Butyl Ether (MTBE)	50.00	52.55	105	69-1	129 59	9-139	
Tert-Butyl Alcohol (TBA)	250.0	260.2	104	69-1	129 59	9-139	
Diisopropyl Ether (DIPE)	50.00	49.81	100	68-1	128 58	3-138	
Ethyl-t-Butyl Ether (ETBE)	50.00	52.31	105	63-1	135 51	-147	
Tert-Amyl-Methyl Ether (TAME)	50.00	50.76	102	67-1	133 56	6-144	
Ethanol	500.0	573.9	115	42-2	168 21	-189	

Total number of LCS compounds: 19 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Work Order: 14-05-2132

Method EPA 8260B **Extraction** EPA 5030C Chemist ID

316

Instrument GC/MS JJ

Analytical Location 2

Page 1 of 1



Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

alscience nvironmental aboratories, Inc.

Work Order: 14-05-2132

Page 1 of 1 Qualifiers Definition * See applicable analysis comment. Less than the indicated value. < Greater than the indicated value. > Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further 1 clarification. 2 Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. 3 Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control. Δ The MS/MSD RPD was out of control due to suspected matrix interference. The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. 5 6 Surrogate recovery below the acceptance limit. 7 Surrogate recovery above the acceptance limit. В Analyte was present in the associated method blank. ΒU Sample analyzed after holding time expired. ΒV Sample received after holding time expired. Е Concentration exceeds the calibration range. FT Sample was extracted past end of recommended max. holding time. HD The chromatographic pattern was inconsistent with the profile of the reference fuel standard. HDH The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected). HDL The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected). Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is J estimated. JA Analyte positively identified but quantitation is an estimate. LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). ME

Glossary of Terms and Qualifiers

- ND Parameter not detected at the indicated reporting limit.
- Q Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
- SG The sample extract was subjected to Silica Gel treatment prior to analysis.
- Х % Recovery and/or RPD out-of-range.
- Ζ Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

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M.

Calscience	W	ORK ORDER	#: 14-(Pag 05-2	e 23 of 23
	SAMPLE REC	EIPT FOF	RM c	ooler _	<u>\</u> of
CLIENT: <u>Parson</u>	<u>></u>		DATE:	05/24	//14
TEMPERATURE: Thermometer	er ID: SC2 (Criteria: 0.0 °C	– 6.0 °C, not froze	n except se	diment/tiss	sue)
Temperature 2.7 °(C - 0.3°C (CF) = _2	<u>- 4</u> °C	Blank	□ Sam	ole
Sample(s) outside temperatur	re criteria (PM/APM contac	ed by:)			
□ Sample(s) outside temperatur	e criteria but received on ic	e/chilled on same d	ay of sampli	ing.	
Received at ambient temper	rature, placed on ice fo	r transport by Co	ourier.		
Ambient Temperature: 🗆 Air	□ Filter			Checked	by: <u>15</u>
CUSTODY SEALS INTACT.			n harren erren herre Anne anderen erren erren erren erren erren erren erren erren erren erren erren erren erren erren erren erren er Anne erren erren erren erren erren erren erren erren erren erren erren erren erren erren erren erren erren erren	terreterreterreterreterreterreterreter	
	No (Not Intact)	M Not Present	□ N/A	Checked	by: 15
\Box Sample \Box	\square No (Not Intact)	Not Present		Checked	by: 779
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SAMPLE CONDITION:			Yes	No	N/A
Chain-Of-Custody (COC) docum	nent(s) received with sam	ples	-E		
COC document(s) received com	plete		. 🗆		
Collection date/time, matrix, and/o	or # of containers logged in ba	sed on sample labels.			
Sampler's name indicated on CC		ne reiinquisneu.	A		
Sample container label(s) consis	tent with COC		2 P		
Sample container(s) intact and o	lood condition		P		
Proper containers and sufficient	volume for analyses req	uested	4		
Analyses received within holding	ı time		1		
Aqueous samples received w	, rithin 15-minute holding t	ime			
□ pH □ Residual Chlorine □ I	Dissolved Sulfides 🛛 Disso	ved Oxygen			Ø
Proper preservation noted on CC	DC or sample container		A		
Unpreserved vials received for	Volatiles analysis				
Volatile analysis container(s) fre	e of headspace				
Tedlar bag(s) free of condensation CONTAINER TYPE:	on		. 🗆		,P
Solid:	□16ozCGJ □Sleeve (_)	s [®] □Terra	Cores [®] 🗆]
Aqueous: OVOA QVOAh OVO)A na₂ □125AGB □125A	GB h □125AGB p		∃1AGB na ₂	□1AGB s
□500AGB □500AGJ □500AG	GJ s □250AGB □2500	CGB □250CGB s	□1PB [∃1PB na	□500PB
□250PB □250PBn □125PB	□125PB znna □100PJ	□100PJ na ₂ □		[]
Air: DTedlar [®] DCanister Other Container: C: Clear A: Amber P: Plastic G Preservative: h: HCL n: HNO ₃ na ₂ :Na ₂ S ₂ O ₃	r: □ Trip Blank :: Glass J: Jar B: Bottle Z: Ziploc na: NaOH p: H ₃ PO4 s: H ₂ SO4 u: U	Lot#: /Resealable Bag E: En Itra-pure znna: ZnAc ₂ +Na	_ Labeled/ velope R OH f: Filtered	Checked b leviewed b Scanned b	y: <u>778</u> y: <u>8%</u> y: <u>8%</u>

SOP T100_090 (07/31/13)

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