SECOND QUARTER 2013 REMEDIATION PROGRESS REPORT

DEFENSE FUEL SUPPORT POINT NORWALK 15306 NORWALK BOULEVARD NORWALK, CALIFORNIA

Prepared for:

Defense Logistics Agency Energy 8725 John J. Kingman Road Fort Belvoir, Virginia 22060-6222

August 15, 2013

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ACRONYMS

AST aboveground storage tank

BTEX benzene, toluene, ethylbenzene, total xylenes

DFSP Defense Fuel Support Point
DLA Defense Logistics Agency

EPA Environmental Protection Agency

GAC granular activated carbon GWE groundwater extraction

JP jet propellant

MTBE methyl tertiary butyl ether

NPDES National Pollutant Discharge Elimination System

OM&M operation, maintenance, and monitoring

PID photoionization detector

RWQCB Regional Water Quality Control Board

SCAQMD South Coast Air Quality Management District

Site DFSP Norwalk facility
TBA Tertiary butyl alcohol

TPH total petroleum hydrocarbons

TPHg total petroleum hydrocarbons quantified as gasoline
TPHd total petroleum hydrocarbons quantified as diesel
USEPA United States Environmental Protection Agency

SVE soil vapor extraction

VOCs volatile organic compounds

1. INTRODUCTION

This remediation progress report was prepared by Parsons on behalf of the Defense Logistics Agency (DLA) Energy for the Defense Fuel Support Point (DFSP) Norwalk facility, located at 15306 Norwalk Boulevard, in the City of Norwalk, California as shown in Figure 1. This report will summarize remediation activities performed at the site during the second quarter 2013 reporting period.

This progress report is submitted pursuant to a request from the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) in its letter dated May 3, 2013¹. This report describes remediation systems present at the site, and for the period of April through June 2013, this report summarizes:

- Documentation of operation, maintenance, and monitoring (OM&M) of remediation systems performed by Parsons field personnel;
- A description of remedial activities and progress achieved through OM&M activities; and
- A remediation system evaluation.

2. REMEDIATION SYSTEMS

Soil and groundwater at the areas of concern are impacted with hydrocarbons mainly consisting of jet propellant (JP)-5, diesel, benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA). MTBE and TBA are groundwater impacts that have resulted from 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 offsite migration and contaminant mass containment, and ultimately achieve site closure within a reasonable timeframe.

The impacted DLA Energy areas consist of the north-central former tank farm, the north-eastern property boundary and offsite under Holifield Park areas, the north-west corner of the site, and the former water tank and truck fueling areas.

The remediation systems consist of soil vapor extraction (SVE), groundwater extraction (GWE), treatment of extracted soil vapors and groundwater, biosparging, free product extraction via vacuum-truck recovery, and absorbent sock installations for passive recovery of free product.

The SVE well network for hydrocarbon extraction from vadose zone subsurface impacts is installed in the following areas as illustrated on Figure 2: the central tank farm area, northwestern AST 80001 area, AST 80006 area, central AST 80008 area, AST 55004 area, north-east area, water tank area, and truck fueling area. SVE is performed using a blower to

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¹ RWQCB, 2013. Letter to Mr. John R. O'Donovan, DLA Installation Support – Energy; Requirement to Submit Progress Report for the Defense Fuel Support Point Norwalk, 15306 Norwalk Boulevard, Norwalk, California (SCP NO. 0286A, Site ID NO. 16638). May 3.

remove soil vapors from the subsurface. The extracted vapors are conveyed to a knock-out tank that separates entrained moisture from the soil vapors. Accumulated moisture in the knock-out tank is treated by the main groundwater treatment system described below. The soil vapors are then treated through four granular activated carbon (GAC) vessels where volatile organic compounds (VOCs) are absorbed onto the GAC beds and entrapped in the vessels. Operation of the SVE and treatment system is conducted in accordance with Permit to Operate No. G6961 A/N 501179 issued by the South Coast Air Quality Management District (SCAQMD).

The GWE wells for hydrocarbon extraction from dissolved-phase subsurface impacts are installed in the northwestern area, central tank farm area, and north eastern boundary area. The GWE systems consists of five vertical extraction wells of which four are 6-inch diameter wells and one is a 4-inch diameter well; and exsitu-treatment system consisting of a surge tank; pump; three bag filter vessels; two MYCELX vessels; three GAC vessels; two ion exchange vessels; discharge flow meter; and level/pump control instrumentation. Operation of the GWE and treatment system is conducted in accordance with a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CAG994004, CI No. 7585).

The biosparge wells for hydrocarbon removal from dissolved-phase subsurface impacts are located from areas throughout the tank farm area and eastern boundary area. The biosparging wells are tied into the former total fluids extraction system. Under the optimized remedial system, biosparging is currently offline.

Vacuum-truck free product recovery is conducted on an as-needed basis at wells where measurable product thickness is greater than 1 foot. Wells are gauged bimonthly and vacuum-truck recovery is conducted when necessary. Absorbent socks are installed in wells that have historically contained measureable free product and changed-out as needed.

A summary of remediation wells throughout the site is presented in Table 1. Table 1 includes well identifications, well construction details, well use, and operational status at the end of the second quarter 2013. The remediation system layout is presented in Figure 2.

3. OPERATIONS, MAINTENCE, AND MONITORING

During this reporting period, OM&M of the remediation systems included the following tasks:

- Performed weekly maintenance and monitoring of the SVE and GWE wells, and the SVE and GWE treatment systems;
- Collected and analyzed system influent vapor and groundwater samples;
- Performed routine cleanout of the sump, tank, and associated lines as needed;
- Changed out MYCELX (MX-7) and bag filters (No. 1, 2, and 3);
- Conducted comprehensive characterization of current groundwater influent including detailed analysis of throughput capacity;
- Designed and installed second bed (15 cubic feet capacity) of arsenic ion removal resin; and
- Replaced GAC in the GWE system with acid-washed coal-based carbon (formerly GAC used was regenerated virgin coconut carbon). Selection of this alternative carbon source is

intended to marginally lower pH in the groundwater process stream increasing overall effectiveness of the arsenic ion exchange resin.

In addition, system effluent vapor and water samples were collected and analyzed for compliance with SCAQMD and NPDES permits. The effluent water sampling results will be provided under separate cover in the NPDES discharge monitoring report for the second quarter 2013 period.

During this reporting period, remediation system inspections were performed on a weekly basis. 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 second quarter 2013 are summarized in Tables 2 and 3. The remediation systems operated during the second quarter 2013 with the following exceptions:

- SVE system was off May 15 through June 30 due to a break in the 8-inch diameter vacuum extraction pipeline between carbon vessels GAC-2 and GAC-3.
- The GWE system was off from the beginning of the period through April 11 due to high arsenic results reported by laboratory. The GWE system remained off for additional testing to investigate reduced efficiency of arsenic removal resin and explore system modifications to improve arsenic removal efficiency. A comprehensive characterization of current influent composition was performed. Based on results of the characterization, a detailed analysis of throughput capacity was completed and selective ion resin options were re-evaluated. Elevated interfering elements and an increase in pH in the influent were found to be responsible for the reduced efficiency of the arsenic ion exchange resin.
- The GWE system was off May 1 through June 3 due to high arsenic results reported by the laboratory. Resin efficiency has been further reduced. A second ion exchange vessel was designed and installed to enhance system performance.
- The GWE system was off June 3 to June 10 for procurement and implementation of GAC change-out.
- The GWE system was off June 18 to June 26 to assess surge tank level sensor failure and make necessary repairs.

Overall during the second quarter 2013, the SVE system operated approximately 49 percent of the time, while the GWE system operated approximately 32.5 percent of the time and taking into account the planned shutdowns, the GWE system operated 43 percent of the time during the second quarter 2013. Performance and compliance soil vapor and water samples from the SVE and GWE systems were collected during the second quarter 2013 when the systems were in operation. During the second quarter 2013, vapor samples were collected on April 22, when the SVE system was operating. Water samples were collected on April 15, 22, 29, June 11, 21, and 26, when the GWE system was operating. The vapor and water 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.

The vapor samples were analyzed for the following:

- Total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg) using EPA Method TO-3M; and
- VOCs using EPA Method TO-15M.

The water samples were analyzed for the following:

- TPHg and TPH quantified as diesel (TPHd) using EPA Method 8015Modified;
- VOCs using EPA Method 8260B;
- Metals (arsenic, copper, selenium, lead, and zinc) using EPA 6010B/6020;
- Oil and grease using SM5520B;
- Turbitidy using SM2130B; and
- pH using SM4500.

Analytical results for the influent vapor and water samples are summarized on Tables 4 and 5, respectively. The laboratory analytical reports are chain-of-custody documents for these samples are included in Appendix A.

Depths to product and groundwater in the GWE wells and specific monitoring wells were measured during the second quarter 2013 to the nearest 0.01 foot from the top of the well casing using an interface probe. The historical gauging results for selected wells are summarized in Table 6.

4. SUMMARY OF REMEDIATION PROGRESS

For the reporting period, the optimized remediation system consisted of SVE operating from the four horizontal wells that span through the entire former tank farm area and the six vertical wells in north-eastern area; GWE from the north-west and north-eastern areas; and vacuum-truck product recovery from GMW-62 located in Holifield Park.

The SVE system operated from four horizontal wells (HW-1, 3, 5, and 7) and six vertical wells (VEW-32 through VEW-37) from the north-east area. The SVE system operated approximately 49 percent of the time for the reporting period. The total mass of VOCs removed by SVE was approximately 3,121 pounds during the second quarter 2013 and since 1996, approximately 1.54 million pounds. The total mass removed by SVE does not include the mass removed by biodegradation.

Four wells, GW-2, GW-13, GW-15, and GW-16, were in operation during this reporting period for the GWE system. Overall, the GWE system operated approximately 32.5 percent of the time for the reporting period and taking into account the planned shutdowns, the GWE system operated approximately 43 percent of the time during the second quarter 2013. During the second quarter, 673,397 gallons of water was extracted. Since 1996, approximately 66 million gallons of groundwater have been extracted via the GWE system. Based on the TPH results for influent water samples and total groundwater extracted, the mass of TPH removed by GWE was approximately 0.0036 gallons (0.0255 pounds) during the second quarter 2013.

During the reporting period, approximately 148 gallons of free product was recovered from the site via vacuum-truck recovery and/or passive absorbent socks.

5. SYSTEM EVALUATION AND OPTIMIZATION

Remedial optimization is on-going to ensure the most efficient means and technology used for cleanup at the site. Included as part of remedial optimization, the most recent activities included the groundwater monitoring program evaluation and the proposed recommendations for revised monitoring plan.

For the SVE treatment system, during the second quarter 2013, influent vapor-phase VOC concentrations were low and reaching asymptotic levels. The operations status of the SVE wells at the end of the second quarter 2013 is also shown on Table 1. An evaluation will be conducted to determine the most beneficial operation of the system. A rebound test may be conducted to evaluate operational data and current vapor impacts to design the best scheduled operation, which may include pulsed operation (under a set schedule based on rebound test data results) or continuous operation with specific wells online. Individual wells for VOC concentration will be measured to better determine specific wells to operate and determine those wells that have reached asymptotic levels whereby SVE is no longer deemed as an effective means of remediation.

Groundwater monitoring from the first semiannual event in April resulted in an overall lower groundwater elevation and a higher number of wells with measurable free product. The overall area of impacts and plumes are similar to previous events. As indicated by the non-detected, stable, or declining dissolved groundwater analytical data from offsite wells (as illustrating in the semiannual groundwater monitoring reports) and from the previous aquifer pump testing and groundwater capture zone analysis, the current GWE systems in the northeast area and northwest corner have been successful in preventing further impacted groundwater from flowing offsite and have captured and treated a significant portion of impacted groundwater under Holifield Park and in the northwest corner. GWE in the north-west and north-east areas will continue to ensure contaminant containment onsite. In addition, vacuum-truck product recovery and absorbent sock installation will continue as needed in wells where measureable product thickness is over 1 foot.

Optimization is on-going and all total fluids and extraction wells will be assessed to determine if additional extraction wells for the GWE system should be brought online as needed to take advantage of the lower groundwater levels and increase in measureable LNAPL in wells.

6. PLANNED THIRD QUARTER 2013 ACTIVITIES

During the third quarter 2013, DLA Energy plans to continue to focus remedial efforts on the north-west, north-east, and north-central areas. The following OM&M activities are planned to be completed during the third quarter 2013:

- Repair SVE GAC vessel pipe network and connections;
- Continue weekly maintenance and monitoring of the SVE and GWE treatment systems;
- Measure individual well vapor concentrations;

- Review current LNAPL thickness and evaluate nearby total fluid and extraction wells to determine if it is beneficial for remediation to bring any wells online with the GWE system;
- Collect and analyze system influent vapor and groundwater samples; and
- Assess the SVE influent data and determine if adjustments in operation are needed or conduct a rebound test.

The SVE and GWE systems for the north-west, north-east, and north-central areas will continue to operate. Based on SVE assessment, once individual well concentrations are measured - turn off system to allow rebound or conduct rebound test, or pulsed operation. Vacuum-truck recovery and absorbent sock installation will continue. The remediation activities and progress for the third quarter 2013 will be described in the Third Quarter 2013 Remediation Progress Report to be submitted by November 15, 2013.

TABLES

TABLE 1
Remediation Well Construction and Status

Remediation Area	Well	Installation Date	Casing Elevation (ft msl) ¹	Total Depth (ft bgs) ²	Screen Interval (ft bgs)	Remediation Well Function	Well Operation Status at End of 2nd Quarter 2013
	GW-1	06/12/95	75.97	63	25 - 60	GWE	OFF
	GW-2	06/12/95	75.78	63	25 - 60	GWE	OFF
North-West	GW-3	06/13/95	75.79	63	25 - 60	GWE	OFF
(AST 80001)	GW-4	06/12/95	75.78	63	25 - 60	GWE	OFF
,	GW-13	04/26/07	76.85	67	25 - 65	GWE	OFF
	VEW-23	8/3/2004	76.20	25	15 - 25	SVE	OFF
	HW-1, HW-3, HV	V-5, HW-7		25	continuous	SVE	OFF
	GMW-21 ³	08/02/91	76.23	50	25 - 50	TFE/GWE	OFF
	GW-14	04/26/07	76.54	67	25 - 65	GWE	OFF
	SP-11b, SP-11c, SP-13c, SP-13d, SP-14c, SP-15, S 17a, SP-18, SP-21, SP-22,SP-23 23c, SP-24, SP-2 25, SP-25a, SP-2 26, SP-26a	SP-14, SP-14 SP-15a, SP-16 18a, SP-20, SI s, SP-23a, SP- 24a, SP-24b, S	la, SP-14b, 5, SP-17, SP- P-20a, SP- 23b, SP- SP-24c, SP-	50	48 - 50	Biosparge	OFF
	TF-8	09/22/95	74.86	63	25 - 60	TFE, GWE	OFF
	TF-9	09/22/95	74.47	63	25 - 60	TFE, GWE	OFF
	TF-10	09/25/95	73.61	63	25 - 60	TFE, GWE	OFF
North-Central	TF-11	09/25/95	74.40	63	25 - 60	TFE, GWE	OFF
(AST 80002,	TF-13	09/26/95	75.47	63	25 - 60	TFE, GWE	OFF
AST 80004,	TF-14	09/27/95	74.35	63	25 - 60	TFE, GWE	OFF
AST 80006,	TF-15	09/28/95	74.78	63	25 - 60	TFE, GWE	OFF
AST 80007,	TF-16	09/28/95	75.89	63	25 - 60	TFE, GWE	OFF
AST 80008,	TF-17	09/29/95	74.88	63	25 - 60	TFE, GWE	OFF
AST 8001,	TF-18	07/06/94	73.94	50.5	20 - 50	TFE, GWE	OFF
AST 55004)	TF-19	10/03/95	75.07	63	25 - 60	TFE, GWE	OFF
,	TF-20	10/03/95	75.08	63	25 - 60	TFE, GWE	OFF
	TF-21	09/29/95	74.96	63	25 - 60	TFE, GWE	OFF
	TF-22	10/02/95	74.76	63	25 - 60	TFE, GWE	OFF
	TF-23	07/05/94	75.31	50.5	20 - 50	TFE, GWE	OFF
	TF-24 ⁴	09/26/95	76.43	63	25 - 60	TFE, GWE	OFF
	TF-25	04/04/01	74.85	47	26 - 36	TFE, GWE	OFF
	TF-26	04/03/01	75.85	47	26 - 36	TFE, GWE	OFF
	VEW-20	8/2/2004	75.95	25	15 - 25	SVE	OFF
	VEW-21	8/2/2004	75.75	25	15 - 25	SVE	OFF
	VEW-22	8/2/2004	77.09	20	10 - 20	SVE	OFF
	VEW-24	8/2/2004	76.13	25	15 - 25	SVE	OFF
	VEW-25	8/2/2004	76.14	25	15 - 25	SVE	OFF
	VEW-26 VEW-27	8/4/2004	77.50 77.07	25	15 - 25 15 - 25	SVE SVE	OFF OFF
	VEW-27 VEW-28	8/4/2004 8/3/2004	77.07 75.67	25 25	10 - 25	SVE	OFF
	VEW-29	8/3/2004	75.25	25	10 - 25	SVE	OFF

TABLE 1
Remediation Well Construction and Status

Remediation Area	Well	Installation Date	Casing Elevation (ft msl) ¹	Total Depth (ft bgs) ²	Screen Interval (ft bgs)	Remediation Well Function	Well Operation Status at End of 2nd Quarter 2013
	BSP-1	04/18/07		50	47 - 49	Biosparge	OFF
	BSP-2	04/18/07		50	48 - 50	Biosparge	OFF
	BSP-3	04/17/07		48	46 - 48	Biosparge	OFF
	BSP-4	04/17/07		49	47 - 49	Biosparge	OFF
	BSP-5	04/17/07		49.5	47 - 49	Biosparge	OFF
	BSP-6	04/18/07		49	47 - 49	Biosparge	OFF
	BSP-7	04/19/07		48	46 - 48	Biosparge	OFF
	BSP-8	04/19/07		48	46 - 48	Biosparge	OFF
	BSP-9	04/19/07		48	46 - 48	Biosparge	OFF
North-East	GMW-58	08/14/98	75.48	55	20 - 55	GWE	OFF
	GW-15	04/26/07	74.94	60.5	20.5 - 60.6	GWE	OFF
	GW-16	07/07/09	76.33	63	20.5 - 60.5	GWE	OFF
	SP-21a, SP-21b,	SP-48		50	48 - 50	Biosparge	OFF
	VEW-32	04/11/07		25	10 - 25	SVE	OFF
	VEW-33	04/11/07		25	10 - 25	SVE	OFF
	VEW-34	04/11/07		25	10 - 25	SVE	OFF
	VEW-35	04/10/07		25	10 - 25	SVE	OFF
	VEW-36	04/10/07		25	10 - 25	SVE	OFF
	VEW-37	40/10/07		25	10 - 25	SVE	OFF
	VEW-31	8/3/2004	75.10	15	5 - 15	SVE	OFF
	VW-07		75.64			SVE	OFF
Former Truck	VW-09		75.77			SVE	OFF
Fueling Area	VW10	03/23/04	75.78	30.5	20 - 30	SVE	OFF
and Adjacent	VW11	03/23/04	75.55	25	20 - 25	SVE	OFF
Water Tank	VW12	03/23/04	75.79	30.5	15 - 30	SVE	OFF
Area	VW13	03/23/04	75.42	29	25 - 29	SVE	OFF
/ lica	VW14	03/23/04	75.89	28	15 - 28	SVE	OFF
	VW15	04/14/04	75.45	30	20 - 30	SVE	OFF
	VW16	04/14/04	75.29	30	20 - 30	SVE	OFF

Notes

- 1. ft msl = feet above mean sea level.
- 2. ft bgs = feet below ground surface.
- 3. GMW-21 is also referred to as TF-24.
- 4. TF-24 is also referred to as "old TF-24" or "former TF-24". See also Note 3.
- --- = information not available.

TABLE 2
Vapor Remediation System Operation Summary
Defense Fuel Support Point, Norwalk, California

System Inspection Date	Cumulative Hours of Operation (hours)	Incremental Hours of Operation (hours)	Influent Analytical TPH Concentration (ppmv as hexane)	Influent PID Reading (ppmv as hexane)	System Flow (cfm)	Mass Removed (pounds)			
2011 Totals						43,505			
2012 Totals						28,354			
First Quarter 201	.3 Total					3,485			
04/05/13	16,688.2	190		10.8	149	973			
04/11/13	16,837.7	150		13.5	143	401			
04/19/13	17,026.9	189		16.3	147	213			
04/22/13	17,099.0	72	5.4	14.8	147	303			
04/26/13	17,193.0	94		10.6	145	358			
05/02/13	17,337.5	145		11.8	146	421			
05/10/13	17,526.9	189		13.9	136	452			
Second Quarter 2013 Total									
Cumulative Mass R	emoved Since V	ES Reconstruct	ion		•	78,465			

TPH = total petroleum hydrocarbons ppmv = parts per million by volume cfm = cubic feet per minute --- = not applicable or not available

TABLE 3
Groundwater Remediation System - Historical Volumetric Flow
Defense Fuel Support Point, Norwalk, California

	Groundwater	Groundwater		
	Extracted from	Extracted from	Total	
	the North-West	the North-East	Groundwater	TPH-d Removed
	Area	Area	Extracted from	from the Site
Date	(gallons)	(gallons)	the Site (gallons)	(pounds)
2009 Totals	2,350,770	2,027,277	4,212,900	(pourids)
	2,318,790	2,449,222	4,081,540	
2010 Totals	· ·		· ·	0.0440
2011 Totals	2,595,532	4,174,656	6,401,590	0.0119
2012 Totals	3,094,814	3,008,511	5,751,810	0.0596
First Quarter 2013 Totals	437,918	382,028	748,341	0.0282
4/11/2013	6,550	4113.8	10,569	0.0003
4/15/2013	51,457	43041	84,300	0.0025
4/16/2013	16,570	13474.6	27,710	0.0008
4/19/2013	39,519	30526.5	63,860	0.0019
4/22/2013	40,002	33460.2	66,124	0.0020
4/24/2013	28,552	25862.8	48,716	0.0015
4/26/2013	25,194	22144.4	44,528	0.0013
4/29/2013	39,706	34553.4	66,852	0.0020
4/30/2013	15,296	13137.3	26,855	0.0008
5/1/2013	10,431	8,625	18,247	0.0010
6/3/2013	1,870	1,847	1,348	0.0001
6/10/2013	1,038	1,021	2,885	0.0002
6/11/2013	13,560	10,792	21,745	0.0011
6/12/2013	15,050	11,410	26,726	0.0014
6/14/2013	26,276	19,708	41,222	0.0022
6/17/2013	38,316	28,679	60,417	0.0032
6/24/2013	14,553	13,043	9,358	0.0005
6/26/2013	6,000	2,547	10,922	0.0006
6/28/2013	25,256	21,782	41,013	0.0022
Second Quarter 2013 Totals	415,194	339,769	673,397	0.0255

TPH-d = total petroleum hydrocarbons quantified as diesel.

TABLE 4
Extracted Vapor Analytical Results
Defense Fuel Support Point, Norwalk, California

	EPA TO-3M ¹		ЕРА ТО	-15, ppb (v,	/v)			EPA 8260	B (M), ppb	(v/v)	
Date Sampled	VOCs	Benzene	Ethylbenzene	Toluene	Xylenes	MTBE	Benzene	Ethylbenzene	Toluene	Xylenes	MTBE
04/29/11	17	21	2.9	ND(5.0)	6.3	ND(2.0)	21	ND(5.0)	ND(5.0)	ND(15)	ND(10)
05/27/11	13						21	ND(5.0)	ND(5.0)	ND(15)	ND(10)
06/30/11	11						18	ND(5.0)	ND(5.0)	ND(15)	ND(10)
07/27/11	8.6						13	12	ND(5.0)	13	ND(10)
08/26/11	7.8						12	20	ND(5.0)	26.4	ND(10)
09/30/11	6.9						12	11	ND(5.0)	11	ND(10)
10/28/11	5.4						11	15	ND(5.0)	28	ND(10)
11/30/11	8.5						12	6.7	ND(5.0)	10	ND(10)
12/28/11	8.6						24	9.6	7.5	22	ND(10)
01/26/12	3.7						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
02/24/12	4.6						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
03/28/12	4.1						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
04/27/12	3.6						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
05/31/12	6.5						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
06/28/12	5.3						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
07/26/12	4.1						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
08/31/12	ND(3.0)						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
09/27/12	ND(3.0)						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
10/30/12	6.1						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
11/26/12	4.2						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
12/19/12	3.2						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
01/31/13	4.6						N/A	N/A	N/A	N/A	N/A
02/27/13	4.5						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
03/28/13	6.7						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)
04/22/13	5.4						ND(5.0)	ND(5.0)	ND(5.0)	ND(15)	ND(10)

¹ EPA-TO-3M in ppm v/v as hexane VOCs = volatile organic compounds MTBE = methyl tertiary butyl ether ppm = parts per million ND = not detected

TABLE 5
Extracted Groundwater Analytical Results

Date	TPH-fp	TPH-d	TPH-g	Benzene	Toluene	Ethylbenzene	mp-Xylenes	o-Xylene	TBA	MTBE	DIPE	ETBE	TAME
Sampled	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
04/22/08	580			71	25	17	42	30	14	4.6	ND(2.0)	ND(2.0)	ND(2.0)
05/01/08	700	810											
05/16/08	780	760											
06/12/08	150			ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	25	7.7	ND(2.0)	ND(2.0)	ND(2.0)
07/19/08		170	ND(100)	27	0.77	7	13	7.9	ND(10)	3.9	ND(2.0)	ND(2.0)	ND(2.0)
09/03/08									ND(10)				
09/08/08				27	0.99	8.3	13	8.2	ND(10)	3.1	ND(2.0)	ND(2.0)	ND(2.0)
09/15/08				36	0.81	8.5	12	6.8	ND(10)	3.8	ND(2.0)	ND(2.0)	ND(2.0)
11/13/08				27	ND(0.50)	2	12	5.6	ND(10)	ND(0.50)	ND(2.0)	ND(2.0)	ND(2.0)
11/26/08				ND(0.50)	ND(0.50)	ND(0.50)	1.3	0.61	16	5.6	ND(2.0)	ND(2.0)	ND(2.0)
12/13/08				ND(0.50)	ND(0.50)	0.56	1.1	0.54	19	7	ND(2.0)	ND(2.0)	ND(2.0)
01/09/09				ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(10)	ND(0.50)	ND(2.0)	ND(2.0)	ND(2.0)
03/05/09		ND(100)		21	ND(0.50)	2.5	7.2	3.1	12	3.1	ND(2.0)	ND(2.0)	ND(2.0)
03/18/09		200	170	21	ND(0.50)	2.9	7	4.5	13	3.3	ND(2.0)	ND(2.0)	ND(2.0)
05/15/09		ND(100)											
06/04/09		190		26	ND(0.50)	3.3	10	6.6	ND(10)	4.8	ND(2.0)	ND(2.0)	ND(2.0)
06/24/09				28	ND(0.50)	2.5	7.6	4.2	12	4.4	ND(2.0)	ND(2.0)	ND(2.0)
05/28/09		170		27	ND(0.50)	2.6	7.9	4.5	ND(10)	3.6	ND(2.0)	ND(2.0)	ND(2.0)
11/19/09		ND(100)		15	ND(0.50)	1.3	5.8	2.9	5.6	2.3	1.2	ND(2.0)	ND(2.0)
10/26/10				20	ND(0.50)	1.6	7.4	2.1	8	2.9	1.1	ND(2.0)	ND(2.0)
06/01/11		90											
07/14/11				13	ND(0.50)	2.3	6.2	3	6.7	1.6	ND(2.0)	ND(2.0)	ND(2.0)
09/13/11				5	ND(0.50)	0.37	3.4	0.99	ND(10)	1.3	ND(2.0)	ND(2.0)	ND(2.0)
09/22/11				5.5	ND(0.50)	0.92	7.2	1.6	5.6	1.1	ND(2.0)	ND(2.0)	ND(2.0)
10/19/11				8.2	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(10)	ND(1.0)	ND(2.0)	ND(2.0)	ND(2.0)
01/20/12				14	ND(0.50)	2.8	7.8	1.2	16	1.3	0.42	ND(2.0)	ND(2.0)
02/03/12		120	340										
02/17/12				10	ND(0.50)	1.5	7.4	1.2	15	1.2	0.39	ND(2.0)	ND(2.0)
02/24/12		180		26	ND(0.50)	1.0	7	1.2	ND(10)	1.2	0.41	ND(2.0)	ND(2.0)
03/02/12				23	ND(0.50)	1.4	11	2.4	8.7	1.4	0.47	ND(2.0)	ND(2.0)
03/06/12				28	ND(0.50)	1.0	9	1.7	13	1.1	0.37	ND(2.0)	ND(2.0)
06/15/12				39	13	17.0	88	26	ND(10)	1.3	0.52	ND(2.0)	ND(2.0)
08/31/12		820	940										
09/27/12		5,300	3800										
10/23/12				67	60	110.0	460	140	ND(10)	ND(0.50)	ND(2.0)	ND(2.0)	ND(2.0)
01/31/13		3,600											
05/01/13		6,300	5500	20	4.7	8	41	14	4.8	0.56	ND(2.0)	ND(2.0)	ND(2.0)

TPH-fp = total petroleum hydrocarbons quantified as fuel products

TPH-d = total hydrocarbons quantified as diesel

TPH-g = total petroleum hydrocarbons quantified as gasoline

TBA = tert-butyl alcohol

MTBE = methyl tert-butyl ether

DIPE = Diisopropyl ether

ETBE = ethyl tert-butyl ether

TAME = tert-amyl-methyl ether

TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GMW-6	03/21/07	77.31		28.06		49.25
GMW-6	04/27/07	77.31		28.02		49.29
GMW-6	08/28/07	77.31		28.51		48.80
GMW-6	11/12/07	77.31		28.48		48.83
GMW-6	02/05/08	77.31		29.32		47.99
GMW-6	04/11/08	77.31		28.34		48.97
GMW-6	07/24/08	77.31		28.81		48.50
GMW-6	10/13/08	77.31		29.48		47.83
GMW-6	02/09/09	77.31		29.62		47.69
GMW-6	04/20/09	77.31		29.21		48.10
GMW-6	07/16/09	77.31		29.51		47.80
GMW-6	10/19/09	77.31		29.94		47.37
GMW-6	04/07/10	77.31		29.74		47.57
GMW-6	04/12/10	77.31		29.42		47.89
GMW-6	01/06/11	77.31		30.23		47.08
GMW-6	02/24/11	77.31		29.29		48.02
GMW-6	04/08/11	77.31		28.86		48.45
GMW-6	07/07/11	77.31		29.16		48.15
GMW-6	10/06/11	77.31		29.16		47.69
GMW-6	04/12/12	77.31		30.86		46.45
GMW-6	04/19/12	77.31		30.57		46.74
GMW-6	01/10/13	77.31		31.96		45.35
GMW-6	04/02/13	77.31		31.91		45.40
GMW-6	04/08/13	77.31		31.91		45.40
GMW-12	04/30/07	75.21		25.51		49.70
GMW-12	11/12/07	75.21		25.46		49.75
GMW-12	04/14/08	75.21		25.72		49.49
GMW-12	07/24/08	75.21		26.06		49.15
GMW-12	10/14/08	75.21		26.83		48.38
GMW-12	02/10/09	75.21		26.39		48.82
GMW-12	04/20/09	75.21		26.38		48.83
GMW-12	10/19/09	75.21		27.62		47.59
GMW-12	04/08/10	75.21		27.17		48.04
GMW-12	04/12/10	75.21		26.83		48.38
GMW-12	01/08/11	75.21		28.05		47.16
GMW-12	04/07/11	75.21		26.54		48.67
GMW-12	07/08/11	75.21		26.57		48.64
GMW-12	10/07/11	75.21		27.25		47.96
GMW-12	04/12/12	75.21		28.38		46.83
GMW-12	04/16/12	75.21		28.25		46.96
GMW-12	01/10/13	75.21		29.97		45.24
GMW-12	04/03/13	75.21		29.88		45.33
GMW-12	04/08/13	75.21		29.94		45.27
GMW-15	03/21/07	76.21		26.38		49.83
GMW-15	04/27/07	76.21		26.90		49.31
GMW-15	08/28/07	76.21		26.70		49.51
GMW-15	11/12/07	76.21		27.38		48.83
GMW-15	02/05/08	76.21		27.78		48.43
GMW-15	04/11/08	76.21		27.29		48.92
	07/24/08	76.21				48.69
GMW-15				27.52		
GMW-15	10/13/08	76.21		28.36		47.85
GMW-15	02/09/09	76.21		28.51		47.70
GMW-15	04/20/09	76.21		28.31		47.90
GMW-15	07/16/09	76.21		28.32		47.89
GMW-15	10/19/09	76.21		28.90		47.31
GMW-15	04/08/10	76.21		28.51		47.70

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GMW-15	04/12/10	76.21		28.24		47.97
GMW-15	01/06/11	76.21		29.10		47.11
GMW-15	04/08/11	76.21		27.81		48.40
GMW-15	07/07/11	76.21		28.05		48.16
GMW-15	10/06/11	76.21		28.53		47.68
GMW-15	04/12/12	76.21		29.75		46.46
GMW-15	04/19/12	76.21		29.45		46.76
GMW-15	01/10/13	76.21		30.88		45.33
GMW-15	04/02/13	76.21		30.82		45.39
GMW-15	04/08/13	76.21		30.78		45.43
GMW-16	03/21/07	77.00		27.51		49.49
GMW-16	04/27/07	77.00		27.72		49.28
GMW-16	08/28/07	77.00		27.99		49.01
GMW-16	11/12/07	77.00		28.33		48.67
GMW-16	02/05/08	77.00		28.68		48.32
GMW-16	04/11/08	77.00		28.13		48.87
GMW-16	07/24/08	77.00		28.56		48.44
GMW-16	10/13/08	77.00		29.21		47.79
GMW-16	02/09/09	77.00		29.18		47.82
GMW-16	04/20/09	77.00		30.50		46.50
GMW-16	07/16/09	77.00		29.52		47.48
GMW-16	10/19/09	77.00		30.24		46.76
GMW-16	04/07/10	77.00		29.68		47.32
GMW-16	04/12/10	77.00		29.38		47.62
GMW-16	01/08/11	77.00		26.47		50.53
GMW-16	07/07/11	77.00		29.04		47.96
GMW-16	10/06/11	77.00		29.48		47.52
GMW-16	04/12/12	77.00		30.53		46.47
GMW-16	04/18/12	77.00		30.29		46.71
GMW-16	01/11/13	77.00		31.68		45.32
GMW-16	04/02/13	77.00		31.66		45.34
GMW-16	04/08/13	77.00		31.65		45.35
GMW-18	03/21/07	75.36		25.18		50.18
GMW-18	04/30/07	75.36		25.72		49.64
GMW-18	08/28/07	75.36		25.62		49.74
GMW-18	11/12/07	75.36		26.29		49.07
GMW-18	02/05/08	75.36		26.73		48.63
GMW-18	04/14/08	75.36		25.91		49.45
GMW-18	10/14/08	75.36		27.00		48.36
GMW-18	02/10/09	75.36		26.50		48.86
GMW-18	04/20/09	75.36		26.80		48.56
GMW-18	07/17/09	75.36		27.41		47.95
GMW-18	10/19/09	75.36		27.91		47.45
GMW-18	04/08/10	75.36		27.30		48.06
GMW-18	04/12/10	75.36		27.44		47.92
GMW-18	10/01/10	75.36		27.80		47.56
GMW-18	01/08/11	75.36		27.86		47.50
GMW-18	04/12/12	75.36		28.54		46.82
GMW-18	04/20/12	75.36	20.66	28.45	0.67	46.91
GMW-18	04/05/13	75.36	29.66	30.33	0.67	NC NC
GMW-18	04/08/13	75.36	29.64	30.21	0.57	NC
GMW-19	03/21/07	76.83		27.41		49.42
GMW-19	04/30/07	76.83		27.48		49.35
GMW-19	08/28/07	76.83		28.00		48.83
GMW-19	11/12/07	76.83		28.04 28.67		48.79 48.16

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GMW-19	04/14/08	76.83		27.64		49.19
GMW-19	07/24/08	76.83		27.97		48.86
GMW-19	10/14/08	76.83		28.76		48.07
GMW-19	02/10/09	76.83		27.35		49.48
GMW-19	04/20/09	76.83		28.71		48.12
GMW-19	07/17/09	76.83		28.79		48.04
GMW-19	10/19/09	76.83		29.54		47.29
GMW-19	04/08/10	76.83		29.05		47.78
GMW-19	04/12/10	76.83		29.16		47.67
GMW-19	01/08/11	76.83		NM		NC
GMW-19	07/08/11	76.83		NM		NC
GMW-19	10/06/11	76.83		29.06		47.77
GMW-19	04/12/12	76.83		30.26		46.57
GMW-19	04/18/12	76.83		30.09		46.74
GMW-19	01/10/13	76.83		31.56		45.27
GMW-19	04/03/13	76.83		31.49		45.34
GMW-19	04/08/13	76.83		31.60		45.23
GMW-21	04/27/07	76.23		26.41		49.82
GMW-21	11/09/07	76.23	27.34	27.37	0.03	NC
GMW-21	02/05/08	76.23		27.79		48.44
GMW-21	10/13/08	76.23		28.18		48.05
GMW-21	02/09/09	76.23		27.48		48.75
GMW-21	07/17/09	76.23		28.40		47.83
GMW-21	04/07/10	76.23		28.81		47.42
GMW-21	10/01/10	76.23		NM		NC
GMW-21	01/06/11	76.23		26.85		49.38
GMW-21	04/06/11	76.23		27.78		48.45
GMW-21	07/07/11	76.23		27.95		48.28
GMW-21	10/06/11	76.23		28.41		47.82
GMW-21	04/12/12	76.23		29.48		46.75
GMW-21	01/10/13	76.23	30.43	31.90	1.47	NC
GMW-21	04/02/13	76.23	30.66	30.73	0.07	NC
GMW-21	04/08/13	76.23	30.56	31.05	0.49	NC
GMW-32	03/21/07	74.62		24.51		50.11
GMW-32	04/30/07	74.62		25.03		49.59
GMW-32	08/28/07	74.62		24.78		49.84
GMW-32	11/12/07	74.62		25.62		49.00
GMW-32	02/05/08	74.62		25.93		48.69
GMW-32	04/14/08	74.62		25.11		49.51
GMW-32	07/24/08	74.62		25.52		49.10
GMW-32	10/14/08	74.62		26.35		48.27
GMW-32	02/10/09	74.62		26.15		48.47
GMW-32	04/20/09	74.62		27.28		47.34
GMW-32	07/16/09	74.62		26.71		47.91
GMW-32	10/19/09	74.62		27.24		47.38
GMW-32	04/08/10	74.62		26.61		48.01
GMW-32	04/12/10	74.62		26.82		47.80
GMW-32	04/07/11	74.62		25.72		48.90
GMW-32	10/06/11	74.62		26.71		47.91
GMW-32	04/12/12	74.62		27.94		46.68
GMW-32	04/19/12	74.62		27.83		46.79
GMW-32	01/10/13	74.62		29.31		45.31
GMW-32	04/03/13	74.62		29.34		45.28
GMW-32	04/08/13	74.62		29.32		45.30
GMW-33	03/21/07	74.88		25.61		49.27
GMW-33	04/30/07	74.88		25.44		49.44

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GMW-33	08/28/07	74.88		25.94		48.94
GMW-33	11/12/07	74.88		25.97		48.91
GMW-33	02/05/08	74.88		26.87		48.01
GMW-33	04/11/08	74.88		25.58		49.30
GMW-33	07/24/08	74.88		26.11		48.77
GMW-33	10/13/08	74.88		26.93		47.95
GMW-33	02/10/09	74.88		27.05		47.83
GMW-33	07/16/09	74.88		27.41		47.47
GMW-33	04/07/10	74.88		26.82		48.06
GMW-33	10/01/10	74.88		27.43		47.45
GMW-33	04/07/11	74.88		NM		NC
GMW-33	10/06/11	74.88		NM		NC
GMW-33	04/12/12	74.88		NM		NC
GMW-33	01/10/13	74.88		NM		NC
GMW-33	04/03/13	74.88		NM		NC
GMW-40	04/30/07	73.13		23.74		49.39
GMW-40	11/12/07	73.13		24.60		48.53
GMW-40	04/11/08	73.13		24.09		49.04
GMW-40	10/14/08	73.13		25.01		48.12
GMW-40	02/10/09	73.13		25.05		48.08
GMW-40	04/20/09	73.13		27.40		45.73
GMW-40	10/19/09	73.13		26.00		47.13
GMW-40	04/08/10	73.13		25.31		47.82
GMW-40	04/12/10	73.13		25.20		47.93
GMW-40	10/01/10	73.13		25.83		47.30
GMW-40 GMW-40	10/04/10 01/07/11	73.13 73.13		25.70 NM		47.43 NC
GMW-40	04/11/11	73.13		NM		NC NC
GMW-40	10/10/11	73.13		25.13		48.00
GMW-40	04/12/12	73.13		26.48		46.65
GMW-41	04/30/07	74.46		25.06		49.40
GMW-41	11/12/07	74.46		25.87		48.59
GMW-41	04/11/08	74.46		25.44		49.02
GMW-41	07/24/08	74.46		25.80		48.66
GMW-41	10/14/08	74.46		26.35		48.11
GMW-41	02/10/09	74.46		26.58		47.88
GMW-41	04/20/09	74.46		26.61		47.85
GMW-41	10/19/09	74.46		27.34		47.12
GMW-41	04/08/10	74.46		26.64		47.82
GMW-41	04/12/10	74.46		26.44		48.02
GMW-41	10/04/10	74.46		26.91		47.55
GMW-41	01/07/11	74.46		27.58		46.88
GMW-41	04/08/11	74.46		26.01		48.45
GMW-41	04/11/11	74.46		NM		NC
GMW-41	07/08/11	74.46		26.01		48.45
GMW-41	10/06/11	74.46		26.61		47.85
GMW-41	10/10/11	74.46		26.53		47.93
GMW-41	04/12/12	74.46		27.77		46.69
GMW-41	04/16/12	74.46		27.54		46.92
GMW-41	01/11/13	74.46		29.47		44.99
GMW-41	04/03/13	74.46		29.29		45.17
GMW-41	04/08/13	74.46		29.16		45.30
GMW-42	04/30/07	75.50		26.07		49.43
GMW-42 GMW-42	11/12/07 04/11/08	75.50		26.38 25.95		49.12 49.55
GMW-42	10/16/08	75.50 75.50		26.92		49.55 48.58

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GMW-42	04/07/10	75.50		27.60		47.90
GMW-42	10/01/10	75.50		28.13		47.37
GMW-42	01/08/11	75.50		28.03		47.47
GMW-42	04/12/12	75.50		28.88		46.62
GMW-44	04/30/07	74.45		25.32		49.13
GMW-44	11/12/07	74.45		25.82		48.63
GMW-44	04/14/08	74.45		25.45		49.00
GMW-44	07/24/08	74.45		25.95		48.50
GMW-44	10/14/08	74.45		26.60		47.85
GMW-44	02/10/09	74.45		26.87		47.58
GMW-44	04/20/09	74.45		26.51		47.94
GMW-44	10/19/09	74.45		27.43		47.02
GMW-44	04/08/10	74.45		26.77		47.68
GMW-44	04/12/10	74.45		26.51		47.94
GMW-44	01/07/11	74.45		27.47		46.98
GMW-44	04/08/11	74.45		26.05		48.40
GMW-44	07/08/11	74.45		NM		NC
GMW-44	10/06/11	74.45		26.91		47.54
GMW-44	04/12/12	74.45		28.13		46.32
GMW-44	04/16/12	74.45		27.92		46.53
GMW-44	01/10/13	74.45		29.54		44.91
GMW-44	04/03/13	74.45		29.51		44.94
GMW-44	04/08/13	74.45		29.42		45.03
GMW-45	03/21/07	75.67		26.09		49.58
GMW-45	04/27/07	75.67		26.48		49.19
GMW-45	08/28/07	75.67		26.42		49.25
GMW-45	11/12/07	75.67		26.94		48.73
GMW-45	02/05/08	74.45		27.52		46.93
GMW-45	04/11/08	75.67		26.76		48.91
GMW-45	07/24/08	75.67		27.27		48.40
GMW-45	10/13/08	75.67		27.95		47.72
GMW-45	02/09/09	74.45		27.68		46.77
GMW-45	04/20/09	75.67		27.58		48.09
GMW-45	07/16/09	75.67		27.91		47.76
GMW-45	10/19/09	75.67		28.54		47.13
GMW-45	04/07/10	75.67		28.22		47.45
GMW-45	04/12/10	75.67		27.85		47.82
GMW-45	01/06/11	75.67		28.75		46.92
GMW-45	04/07/11	75.67		27.38		48.29
GMW-45	07/07/11	75.67		27.63		48.04
GMW-45	10/07/11	75.67		28.22		47.45
GMW-45	04/12/12	75.67		29.30		46.37
GMW-45	04/19/12	75.67		29.02		46.65
GMW-45	01/10/13	75.67		30.35		45.32
GMW-45	04/02/13	75.67		30.34		45.33
GMW-45	04/08/13	75.67		30.29		45.38
GMW-47	03/21/07	75.98		26.30		49.68
GMW-47	04/27/07	75.98		26.71		49.27
GMW-47	08/28/07	75.98		26.74		49.24
GMW-47	11/12/07	75.98		27.12		48.86
GMW-47	02/05/08	75.98		27.75		48.23
GMW-47	04/11/08	75.98		26.93		49.05
GMW-47	07/24/08	75.98		27.49		48.49
GMW-47	10/13/08	75.98		28.19		47.79
GMW-47	02/09/09	75.98		28.07		47.91
GMW-47	04/20/09	75.98		27.66		48.32

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GMW-47	07/16/09	75.98		28.22		47.76
GMW-47	07/20/09	75.98		28.10		47.88
GMW-47	10/19/09	75.98		28.48		47.50
GMW-47	01/11/10	75.98		29.10		46.88
GMW-47	04/07/10	75.98		NM		NC
GMW-47	04/12/10	75.98		28.52		47.46
GMW-47	01/06/11	75.98		29.05		46.93
GMW-47	04/07/11	75.98		27.50		48.48
GMW-47	07/07/11	75.98		27.83		48.15
GMW-47	10/06/11	75.98		28.41		47.57
GMW-47	01/10/12	75.98		28.71		47.27
GMW-47	04/12/12	75.98		29.55		46.43
GMW-47	04/20/12	75.98		29.26		46.72
GMW-47	01/10/13	75.98		30.57		45.41
GMW-47	04/02/13	75.98		30.55		45.43
GMW-47	04/08/13	75.98		30.55		45.43
GMW-57	07/07/11	76.66		28.53		48.13
GMW-57	10/06/11	76.66		29.12		47.54
GMW-57	01/09/12	76.66		29.48		47.18
GMW-57	04/12/12	76.66		30.15		46.51
GMW-57	04/17/12	76.66		29.85		46.81
GMW-57	01/10/13	76.66		31.18		45.48
GMW-57	04/02/13	76.66		31.18		45.48
GMW-57	04/08/13	76.66		31.04		45.62
GMW-58	07/08/11	75.48		26.46		49.02
GMW-58	10/06/11	75.48		27.11		48.37
GMW-58	01/10/12	75.48		27.42		48.06
GMW-58	04/12/12	75.48		28.20		47.28
GMW-58	04/18/12	75.48		27.86		47.62
GMW-58	01/11/13	75.48		29.26		46.22
GMW-58	04/03/13	75.48		29.23		46.25
GMW-58	04/08/13	75.48		29.17		46.31
GMW-59	07/07/11	75.28		25.69		49.59
GMW-59	10/06/11	75.28		26.35		48.93
GMW-59	01/10/12	75.28		26.80		48.48
GMW-59	04/12/12	75.28	27.55	27.56	0.01	NC 10.00
GMW-59	04/20/12	75.28		27.28		48.00
GMW-59	01/10/13	75.28		28.60		46.68
GMW-59	04/03/13	75.28		28.62		46.66
GMW-59	04/08/13	75.28		29.02		46.26
GMW-61	11/01/04	75.60		28.02		47.58
GMW-61	02/28/05	75.60		23.81		51.79
GMW-61	05/02/05	75.60		22.18		53.42
GMW-61 GMW-61	03/06/06 05/01/06	75.60 75.60		24.53 24.64		51.07
GMW-61	08/26/06	75.60 75.60		25.13		50.96 50.47
GMW-61	12/01/06	75.60		25.60		50.47
GMW-61	03/21/07	75.60		26.01		49.59
GMW-61	04/27/07	75.60		26.25		49.35
GMW-61	08/28/07	75.60		26.21		49.39
GMW-61	11/12/07	75.60		26.67		48.93
GMW-61	02/05/08	75.60		27.17		48.43
GMW-61	04/11/08	75.60		26.29		49.31
GMW-61	07/24/08	75.60		27.01		48.59
		75.60		27.73		47.87
GMW-61	10/13/08	75.60		21.13		47.07

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GMW-61	04/20/09	75.60		27.14		48.46
GMW-61	07/16/09	75.60		27.69		47.91
GMW-61	07/20/09	75.60		27.84		47.76
GMW-61	10/19/09	75.60		28.22		47.38
GMW-61	01/11/10	75.60		28.81		46.79
GMW-61	04/07/10	75.60		27.67		47.93
GMW-61	04/12/10	75.60		27.22		48.38
GMW-61	01/08/11	75.60		28.37		47.23
GMW-61	04/08/11	75.60		26.68		48.92
GMW-61	07/07/11	75.60		27.23		48.37
GMW-61	10/06/11	75.60		27.92		47.68
GMW-61	01/10/12	75.60		28.41		47.19
GMW-61	04/12/12	75.60		29.06		46.54
GMW-61	04/19/12	75.60		28.71		46.89
GMW-61	01/11/13	75.60		30.05		45.55
GMW-61	04/03/13	75.60		30.11		45.49
GMW-61	04/08/13	75.60		30.01		45.59
GMW-62	07/02/07	76.34		27.03		49.31
GMW-62	02/05/08	76.34		27.79		48.55
GMW-62	04/14/08	76.34		26.87		49.47
GMW-62	07/24/08	76.34		27.98		48.36
GMW-62	10/14/08	76.34		28.24		48.10
GMW-62	02/10/09	76.34		28.31		48.03
GMW-62	04/20/09	76.34		27.94		48.40
GMW-62	07/17/09	76.34		28.15		48.19
GMW-62	07/21/09	76.34		28.30		48.04
GMW-62	10/19/09	76.34		29.00		47.34
GMW-62	01/11/10	76.34		29.51		46.83
GMW-62	04/12/10	76.34		28.24		48.10
GMW-62	01/10/11	76.34	28.78	29.08	0.30	NC
GMW-62	04/07/11	76.34	26.89	28.57	1.68	NC
GMW-62	07/07/11	76.34	28.03	28.14	0.11	NC
GMW-62	10/06/11	76.34	28.45	29.39	0.94	NC
GMW-62	01/09/12	76.34	28.97	29.02	0.05	NC
GMW-62	04/12/12	76.34	29.58	29.68	0.10	NC
GMW-62	04/18/12	76.34	29.40	29.46	0.06	NC
GMW-62	01/11/13	76.34		30.62		45.72
GMW-62	04/03/13	76.34	30.42	31.36	0.94	NC
GMW-62	04/08/13	76.34	30.35	32.13	1.78	NC 10.10
GMW-65	07/17/09	76.78		28.65		48.13
GMW-65	07/21/09	76.78		28.83		47.95
GMW-65	10/19/09	76.78		29.60		47.18
GMW-65	01/11/10 04/12/10	76.78		29.80		46.98
GMW-65		76.78		28.68		48.10
GMW-65	01/08/11	76.78		29.39		47.39
GMW-65 GMW-65	04/07/11 07/07/11	76.78 76.78		27.98 28.63		48.80 48.15
GMW-65	10/06/11	76.78		28.63		48.15
GMW-65	01/09/12	76.78		29.18		47.35
GMW-65	04/12/12	76.78		30.15		46.63
GMW-65	04/12/12	76.78		29.85		46.63
GMW-65	04/10/12	76.78		31.08		45.70
GMW-65	04/03/13	76.78		31.07		45.71
GMW-65	04/03/13	76.78		30.92		45.86
GMW-66	10/19/09	77.00		29.73		47.27
GMW-66	04/12/10	77.00		29.64		47.36

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GMW-66	04/07/11	77.00		28.63		48.37
GMW-66	07/07/11	77.00		28.96		48.04
GMW-66	10/06/11	77.00		29.48		47.52
GMW-66	04/12/12	77.00		30.46		46.54
GMW-66	04/17/12	77.00		30.11		46.89
GMW-66	01/10/13	77.00		31.36		45.64
GMW-66	04/02/13	77.00		31.34		45.66
GMW-66	04/08/13	77.00		31.25		45.75
GW-2	04/30/07	75.78		26.52		49.26
GW-2	11/12/07	75.78		NM		NC
GW-2	04/11/08	76.39		27.39		49.00
GW-2	07/24/08	76.39		27.88		48.51
GW-2	10/13/08	76.39		28.31		48.08
GW-2	02/09/09	76.39		27.61		48.78
GW-2	01/11/10	76.39		29.26		47.13
GW-2	04/07/10	76.39		29.45		46.94
GW-2	01/06/11	75.78		32.45		43.33
GW-2	04/06/11	75.78		28.31		47.47
GW-2	07/07/11	75.78		28.25		47.53
GW-2	10/06/11	75.78		28.47		47.31
GW-2	04/12/12	75.78		29.34		46.44
GW-2	04/19/12	75.78		28.99		46.79
GW-2	01/10/13	75.78		30.42		45.36
GW-2	04/02/13	75.78		30.25		45.53
GW-2 GW-3	04/08/13 04/30/07	75.78 73.86		30.11 26.65		45.67 47.21
GW-3	11/12/07	75.79		27.11		48.68
GW-3	04/11/08	76.56		27.92		48.64
GW-3	07/24/08	75.79		27.79		48.00
GW-3	10/13/08	75.79		28.39		47.40
GW-3	02/09/09	75.79		27.12		48.67
GW-3	04/20/09	75.79		26.30		49.49
GW-3	10/19/09	75.79		29.24		46.55
GW-3	04/07/10	76.56		55.57		20.99
GW-3	04/12/10	75.79		28.84		46.95
GW-3	10/01/10	75.79		29.10		46.69
GW-3	04/06/11	75.79		28.50		47.29
GW-3	07/08/11	75.79		28.36		47.43
GW-3	10/06/11	75.79		28.65		47.14
GW-3	04/12/12	75.79		29.35		46.44
GW-3	01/10/13	75.79		30.49		45.30
GW-3	04/02/13	75.79		30.38		45.41
GW-3	04/08/13	75.79		30.26		45.53
GW-6	04/27/07	76.38		27.14		49.24
GW-6	11/12/07	77.41		27.75		49.66
GW-6 GW-6	04/11/08 07/24/08	76.38		27.52		48.86
GW-6	10/13/08	76.38 76.38		27.75 28.54		48.63 47.84
GW-6	02/09/09	76.38		27.38		49.00
GW-6	04/20/09	76.38		28.41		47.97
GW-6	10/19/09	76.38		29.32		47.06
GW-6	04/07/10	76.38		30.21		46.17
GW-6	04/12/10	76.38		29.61		46.77
GW-6	01/06/11	76.38		29.45		46.93
GW-6	04/06/11	76.38		28.35		48.03
GW-6	07/07/11	76.38	28.51	28.52	0.01	NC

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GW-6	10/06/11	76.38		28.88		47.50
GW-6	04/12/12	76.38		29.88		46.50
GW-6	04/18/12	76.38		29.65		46.73
GW-6	01/10/13	76.38		31.13		45.25
GW-6	04/02/13	76.38		31.03		45.35
GW-6	04/08/13	76.38		31.00		45.38
GW-13(6")	11/12/07	76.85		28.31		48.54
GW-13(6")	07/24/08	77.45		28.91		48.54
GW-13(6")	10/13/08	77.45		29.29		48.16
GW-13(6")	02/09/09	76.85		28.88		47.97
GW-13(6")	04/20/09	76.85		29.48		47.37
GW-13(6")	10/19/09	76.85		29.92		46.93
GW-13(6")	04/12/10	76.85		29.91		46.94
GW-13(6")	01/06/11	76.85		33.10		43.75
GW-13(6")	04/08/11	76.85		29.49		47.36
GW-13(6")	07/07/11	76.85		29.45		47.40
GW-13(6")	10/06/11	76.85		29.64		47.21
GW-13(6")	04/12/12	76.85		30.52		46.33
GW-13(6")	04/18/12	76.85		30.27		46.58
GW-13(6")	01/10/13	76.85		31.63		45.22
GW-13(6")	04/02/13	76.85		31.51		45.34
GW-13(6")	04/08/13	76.85		31.41		45.44
GW-14(1")	01/12/10	76.55		29.84		46.71
GW-14(6")	11/09/07	76.54		27.85		48.69
GW-14(6")	04/14/08	76.54		27.36		49.18
GW-14(6")	07/24/08	76.54		26.02		50.52
GW-14(6") GW-14(6")	10/13/08	76.54		28.79		47.75
GW-14(6")	02/10/09 04/20/09	76.54 76.54		26.62 28.27		49.92 48.27
GW-14(6")	10/19/09	76.54		27.46		49.08
GW-14(6")	04/08/10	76.54		28.70		47.84
GW-14(6")	04/12/10	76.54		28.40		48.14
GW-14(6")	01/08/11	76.54		29.45		47.09
GW-14(6")	04/08/11	76.54		27.98		48.56
GW-14(6")	07/08/11	76.54		28.31		48.23
GW-14(6")	10/06/11	76.54		28.93		47.61
GW-14(6")	04/12/12	76.54		29.95		46.59
GW-14(6")	04/20/12	76.54		29.90		46.64
GW-14(6")	01/10/13	76.54		33.29		43.25
GW-14(6")	04/03/13	76.54		31.29		45.25
GW-14(6")	04/08/13	76.54		31.17		45.37
GW-15(1")	07/24/08	75.36	27.50	27.55	0.05	NC
GW-15(1")	10/16/08	75.36	28.15	28.16	0.01	NC
GW-15(1")	02/09/09	75.36	27.98	28.02	0.04	NC
GW-15(1")	07/17/09	75.36	28.51	28.59	0.08	NC
GW-15(1")	04/08/10	75.36	27.74	29.43	1.69	NC
GW-15(6")	04/11/08	74.94		26.19		48.75
GW-15(6")	10/19/09	74.94		NM		NC NC
GW-15(6")	04/12/10	74.94	27.58	29.63	2.05	NC NC
GW-15(6")	04/08/11	74.94	26.75	26.76	0.01	NC NC
GW-15(6") GW-15(6")	07/07/11 10/06/11	74.94 74.94	27.57 28.38	27.61 28.40	0.04 0.02	NC NC
GW-15(6")	04/12/12	74.94 74.94	28.38	28.40	0.02	NC NC
GW-15(6")	01/11/13	74.94	23.34	30.39	0.01	44.55
GW-15(6")	04/03/13	74.94	29.13	35.20	6.07	NC
GW-16(1")	07/17/09	76.55		28.87		47.68
	51,11,00	. 0.00		_0.07	1	

ES071612182736SCO/ 121980002/T5-hISTWL Page 9 of 13

TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
GW-16(1")	01/12/10	76.55		29.94		46.61
GW-16(1")	04/07/11	76.33		28.55		47.78
GW-16(6")	10/19/09	76.33		29.94		46.39
GW-16(6")	04/12/10	76.33		28.71		47.62
GW-16(6")	07/07/11	76.33		28.96		47.37
GW-16(6")	10/06/11	76.33		29.34		46.99
GW-16(6")	04/12/12	76.33		30.12		46.21
GW-16(6")	01/11/13	76.33		31.30		45.03
GW-16(6")	04/03/13	76.33		31.10		45.23
MW-22 (MID)	03/21/07	79.57		31.49		48.08
MW-22 (MID)	04/30/07	79.57		31.33		48.24
MW-22 (MID)	08/28/07	79.57		31.96		47.61
MW-22 (MID)	11/12/07	79.57		32.19		47.38
MW-22 (MID)	02/05/08	79.57		32.51		47.06
MW-22 (MID)	04/11/08	79.57		31.83		47.74
MW-22 (MID)	10/13/08	79.57		33.01		46.56
MW-22 (MID)	02/09/09	79.57		32.96		46.61
MW-22 (MID)	04/20/09	79.57		32.65		46.92
MW-22 (MID)	07/16/09	79.57		33.51		46.06
MW-22 (MID)	07/20/09	79.57		33.96		45.61
MW-22 (MID)	10/19/09	79.57		33.87		45.70
MW-22 (MID)	01/11/10	79.57		34.14		45.43
MW-22 (MID)	04/07/10	79.57		34.02		45.55
MW-22 (MID)	04/12/10	79.57		33.62		45.95
MW-22 (MID)	01/07/11	79.57		34.50		45.07
MW-22 (MID)	04/06/11	79.57		33.39		46.18
MW-22 (MID)	07/08/11	79.57		33.34		46.23
MW-22 (MID) MW-22 (MID)	10/06/11 01/09/12	79.57 79.57		33.57 33.72		46.00 45.85
MW-22 (MID)	04/12/12	79.57		34.22		45.35
MW-22 (MID)	04/18/12	79.57		33.98		45.59
MW-22 (MID)	01/11/13	79.57		35.48		44.09
MW-22 (MID)	04/03/13	79.57		35.32		44.25
MW-22 (MID)	04/08/13	79.57		35.30		44.27
MW-26	04/30/07	77.40		28.18		49.22
MW-26	11/12/07	77.40		28.75		48.65
MW-26	04/11/08	77.40		28.46		48.94
MW-26	07/24/08	77.40		29.00		48.40
MW-26	10/13/08	77.40		29.42		47.98
MW-26	02/09/09	77.40		29.11		48.29
MW-26	04/20/09	77.40		29.42		47.98
MW-26	10/19/09	77.40		30.00		47.40
MW-26	04/07/10	77.40		30.24		47.16
MW-26	04/12/10	77.40		29.82		47.58
MW-26	01/07/11	77.40		30.77		46.63
MW-26	04/06/11	77.40		29.52		47.88
MW-26	07/08/11	77.40		29.48		47.92
MW-26	10/06/11	77.40		29.88		47.52
MW-26	04/12/12	77.40		30.77		46.63
MW-26	04/17/12	77.40		30.58		46.82
MW-26 MW-26	01/11/13 04/03/13	77.40 77.40		32.17 31.94		45.23 45.46
MW-26	04/03/13	77.40		31.86		45.46
MW-27	04/30/07	78.46		29.17		49.29
MW-27	11/12/07	78.46		29.75		48.71
MW-27	04/11/08	78.46		29.25		49.21
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ES071612182736SCO/ 121980002/T5-hISTWL Page 10 of 13

TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
MW-27	07/24/08	78.46		29.96		48.50
MW-27	10/13/08	78.46		30.34		48.12
MW-27	02/09/09	78.46		30.44		48.02
MW-27	04/20/09	78.46		30.27		48.19
MW-27	10/19/09	78.46		31.23		47.23
MW-27	04/07/10	78.46		30.95		47.51
MW-27	04/12/10	78.46		30.79		47.67
MW-27	01/07/11	78.46		31.53		46.93
MW-27	04/06/11	78.46		29.82		48.64
MW-27	07/08/11	78.46		30.03		48.43
MW-27	10/06/11	78.46		30.06		48.40
MW-27	04/12/12	78.46		31.72		46.74
MW-27	04/17/12	78.46		31.49		46.97
MW-27	01/11/13	78.46		33.24		45.22
MW-27	04/03/13	78.46		33.02		45.44
MW-27	04/08/13	78.46		32.98		45.48
PZ-3	03/21/07	76.17	26.05	26.16	0.11	NC
PZ-3	04/30/07	76.17	26.66	26.68	0.02	NC
PZ-3	11/12/07	76.17		NM		NC
PZ-3	02/05/08	76.17		27.84		48.33
PZ-3	07/24/08	76.17		27.33		48.84
PZ-3	10/14/08	76.17		28.07		48.10
PZ-3	02/10/09	76.17		27.31		48.86
PZ-3	04/20/09	76.17		27.94		48.23
PZ-3	07/16/09	76.17		28.97		47.20
PZ-3	04/08/10	76.17		28.40		47.77
PZ-3	04/12/10	76.17		28.14		48.03
PZ-3	01/08/11	76.17		28.85		47.32
PZ-3	04/08/11	76.17		27.63		48.54
PZ-3	07/08/11	76.17		27.85		48.32
PZ-3	10/07/11	76.17		28.46		47.71
PZ-3	04/12/12	76.17		29.48		46.69
PZ-3	04/19/12	76.17		29.30		46.87
PZ-3	01/11/13	76.17	30.20	33.08	2.88	NC
PZ-3	04/03/13	76.17	30.63	30.86	0.23	NC NC
PZ-3	04/08/13	76.17	30.56	30.99	0.43	
TF-8 TF-8	03/21/07	74.86		25.52		49.34
TF-8	04/30/07 08/28/07	74.86 75.60		25.54 25.92		49.32 49.68
TF-8	11/12/07	74.86		25.92		49.66
TF-8	02/05/08	75.60		26.69		48.91
TF-8	04/11/08	74.86		25.78		49.08
TF-8	07/16/08	75.60		28.42		47.18
TF-8	07/10/08	75.60		27.05		48.55
TF-8	10/14/08	75.60		27.84		47.76
TF-8	02/10/09	75.60		27.69		47.70
TF-8	04/08/10	75.60		28.30		47.30
TF-8	10/01/10	74.86		27.81		47.05
TF-8	01/07/11	74.86		27.90		46.96
TF-8	04/08/11	74.86		26.52		48.34
TF-8	07/08/11	74.86		26.66		48.20
TF-8	10/07/11	74.86		27.18		47.68
TF-8	04/12/12	74.86		28.14		46.72
TF-8	01/11/13	74.86		29.56		45.30
TF-8	04/03/13	74.86		29.35		45.51
TF-18	03/21/07	73.94	23.91	24.02	0.11	NC

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
TF-18	04/30/07	73.94	24.30	24.35	0.05	NC
TF-18	11/09/07	73.94		24.85		49.09
TF-18	02/05/08	73.94		25.49		48.45
TF-18	07/24/08	73.94		24.97		48.97
TF-18	10/14/08	73.94		25.62		48.32
TF-18	02/10/09	73.94		25.88		48.06
TF-18	07/16/09	73.94		26.42		47.52
TF-18	04/08/10	73.94	25.70	25.73	0.03	NC
TF-18	10/01/10	73.94		26.35		47.59
TF-18	01/08/11	73.94	26.65	26.86	0.21	NC
TF-18	04/07/11	73.94	24.95	25.11	0.16	NC
TF-18	07/08/11	73.94	25.30	25.40	0.10	NC
TF-18	10/06/11	73.94	25.95	25.97	0.02	NC
TF-18	04/12/12	73.94		27.30		46.64
TF-18	01/10/13	73.94	27.85	30.25	2.40	NC
TF-18	04/03/13	73.94	28.04	28.80	0.76	NC
TF-21	03/21/07	75.60		25.51		50.09
TF-21	04/30/07	75.60		25.72		49.88
TF-21	08/28/07	75.60		26.17		49.43
TF-21	11/12/07	74.76		26.35		48.41
TF-21	02/05/08	75.60		27.25		48.35
TF-21	04/14/08	75.60		25.93		49.67
TF-21	07/24/08	74.96		26.51		48.45
TF-21	10/13/08	74.96		27.10		47.86
TF-21	02/10/09	75.60		26.72		48.88
TF-21	04/20/09	74.96		21.85		53.11
TF-21	07/17/09	75.60		27.31		48.29
TF-21	10/19/09	74.96		29.84		45.12
TF-21 TF-21	04/08/10	75.60		27.30		48.30
TF-21	04/12/10 10/01/10	74.96 74.96		27.00 NM		47.96 NC
TF-21	01/08/11	74.96		27.89		47.07
TF-21	04/08/11	74.96		26.09		48.87
TF-21	07/08/11	74.96		26.59		48.37
TF-21	10/06/11	74.96		27.23		47.73
TF-21	04/12/12	74.96		28.16		46.80
TF-21	04/20/12	74.96		28.14		46.82
TF-21	01/11/13	74.96		29.63		45.33
TF-21	04/03/13	74.96		29.43		45.53
TF-21	04/08/13	74.96		29.90		45.06
TF-23	03/21/07	75.31		25.51		49.80
TF-23	04/30/07	75.31		25.67		49.64
TF-23	11/12/07	75.31		26.20		49.11
TF-23	02/05/08	75.31		26.75		48.56
TF-23	04/14/08	75.31		25.81		49.50
TF-23	07/24/08	75.31		26.45		48.86
TF-23	10/13/08	75.31		27.15		48.16
TF-23	02/10/09	75.31		26.46		48.85
TF-23	07/17/09	75.31		26.93		48.38
TF-23	04/08/10	75.31		27.20		48.11
TF-23	10/01/10	75.31		27.67		47.64
TF-23	01/08/11	75.31		27.88		47.43
TF-23	04/08/11	75.31		26.43		48.88
TF-23 TF-23	07/08/11 10/06/11	75.31 75.31		26.76		48.55
	311//16/11	/h 31		27.34		47.97

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TABLE 6
Summary of Historical Groundwater Elevations of Selected Wells

Well	Date	Top of Casing Elevation (feet msl)	Depth to Product (feet btoc)	Depth to Water (feet btoc)	Apparent Product Thickness (feet)	Groundwater Elevation (feet msl)
TF-23	01/11/13	75.31		29.67		45.64
TF-23	04/03/13	75.31	29.60	29.70	0.10	NC
TF-24	03/21/07	76.43	25.88	26.52	0.64	NC
TF-24	11/12/07	76.43		28.03		48.40
TF-24	04/11/08	76.43		27.80		48.63
TF-24	07/24/08	76.43		28.10		48.33
TF-24	10/13/08	76.43		28.90		47.53
TF-24	02/09/09	76.43		29.90		46.53
TF-24	07/16/09	76.43		29.11		47.32
TF-24	04/07/10	76.43		29.20		47.23
TF-24	10/01/10	76.43		29.45		46.98
TF-24	01/08/11	76.43		29.45		46.98
TF-24	04/08/11	76.43		28.23		48.20
TF-24	07/07/11	76.43		28.47		47.96
TF-24	10/07/11	76.43		28.98		47.45
TF-24	04/12/12	76.43		29.98		46.45
TF-24	01/10/13	76.43		31.13		45.30
TF-24	04/02/13	76.43		31.11		45.32

Notes:

--- = not detected or applicable

feet btoc = feet below top of casing

feet msl = feet above mean sea level, based on Los Angeles County Datum, 1980

NM = not measured

NC = not calculated due to presence of product in well

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FIGURES





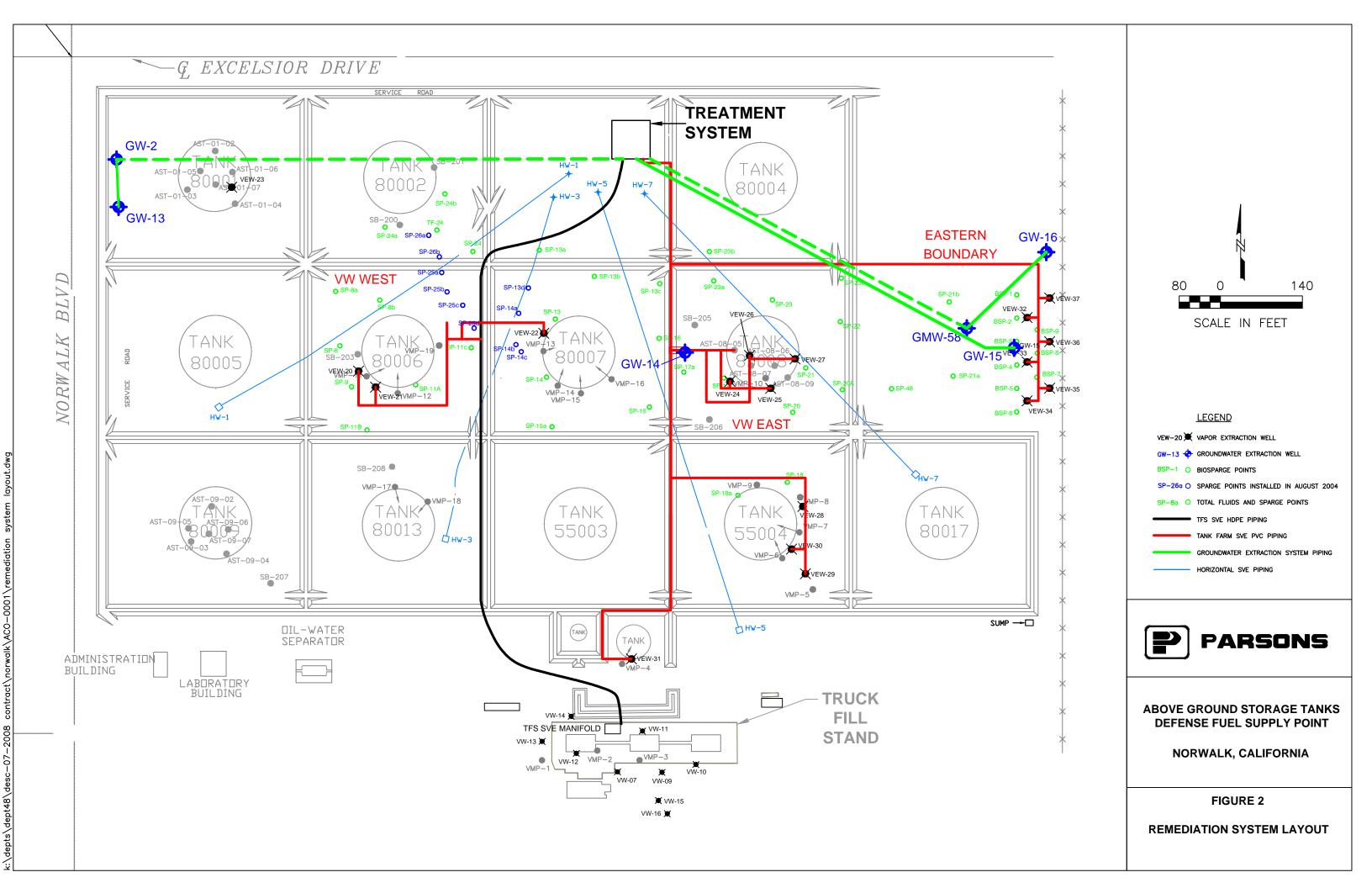
FIGURE 1

SITE LOCATION MAP

DEFENSE FUEL SUPPORT POINT NORWALK, CALIFORNIA

PARSONS

Pasadena, California



APPENDIX A

Laboratory Analytical Reports





CALSCIENCE

WORK ORDER NUMBER: 13-04-1064

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 X. T. Clark

Approved for release on 04/22/2013 by:

Ranjit Clarke Project Manager



F 1 DM

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.



Contents

Client Project Name: DFSP - Norwalk Work Order Number: 13-04-1064

1	Work Order Narrative	3
2	Client Sample Data	4 4
3	Quality Control Sample Data	5 5 7
4	Sample Analysis Summary	8
5	Glossary of Terms and Qualifiers	9
6	Chain of Custody/Sample Receipt Form	10

Page 3 of 11 nvironmental Work Order Narrative aboratories, Inc.

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/15/2013. They were assigned to Work Order 13-04-1064.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

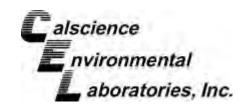
Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontract Information:

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

Seturn to Contents





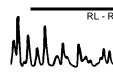


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/15/13 13-04-1064 EPA 3020A Total EPA 6020

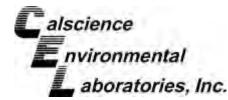
Project: DFSP - Norwalk

Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent		13-04-1064-1-A	04/15/13 12:20	Aqueous	ICP/MS 03	04/18/13	04/18/13 21:32	130418L04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Arsenic	0.00118	0.00100	1		mg/L			
Surge Tank		13-04-1064-2-A	04/15/13 12:25	Aqueous	ICP/MS 03	04/18/13	04/18/13 21:35	130418L04
Parameter	Result	RL	<u>DF</u>	Qual	<u>Units</u>			
Arsenic	0.0577	0.00100	1		mg/L			
Method Blank		096-06-003-4,085	N/A	Aqueous	ICP/MS 03	04/18/13	04/18/13 17:21	130418L04
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Arsenic	ND	0.00100	1		mg/L			







Quality Control - Spike/Spike Duplicate



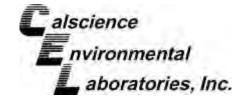
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/15/13 13-04-1064 EPA 3020A Total EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID			Matrix	Ir	nstrument		Pate epared	Date Analyzed		/ISD Batch lumber
13-04-1067-1			Aqueous	i IC	P/MS 03	04/	18/13	04/18/13	130)418S04
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Arsenic	0.004321	0.1000	0.1052	101	0.1050	101	80-120	0	0-20	







Quality Control - PDS / PDSD



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

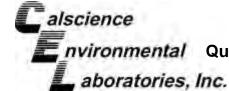
Date Received Work Order No: Preparation: Method:

04/15/13 13-04-1064 EPA 3020A Total EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrum	nent	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
13-04-1067-1	Aqueo	us ICP/M	S 03	04/18/13	04/18/13	130418S04
<u>Parameter</u>	SAMPLE CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	<u>Qualifiers</u>
Arsenic	0.004321	0.1000	0.1007	96	75-125	





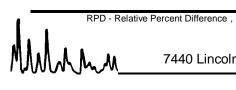
nvironmental Quality Control - Laboratory Control Sample



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1064 EPA 3020A Total EPA 6020

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File	e ID	LCS Batch Number
096-06-003-4,085	Aqueous	ICP/MS 03	04/18/13	130418-L-04_	_133.icp	130418L04
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec C	<u>Qualifiers</u>
Arsenic		0.1000	0.09631	96	80-120	





Sample Analysis Summary Report

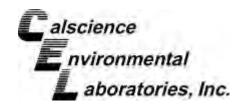


WORK ORDER #: 13-04-1064

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-A	Effluent	EPA 6020	EPA 3020A T	04/18/2013 21:32	598	ICP/MS 03	1
2-A	Surge Tank	EPA 6020	EPA 3020A T	04/18/2013 21:35	598	ICP/MS 03	1

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

04/22/13



Glossary of Terms and Qualifiers

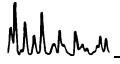


Work Order Number: 13-04-1064

Qualifier	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
E	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 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).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	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

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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.



Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

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						Unpreserved	D.	Field Filtered	FPH (g) or GRO	I DR		BTEX / MTBE (8260) or	(097	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	382)	PNAs (8310) or (8270)	722 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Arsenic		
LAB		SAMPL	.ING		NO.	rese	Preserved	II PI	(<u>6</u>)	(b) t	<u> </u>	X/N	VOCs (8260)	gena	Core) soc	sticide	PCBs (8082)	As (8	Met	VI) (7	Š	卢	55		
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SAMPLE RECEIPT FORM Cooler _ 1 of _

CLIENT: PARSONS DA	TE: <u>04 /</u>	15/13
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except Temperature	nk □ Samp ampling.	
CUSTODY SEALS INTACT: Cooler		ial: <u>& } </u> ial: <u>& #</u>
SAMPLE CONDITION: Chain-Of-Custody (COC) document(s) received with samples	No	N/A
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished. Sampler's name indicated on COC		
Proper containers and sufficient volume for analyses requested		_ _ _ Ø
Proper preservation noted on COC or sample container		
CONTAINER TYPE: Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores® □ Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGBp □1A	 TerraCores [®]	a₂ □1AGBs
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs □1 □250PB □250PBn □125PB □125PBznna □100PJ □100PJna₂ □ Air: □Tedlar® □Canister Other: □ Trip Blank Lot#: Lab Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Fil	oeled/Checked k	□ oy: <u>HH</u> by: <u>4·</u> U





CALSCIENCE

WORK ORDER NUMBER: 13-04-1558

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 X. T. Clarke

Approved for release on 04/30/2013 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.

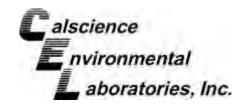


Contents

Client Project Name: DFSP Norwalk - Quarterly

Work Order Number: 13-04-1558

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	2.1 EPA 8015B (M) TPH Diesel (Aqueous)	4
	2.2 EPA 8015B (M) TPH Gasoline (Aqueous)	5
	2.3 Combined Inorganic Tests	6
3	Quality Control Sample Data	7
	3.1 MS/MSD and/or Duplicate	7
	3.2 LCS/LCSD	10
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5	Glossary of Terms and Qualifiers	18
6	Chain of Custody/Sample Receipt Form	19



Work Order Narrative



Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/22/2013. They were assigned to Work Order 13-04-1558.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

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.

Subcontract Information:

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



NELAP ID: 03220CA DoD-ELAP ID: L10-41

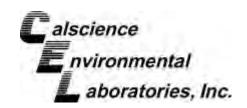
CSDLAC ID: 10109

SCAQMD ID: 93LA0830

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 .

FAX: (714) 894-7501







Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/22/13 13-04-1558 EPA 3510C EPA 8015B (M)

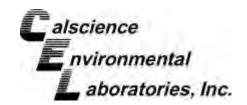
Project: DFSP Norwalk - Quarterly

Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent		13-04-1558-1-N	04/22/13 12:15	Aqueous	GC 45	04/24/13	04/25/13 04:33	130424B05
Parameter TPH as Diesel	<u>Result</u> ND	<u>RL</u> 100	<u>DF</u> 1	Qual	<u>Units</u> ug/L			
Surrogates: n-Octacosane	<u>REC (%)</u> 93	Control Limits 68-140		Qual				
11-Octacosarie	33	00-140						
Method Blank	93	099-15-282-94	N/A	Aqueous	GC 45	04/24/13	04/25/13 03:41	130424B05
	Result ND		N/A DF 1	Aqueous Qual	GC 45 Units ug/L	04/24/13		130424B05









Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/22/13 13-04-1558 EPA 5030C EPA 8015B (M)

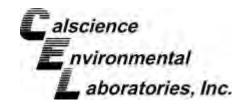
Project: DFSP Norwalk - Quarterly

Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent		13-04-1558-1-E	04/22/13 12:15	Aqueous	GC 25	04/24/13	04/24/13 21:28	130424B01
Parameter TPH as Gasoline	<u>Result</u> ND	<u>RL</u> 100	<u>DF</u> 1	<u>Qual</u>	<u>Units</u> ug/L			
Surrogates: 1,4-Bromofluorobenzene	<u>REC (%)</u> 81	Control Limits 38-134		<u>Qual</u>				
1,4-Bromondobenzene	01	36-134						
Method Blank	01	099-15-704-351	N/A	Aqueous	GC 25	04/24/13	04/24/13 10:47	130424B01
,	Result ND		N/A <u>DF</u> 1	Aqueous Qual	GC 25 Units ug/L	04/24/13		130424B01









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

04/22/13

Work Order No: 13-04-1558

Project: DFSP Norwalk - Quarterly

Page 1 of 1

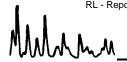
Client Sample Number	L	ab Sample	e Number	Date Collected	Matrix			
Effluent			13-04-155	58-1	04/22/13	Aqueous		
<u>Parameter</u>	Results	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method
Phenolics, Total	ND	0.10	1		mg/L	04/25/13	04/25/13	EPA 420.1
Turbidity	9.1	0.10	1		NTU	N/A	04/22/13	SM 2130 B
Solids, Total Suspended	1.4	1.0	1		mg/L	04/24/13	04/24/13	SM 2540 D
Solids, Settleable	ND	0.10	1		mL/L/hr	N/A	04/23/13	SM 2540 F
рН	7.04	0.01	1		pH units	N/A	04/22/13	SM 4500 H+ B
Sulfide, Total	ND	0.050	1		mg/L	04/24/13	04/24/13	SM 4500 S2 - D
Chlorine, Total Residual	ND	0.10	1		mg/L	N/A	04/22/13	SM 4500-CI F
Oil and Grease	ND	1.0	1		mg/L	04/26/13	04/26/13	SM 5520 B
MBAS	ND	0.10	1		mg/L	04/23/13	04/23/13	SM 5540C
Method Blank					N/A	Aqueous		
<u>Parameter</u>	<u>Results</u>	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	Method
Phenolics, Total	ND	0.10	1		mg/L	04/25/13	04/25/13	EPA 420.1
Solids, Total Suspended	ND	1.0	1		mg/L	04/24/13	04/24/13	SM 2540 D
Sulfide, Total	ND	0.050	1		mg/L	04/24/13	04/24/13	SM 4500 S2 - D
Chlorine, Total Residual	ND	0.10	1		mg/L	N/A	04/22/13	SM 4500-CI F
Oil and Grease	ND	1.0	1		mg/L	04/26/13	04/26/13	SM 5520 B

mg/L

04/23/13

04/23/13

SM 5540C



MBAS

DF - Dilution Factor

ND

0.10

Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/22/13 13-04-1558 N/A SM 5540C

Project DFSP Norwalk - Quarterly

Quality Control Sample ID			Matrix	Ir	nstrument		Pate epared	Date Analyzed		/ISD Batch lumber
Effluent			Aqueou	ıs U	V 8	04/2	23/13	04/23/13	D042	23SURS1
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
MBAS	ND	1.0	0.96	96	0.98	98	70-130	2	0-25	



Return to Conten

Quality Control - Spike/Spike Duplicate

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

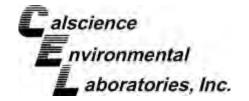
Date Received: Work Order No: Preparation: Method:

EPA 5030C EPA 8015B (M)

Quality Control Sample ID			Matrix	Ir	nstrument		Pate epared	Date Analyzed		/ISD Batch lumber
13-04-1420-1			Aqueou	ıs G	C 25	04/2	24/13	04/24/13	130)424S01
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1884	94	1921	96	68-122	2	0-18	







Quality Control - Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

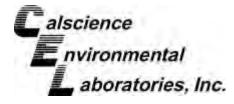
N/A 13-04-1558

13-04-1558

Matrix: Aqueous or Solid	l							
<u>Parameter</u>	<u>Method</u>	QC Sample ID	<u>Date Analyzed</u>	Sample Conc	DUP Conc	<u>RPD</u>	RPD CL	Qualifiers
Chlorine, Total Residual	SM 4500-CI F	Effluent	04/22/13	ND	ND	NA	0-25	
Turbidity	SM 2130 B	13-04-1521-1	04/22/13	0.62	0.63	2	0-25	
рН	SM 4500 H+ B	13-04-1521-1	04/22/13	7.24	7.27	0	0-25	
Sulfide, Total	SM 4500 S2 - D	13-04-1428-3	04/24/13	ND	ND	NA	0-25	
Solids, Settleable	SM 2540 F	13-04-1631-1	04/23/13	ND	ND	NA	0-25	
Solids, Total Suspended	SM 2540 D	13-04-1454-2	04/24/13	77	75	2	0-20	







Quality Control - LCS/LCS Duplicate

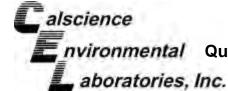


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1558 N/A EPA 420.1

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	l	LCS/LCSD Batch Number	
099-05-085-2,642	Aqueous		UV 8	04/	25/13	04/25/13		D0425PHEL1	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenolics, Total	0.50	0.45	90	0.42	84	80-120	7	0-20	





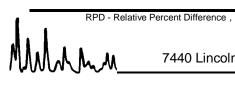


nvironmental Quality Control - Laboratory Control Sample

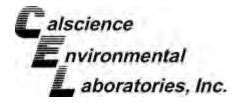


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1558 N/A SM 5540C

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-093-2,491	Aqueous	UV 8	04/23/13	NONE	D0423SURL1
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL Qualifiers
MBAS		1.0	0.97	97	80-120





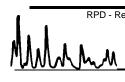


Quality Control - LCS/LCS Duplicate

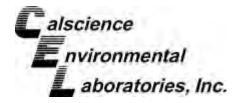


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1558 N/A SM 4500 S2 - D

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	t	LCS/LCSD Batch Number	
099-15-853-35	Aqueous		N/A	04/2	24/13	04/24/13		D0424SL1	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Sulfide, Total	1.0	0.80	80	0.80	80	80-120	0	0-20	





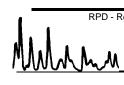


Quality Control - LCS/LCS Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1558 N/A SM 5520 B

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	t	LCS/LCSD Batch Number	
099-05-081-2,901	Aqueous		N/A	04/2	26/13	04/26/13		D0426OGL1	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Oil and Grease	40.0	39.2	98	38.0	95	80-120	3	0-20	



alscience nvironmental Qu aboratories, Inc.

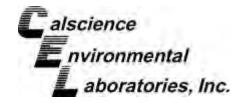
nvironmental Quality Control - Laboratory Control Sample

Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: N/A
Work Order No: 13-04-1558
Preparation: N/A
Method: SM 2540 D

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS	Batch Number
099-09-010-6,263	Aqueous	N/A	04/24/13	NONE	[00424TSSL1
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Solids, Total Suspended		100	92	92	80-120	





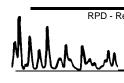


Quality Control - LCS/LCS Duplicate

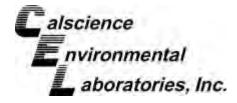


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1558 EPA 3510C EPA 8015B (M)

Quality Control Sample ID	Matrix	I	nstrument		ate pared	Date Analyzed	d	LCS/LCSD Batch Number	
099-15-282-94	Aqueous		GC 45	04/	24/13	04/25/13		130424B05	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Diesel	4000	4082	102	3899	97	75-117	5	0-13	





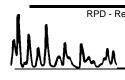


Quality Control - LCS/LCS Duplicate

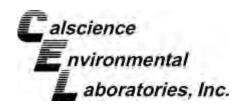


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1558 EPA 5030C EPA 8015B (M)

Quality Control Sample ID	Matrix	Matrix I			Date Prepared		d	LCS/LCSD Batch Number	
099-15-704-351	Aqueous		GC 25	04/	24/13	04/24/13		130424B01	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline	2000	1954	98	1925	96	78-120	2	0-10	







Sample Analysis Summary Report



WORK ORDER #: 13-04-1558

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-I	Effluent	SM 4500-CI F	N/A	04/22/2013 19:23	688	BUR16	1
1-L	Effluent	SM 5520 B	N/A	04/26/2013 20:00	691	N/A	1
1-M	Effluent	EPA 420.1	N/A	04/25/2013 17:54	686	UV 8	1
1-K	Effluent	SM 2540 F	N/A	04/23/2013 14:00	691	N/A	1
1-I	Effluent	SM 5540C	N/A	04/23/2013 15:23	686	UV 8	1
1-J	Effluent	SM 2540 D	N/A	04/24/2013 15:30	722	N/A	1
1-I	Effluent	SM 2130 B	N/A	04/22/2013 19:26	688	TUR 3	1
1-E	Effluent	EPA 8015B (M)	EPA 5030C	04/24/2013 21:28	797	GC 25	2
1-I	Effluent	SM 4500 H+ B	N/A	04/22/2013 19:01	688	PH 1	1
1-N	Effluent	EPA 8015B (M)	EPA 3510C	04/25/2013 4:33	682	GC 45	1
1-G	Effluent	SM 4500 S2 - D	N/A	04/24/2013 19:06	735	N/A	1

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

04/30/13



Glossary of Terms and Qualifiers

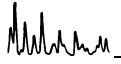


Work Order Number: 13-04-1558

Qualifier	<u>Definition</u>
*	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
E	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 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).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	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 OC results are reported on a wet weight basis.

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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.





7440 LINCOLN WAY

GARDEN GROVE, CA 92841-1432

TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE:	4-2	2-13		
PAGE:	1	OF	1	

LABORATORY CLIENT:								CLIENT PROJECT NAME / NUMBER: P.O.						P.O. NO.:							
Par	sons, Inc.						ם	FSP	Nor	wal	k - Q	uarl	erlv						7475	77-0500	0
100	W. Walnut Street						PRC	DJECT (CONTA	ACT:									QUOTE N	O.:	
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Revised: 08/28/08





WORK ORDER #: 13-04- 1 5

SAMPLE RECEIPT FORM Cooler of

CLIENT: PARSONS DA	ATE.	04/12/13										
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen exception of the state o		ent/tissue) Sample										
☐ 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 Courier.												
Ambient Temperature: Air Filter Initial: Initial:												
CUSTODY SEALS INTACT: Cooler] N/A	Initial: <u>RM</u> Initial: <u>P</u>										
SAMPLE CONDITION: Yes	1	No N/A										
Chain-Of-Custody (COC) document(s) received with samples												
COC document(s) received complete	. [
\square Collection date/time, matrix, and/or # of containers logged in based on sample labels.												
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.												
Sampler's name indicated on COC	[
Sample container label(s) consistent with COC	[
Sample container(s) intact and good condition	[
Proper containers and sufficient volume for analyses requested	[
Analyses received within holding time												
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours 🔽												
Proper preservation noted on COC or sample container	· · [
☐ Unpreserved vials received for Volatiles analysis												
Volatile analysis container(s) free of headspace	1											
Tedlar bag(s) free of condensation	[
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores® □	TerraCor	es® □										
Water: □VOA ☑VOĀn □VOAna₂ □125AGB □125AGBh □125AGBp □14	AGB □1/	AGBna₂ Ø1AGBs										
□500AGB Ø500AGJ Ø500AGJs □250AGB □250CGB □250CGBs Ø	ÍPB □1F	PB na □500PB										
□250PB ☑250PBnu□125PB ☑125PB znna □100PJ □100PJ na ₂ □	_ 🗆											
Air: Tedlar [®] Canister Other: Trip Blank Lot#: La Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Preservative: h: HCL n: HNO3 na ₂ :Na ₂ S ₂ O ₃ na: NaOH p: H ₃ PO ₄ s: H ₂ SO ₄ u: Ultra-pure znna: ZnAc ₂ +NaOH f: F	Revi	iewed by:										

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Filtered





CALSCIENCE

WORK ORDER NUMBER: 13-04-1572

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. T. Clarke

Approved for release on 04/29/2013 by:

Ranjit Clarke Project Manager



Email your PM >

ResultLink >

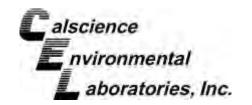
Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, 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.



Contents

Client Project Name: DFSP Norwalk Work Order Number: 13-04-1572

1	Work Order Narrative	3
2	Client Sample Data	4 4 6
3	Quality Control Sample Data	7 7 10
4	Sample Analysis Summary	12
5	Glossary of Terms and Qualifiers	13
6	Chain of Custody/Sample Receipt Form	14



Work Order Narrative



Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/22/2013. They were assigned to Work Order 13-04-1572.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

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.

Subcontract Information:

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



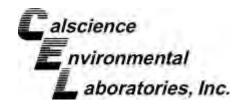
NELAP ID: 03220CA DoD-ELAP ID: L10-41

CSDLAC ID: 10109

SCAQMD ID: 93LA0830

FAX: (714) 894-7501







Parsons Government Services, Inc.

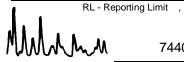
100 West Walnut Street Pasadena, CA 91124-0002 Date Received: 04/22/13 Work Order No: 13-04-1572

Preparation: EPA 5030C Method: EPA 8260B

Units: ug/L

Project: DFSP Norwalk Page 1 of 2

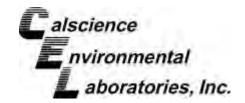
Client Sample Number			Lab S Nun	ample nber		Date/Time Collected	Matrix	Instrument	Date Prepa		Oate/Time Analyzed	QC Bat	ch ID
Effluent			13-04	-1572-1	- A	04/22/13 12:15	Aqueous	GC/MS OO	04/23/	/13	04/23/13 16:27	130423	L01
Comment(s): -Results were	evaluated to t	he MDL (D	L), conce		ns >= to	the MDL (DL) but < RL (I	_OQ), if found	d, are qual	ified wit	h a "J" flag	•	
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual
Acetone	ND	20	10	1		c-1,3-Dichlo			ND	0.50	0.25	1	
Benzene	ND	0.50	0.14	1		t-1,3-Dichlo	ropropene		ND	0.50	0.25	1	
Bromobenzene	ND	1.0	0.30	1		Ethylbenzer	ne		ND	0.50	0.14	1	
Bromochloromethane	ND	1.0	0.48	1		2-Hexanone	•		ND	10	2.1	1	
Bromodichloromethane	ND	1.0	0.21	1		Isopropylbe	nzene		ND	1.0	0.58	1	
Bromoform	ND	1.0	0.50	1		p-Isopropylt	toluene		ND	1.0	0.16	1	
Bromomethane	ND	5.0	3.9	1		Methylene (Chloride		ND	5.0	0.64	1	
2-Butanone	ND	10	2.2	1		4-Methyl-2-	Pentanone		ND	10	4.4	1	
n-Butylbenzene	ND	1.0	0.23	1		Naphthalen	е		ND	10	2.5	1	
sec-Butylbenzene	ND	1.0	0.25	1		n-Propylber	nzene		ND	1.0	0.17	1	
tert-Butylbenzene	ND	1.0	0.28	1		Styrene			ND	1.0	0.17	1	
Carbon Disulfide	ND	10	0.41	1		•	achloroetha	ne	ND	1.0	0.40	1	
Carbon Tetrachloride	ND	0.50	0.23	1		1.1.2.2-Tetr	achloroetha	ne	ND	1.0	0.41	1	
Chlorobenzene	ND	1.0	0.17	1		Tetrachloro	ethene		ND	1.0	0.39	1	
Chloroethane	ND	5.0	2.3	1		Toluene			ND	0.50	0.24	1	
Chloroform	ND	1.0	0.46	1		1,2,3-Trichl	orobenzene		ND	1.0	0.51	1	
Chloromethane	ND	5.0	1.8	1		1,2,4-Trichl			ND	1.0	0.50	1	
2-Chlorotoluene	ND	1.0	0.24	1		1,1,1-Trichl			ND	1.0	0.30	1	
4-Chlorotoluene	ND	1.0	0.13	1				fluoroethane	ND	10	0.78	1	
Dibromochloromethane	ND	1.0	0.25	1		1,1,2-Trichl			ND	1.0	0.38	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.2	1		Trichloroeth			ND	1.0	0.37	1	
1,2-Dibromoethane	ND	1.0	0.36	1		Trichloroflu			ND	10	1.7	1	
Dibromomethane	ND	1.0	0.46	1			oropropane		ND	5.0	0.64	1	
1,2-Dichlorobenzene	ND	1.0	0.46	1			thylbenzene		ND	1.0	0.36	1	
1,3-Dichlorobenzene	ND	1.0	0.40	1			thylbenzene		ND	1.0	0.28	1	
1,4-Dichlorobenzene	ND	1.0	0.43	1		Vinyl Aceta			ND	10	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.46	1		Vinyl Chlori			ND	0.50	0.30	1	
1,1-Dichloroethane	ND	1.0	0.48	1		p/m-Xylene	ac		ND	0.50	0.24	1	
1,2-Dichloroethane	ND	0.50	0.24	1		o-Xylene			ND	0.50	0.23	1	
1,1-Dichloroethene	ND	1.0	0.43	1		•	tyl Ether (M	TRE)	ND	0.50	0.23	1	
c-1,2-Dichloroethene	ND	1.0	0.48	1		•	Alcohol (TBA	,	8.9	10	4.6	1	J
t-1.2-Dichloroethene	ND	1.0	0.37	1		•	Ether (DIPE	,	ND	2.0	0.33	1	Ū
1,2-Dichloropropane	ND	1.0	0.42	1			l Ether (ETE	•	ND	2.0	0.33	1	
1,3-Dichloropropane	ND	1.0	0.30	1			Nethyl Ether		ND	2.0	0.22	1	
2,2-Dichloropropane	ND	1.0	0.36	1		Ethanol	ACTIVI ETICI	(TAIVIL)	ND	100	50	1	
1,1-Dichloropropene	ND	1.0	0.46	1		Lilanoi			ND	100	50		
Surrogates:	REC (%)		<u>Qu</u>	<u>al</u>		Surrogates:			REC (%)			<u>lual</u>	
1,4-Bromofluorobenzene	98	<u>Limits</u> 80-120				Dibromofluo	oromethano		95	<u>Limits</u> 80-12	_		
•	99	80-120					Jonethane		99	80-12			
1,2-Dichloroethane-d4	99	80-134				Toluene-d8			33	80-12	20		



DF - Dilution Factor , Qual - Qualifiers

04/22/13





Analytical Report



Parsons Government Services, Inc.

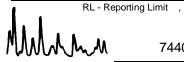
100 West Walnut Street Pasadena, CA 91124-0002 Date Received:
Work Order No:

Work Order No: 13-04-1572
Preparation: EPA 5030C
Method: EPA 8260B

Units: ug/L

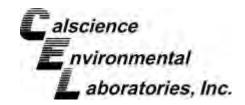
Project: DFSP Norwalk Page 2 of 2

Client Sample Number			Lab Sa Num	•		Date/Time Collected	Matrix	Instrument	Date Prepa		ate/Time nalyzed	QC Bat	ch ID
Method Blank			099-14	-001-10,	745	N/A	Aqueous	GC/MS OO	04/23/	13 0	4/23/13 13:19	130423	L01
Comment(s): -Results were	evaluated to the	ne MDL (D	L), conce	ntrations	>= to	the MDL (DL) but < RL (l	_OQ), if found	d, are qual	ified with	n a "J" flag].	
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual
Acetone	ND	20	10	1		c-1,3-Dichle	oropropene		ND	0.50	0.25	1	
Benzene	ND	0.50	0.14	1		t-1,3-Dichlo	ropropene		ND	0.50	0.25	1	
Bromobenzene	ND	1.0	0.30	1		Ethylbenzei	ne		ND	0.50	0.14	1	
Bromochloromethane	ND	1.0	0.48	1		2-Hexanone	9		ND	10	2.1	1	
Bromodichloromethane	ND	1.0	0.21	1		Isopropylbe	nzene		ND	1.0	0.58	1	
Bromoform	ND	1.0	0.50	1		p-Isopropyl	toluene		ND	1.0	0.16	1	
Bromomethane	ND	5.0	3.9	1		Methylene (Chloride		ND	5.0	0.64	1	
2-Butanone	ND	10	2.2	1		4-Methyl-2-	Pentanone		ND	10	4.4	1	
n-Butylbenzene	ND	1.0	0.23	1		Naphthalen			ND	10	2.5	1	
sec-Butylbenzene	ND	1.0	0.25	1		n-Propylber			ND	1.0	0.17	1	
tert-Butylbenzene	ND	1.0	0.28	1		Styrene			ND	1.0	0.17	1	
Carbon Disulfide	ND	10	0.41	1		•	achloroetha	ne	ND	1.0	0.40	1	
Carbon Tetrachloride	ND	0.50	0.23	1			achloroetha		ND	1.0	0.41	1	
Chlorobenzene	ND	1.0	0.17	1		Tetrachloro			ND	1.0	0.39	1	
Chloroethane	ND	5.0	2.3	1		Toluene	0.1.0.1.0		ND	0.50	0.24	1	
Chloroform	ND	1.0	0.46	1			orobenzene		ND	1.0	0.51	1	
Chloromethane	ND	5.0	1.8	1			orobenzene		ND	1.0	0.50	1	
2-Chlorotoluene	ND	1.0	0.24	1		1,1,1-Trichl			ND	1.0	0.30	1	
4-Chlorotoluene	ND	1.0	0.13	1				fluoroethane		10	0.78	1	
Dibromochloromethane	ND	1.0	0.15	1		1,1,2-Trichl		indordetriarie	ND	1.0	0.78	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.2	1		Trichloroeth			ND	1.0	0.37	1	
1,2-Dibromoethane	ND	1.0	0.36	1		Trichloroflu			ND	1.0	1.7	1	
,	ND	1.0		1					ND	5.0	0.64	1	
Dibromomethane	ND	1.0	0.46 0.46	1		1,2,3-Trichl					0.84	1	
1,2-Dichlorobenzene							thylbenzene		ND ND	1.0	0.36	-	
1,3-Dichlorobenzene	ND	1.0	0.40	1			thylbenzene			1.0		1	
1,4-Dichlorobenzene	ND	1.0	0.43	1		Vinyl Aceta			ND	10	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.46	1		Vinyl Chlori	ae		ND	0.50	0.30	1	
1,1-Dichloroethane	ND	1.0	0.28	1		p/m-Xylene			ND	0.50	0.24	1	
1,2-Dichloroethane	ND	0.50	0.24	1		o-Xylene			ND	0.50	0.23	1	
1,1-Dichloroethene	ND	1.0	0.43	1		,	tyl Ether (M	,	ND	0.50	0.31	1	
c-1,2-Dichloroethene	ND	1.0	0.48	1		•	Alcohol (TBA	,	ND	10	4.6	1	
t-1,2-Dichloroethene	ND	1.0	0.37	1			Ether (DIPE	,	ND	2.0	0.33	1	
1,2-Dichloropropane	ND	1.0	0.42	1		, ,	I Ether (ETE	,	ND	2.0	0.44	1	
1,3-Dichloropropane	ND	1.0	0.30	1		•	Nethyl Ether	(TAME)	ND	2.0	0.22	1	
2,2-Dichloropropane	ND	1.0	0.36	1		Ethanol			ND	100	50	1	
1,1-Dichloropropene	ND	1.0	0.46	1									
Surrogates:	REC (%)	Control Limits	Qua	<u>ll</u>		Surrogates:			REC (%)	Contro		<u>tual</u>	
1,4-Bromofluorobenzene	99	80-120				Dibromoflu	oromethane		95	80-12			
1,2-Dichloroethane-d4	98	80-134				Toluene-d8	J. G. HOU IGHO		100	80-12			
1,2-DICHIOIOEHIAHE-U4		00-104				1 Oluel le-do			.00	00-12	•		



DF - Dilution Factor , Qual - Qualifiers







Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation:

Method:

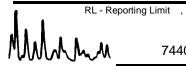
Units:

04/22/13 13-04-1572 EPA 3020A Total EPA 6020

mg/L

Project: DFSP Norwalk Page 1 of 1

Client Sample Number	er		Lab Sam Numbe	•	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent		13-04-15	572-1-D	04/22/13 12:15	Aqueous	ICP/MS 03	04/24/13	04/24/13 18:34	130424L02	
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	Parameter		Result	<u>RL</u>	DF	Qual
Arsenic	0.00619	0.00100	1		Selenium		ND	0.00		
Copper	0.00139	0.00100	1		Zinc			0.00500 1		
Lead	ND	0.00100	1							
Method Blank		096-06-0	096-06-003-4,094		Aqueous	ICP/MS 03	04/24/13 04/24/1 17:26		130424L02	
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	Parameter		Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Arsenic	ND	0.00100	1		Selenium		ND	0.00	100 1	
Copper	ND	0.00100	1		Zinc		ND	0.00	500 1	
Lead	ND	0.00100	1							





Quality Control - Spike/Spike Duplicate

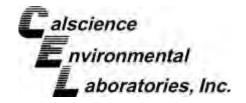
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/22/13 13-04-1572 EPA 3020A Total EPA 6020

Project DFSP Norwalk

Quality Control Sample ID			Matrix Instrument				Date epared	Date Analyzed	MS/MSD Batch Number		
13-04-1640-2			Aqueou	s IC	CP/MS 03	04/2	23/13	04/24/13	130424\$02		
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers	
Arsenic	4.750	0.1000	4.656	4X	4.572	4X	73-127	4X	0-11	Q	
Copper	0.001197	0.1000	0.1008	100	0.1005	99	72-108	0	0-10		
Lead	ND	0.1000	0.1092	109	0.1078	108	79-121	1	0-10		
Selenium	ND	0.1000	0.08959	90	0.08701	87	59-125	3	0-12		
Zinc	ND	0.1000	0.09515	95	0.08890	89	43-145	7	0-39		







Quality Control - PDS / PDSD



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received Work Order No: Preparation: Method: 04/22/13 13-04-1572 EPA 3020A Total EPA 6020

Project DFSP Norwalk

Quality Control Sample ID	Matrix	Instrun	nent	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
13-04-1640-2	Aqueo	us ICP/N	IS 03	04/23/13	04/24/13	130424S02
<u>Parameter</u>	SAMPLE CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	<u>Qualifiers</u>
Arsenic	4.750	0.1000	4.705	4X	75-125	Q
Copper	0.001197	0.1000	0.1004	99	75-125	
Lead	ND	0.1000	0.1065	107	75-125	
Selenium	ND	0.1000	0.08912	89	75-125	
Zinc	ND	0.1000	0.09177	92	75-125	





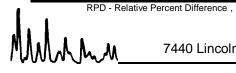
Quality Control - Spike/Spike Duplicate

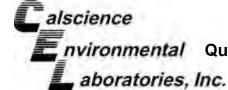


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/22/13 13-04-1572 EPA 5030C EPA 8260B

Project DFSP Norwalk

Quality Control Sample ID	Quality Control Sample ID		Matrix		Instrument		Date epared	Date Analyzed	MS/MSD Batch Number	
13-04-1260-1			Aqueous		GC/MS OO	04/23/13		04/23/13	130	423S02
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	ND	50.00	45.87	92	55.15	110	78-120	18	0-20	
Carbon Tetrachloride	ND	50.00	49.85	100	59.00	118	67-139	17	0-20	
Chlorobenzene	ND	50.00	48.67	97	57.62	115	80-120	17	0-20	
1,2-Dibromoethane	ND	50.00	45.70	91	54.83	110	80-123	18	0-20	
1,2-Dichlorobenzene	ND	50.00	48.15	96	57.25	115	76-120	17	0-20	
1,2-Dichloroethane	ND	50.00	46.28	93	55.66	111	76-130	18	0-20	
1,1-Dichloroethene	ND	50.00	48.16	96	56.09	112	70-130	15	0-27	
Ethylbenzene	ND	50.00	46.80	94	55.20	110	73-127	16	0-20	
Toluene	ND	50.00	47.85	96	57.12	114	72-126	18	0-20	
Trichloroethene	ND	50.00	46.54	93	54.98	110	74-122	17	0-20	
Vinyl Chloride	ND	50.00	42.42	85	50.90	102	65-131	18	0-24	
p/m-Xylene	ND	100.0	91.65	92	109.3	109	70-130	18	0-30	
o-Xylene	ND	50.00	47.44	95	56.38	113	70-130	17	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	41.55	83	48.99	98	69-123	16	0-20	
Tert-Butyl Alcohol (TBA)	ND	250.0	261.8	105	304.0	122	65-131	15	0-22	
Diisopropyl Ether (DIPE)	1.804	50.00	45.68	88	53.59	104	68-128	16	0-22	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	41.52	83	48.27	97 69-123		15	0-21	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	41.55	83	50.19	100 70-124		19	0-20	
Ethanol	ND	500.0	661.2	132	723.0	145	41-155	9	0-35	





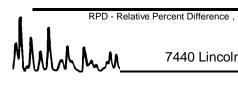
nvironmental Quality Control - Laboratory Control Sample



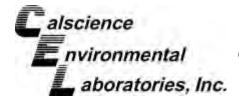
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1572 EPA 3020A Total EPA 6020

Project: DFSP Norwalk

Quality Control Sample ID	Control Sample ID Matrix Instrument		Date Analyzed	Lab File	e ID L	.CS Batch Number
096-06-003-4,094	Aqueous	ICP/MS 03	3 04/24/13	130424-L-02_	_092.icp	130424L02
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	<u>Qualifiers</u>
Arsenic		0.1000	0.1040	104	80-120	
Copper		0.1000	0.1101	110	80-120	
Lead		0.1000	0.1015	101	80-120	
Selenium		0.1000	0.09767	98	80-120	
Zinc		0.1000	0.1079	108	80-120	







Quality Control - LCS/LCS Duplicate



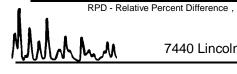
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1572 EPA 5030C EPA 8260B

Project: DFSP Norwalk

Quality Control Sample ID	M	atrix	Instrumer	nt	Date Prepared		ate llyzed	LCS	1	
099-14-001-10,745	Aque	eous	GC/MS O)	04/23/13	04/23	3/13	1	30423L01	
<u>Parameter</u>	<u>SPIKE</u> ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	50.00	46.05	92	52.50	105	80-120	73-127	13	0-20	
Carbon Tetrachloride	50.00	49.17	98	56.57	113	66-138	54-150	14	0-20	
Chlorobenzene	50.00	48.22	96	54.77	110	80-120	73-127	13	0-20	
1,2-Dibromoethane	50.00	46.69	93	52.84	106	80-120	73-127	12	0-20	
1,2-Dichlorobenzene	50.00	47.60	95	54.74	109	80-120	73-127	14	0-20	
1,2-Dichloroethane	50.00	47.96	96	53.37	107	80-129	72-137	11	0-20	
1,1-Dichloroethene	50.00	47.04	94	53.88	108	71-131	61-141	14	0-20	
Ethylbenzene	50.00	45.77	92	52.77	106	80-123	73-130	14	0-20	
Toluene	50.00	47.52	95	55.38	111	79-121	72-128	15	0-20	
Trichloroethene	50.00	45.55	91	53.54	107	80-120	73-127	16	0-20	
Vinyl Chloride	50.00	42.54	85	48.63	97	70-136	59-147	13	0-20	
p/m-Xylene	100.0	90.80	91	103.8	104	75-125	67-133	13	0-25	
o-Xylene	50.00	46.47	93	52.79	106	75-125	67-133	13	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	41.86	84	46.78	94	72-126	63-135	11	0-22	
Tert-Butyl Alcohol (TBA)	250.0	226.7	91	265.2	106	71-125	62-134	16	0-25	
Diisopropyl Ether (DIPE)	50.00	43.64	87	49.82	100	69-129	59-139	13	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	41.12	82	46.37	93	69-129	59-139	12	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	42.54	85	47.57	95	67-133	56-144	11	0-20	
Ethanol	500.0	556.5	111	688.3	138	47-155	29-173	21	0-36	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed:

LCS ME CL validation result: Pass





Sample Analysis Summary Report



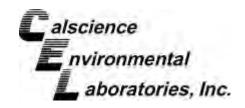
WORK ORDER #: <u>13-04-1572</u>

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-D	Effluent	EPA 6020	EPA 3020A T	04/24/2013 18:34	598	ICP/MS 03	1
1-A	Effluent	EPA 8260B	EPA 5030C	04/23/2013 16:27	486	GC/MS OO	2

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



04/29/13



Glossary of Terms and Qualifiers

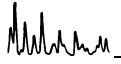


Work Order Number: 13-04-1572

Qualifier	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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 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).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	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.

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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.



Calscience Environmental Laboratories, Inc. ▼ SoCal Laboratory ☐ NorCal Service Center

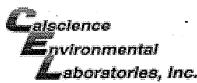
CHAIN OF CUSTODY RECORD

7440 Lincoln Way 5063 Commercial Circle, Suite H Garden Grove, CA 92841-1427 Concord, CA 94520-8577								WO # / LAB USE ONLY Date Page Page					4-22-13 1 of /				**								
	(714) 895-5494 RATORY CLIENT:		(925) 689	9022	na parameter de la companya de la companya de la companya de la companya de la companya de la companya de la co	niene en marien management		CLIENT PROJECT NAME / NUMBER:					e	P.O. NO.:											
	Parsons					DAGONE BERFESON WORKEN FORM		PROJECT CONTACT:								747576 - 05000 SAMPLER(S): (PRINT)									
ADDRE	ess: 100 W. W.	12.4.54						PRO	JECT -	CONT	ACT:	wa	IC						SAME	/) PLER(26 S): (PF	<u>- US</u> RINT)	,000	2	
CITY	ρ,	Kinor oi	STATE			ZIP		Mary Lucas/Cindy Zicker										osk							
TEL:	Pasa dena	MAIL: .	CA_		·			YIE	sry.	LU	ىمى			2 <u>4/</u>	<u> </u>	CO			VC	<u>inn</u> ES	1	<u>var</u>	03K	Q	
624	440-6032 AROUND TIME:	Mary. Luc	as e Par	soms con	<u>~_</u>				T	ī	T	r	(EU	UE	:31	EL	AI	AMI	- Y 3	ES	inocurrence of	ΑT	***************************************		
		8 HR72 I	HR ⊠s	TANDARD					4														2		
COELT EDF GLOBAL ID LOG CODE									TPH (d) or DRO or (C6-C36) or (C6-C44)					35)	- Control of the Cont				-		(6)		As, Cu, Se, Pb,		
SPECI	AL INSTRUCTIONS:		nn a an maintean na mainteann a maraige ann ach						36) 0) (20;						18.6]	0-15		3		
									၁၂) or (En Core / Terra Core Prep (5035)				(0)	(X.	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)		As,		
								0) oc		(8260		260)	Con		(1)		r (827	10/7	7196)-14A	[0-3]	- 1		
					rved	g	ered	r GR	r DR(TBE	(09)	8) sa	Terra	3270)	3 (80	82)	10)) si	10 96 01	s (TC	(a)	9		l
LAB		SAMPI	ING	NO.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	(p)		BTEX / MTBE (8260) or	VOCs (8260)	Oxygenates (8260)	Sore /	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	<u>) []</u>	8	Air - TPH (g) [TO-3]	2		
USE ONLY	SAMPLE ID	DATE	TIME	MATRIX OF CONT.	J S	Pre	Fiel	直	声	TPH (盟	8	Š	듑	SVC	Pes	2	NA	T22	ઈ	Air	Air.	Mets 6020		
1	Effluent	4-22-13	1215	GW								×	X										X		
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DISTRIBUTION: White with final report, Green and Yellow to Client.

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.

Return to Contents



WORK ORDER #: 13-04-1/

SAMPLE RECEIPT FOR	KIM C	ooler	_ of
CLIENT: PARSONS	DATE:	04/2	<u>2/13</u>
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen	except sec	liment/tissu	e)
Temperature 2.3° C - 0.2 °C (CF) = 2.1° C	Blank	☐ Sample	Э
☐ Sample(s) outside temperature criteria (PM/APM contacted by:).		-	
☐ Sample(s) outside temperature criteria but received on ice/chilled on same da	ev of samplir	na.	
☐ Received at ambient temperature, placed on ice for transport by Co		.9.	
Ambient Temperature: Air Filter	u	Initial	. LIA
Ambient remperature.		mittai	
CUSTODY SEALS INTACT:			
☐ Cooler ☐ ☐ No (Not Intact) ☐ Not Present	□ N/A	Initia	1: <u>BM</u>
□ Sample □ □ No (Not Intact) ☑ Not Present		Initia	1: <u>&</u>
, <u></u>	Yes 	No —	N/A
Chain-Of-Custody (COC) document(s) received with samples			
COC document(s) received complete	418413		
Collection date/time, matrix, and/or # of containers logged in based on sample labels.	Q y		
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC			
Sample container label(s) consistent with COC			
Sample container(s) intact and good condition	.2		
Proper containers and sufficient volume for analyses requested			
Analyses received within holding time	Z		
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	. 🗆		
Proper preservation noted on COC or sample container			
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace			
Tedlar bag(s) free of condensation CONTAINER TYPE:	. 🗆 .		
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve() □EnCores	s [®] □Terra(Cores [®] □_	
Water: □VOA ☑VOAh □VOAna₂ □125AGB □125AGBh □125AGBp			□1AGBs
D500AGR D500AG D500AG IS D250AGR D250CGB D250CGBs	. □1PB □	∃1PBna □	1500PB

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Filtered Scanned by: _

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope

Air: □Tedlar[®] □Canister Other: □_____ Trip Blank Lot#:_

Reviewed by: _ P.L

Labeled/Checked by: <u></u>





CALSCIENCE

WORK ORDER NUMBER: 13-04-2011

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 X. T. Clarke

Approved for release on 04/30/2013 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 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.



Contents

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3	Quality Control Sample Data	5 5 7
4	Sample Analysis Summary	8
5	Glossary of Terms and Qualifiers	9
6	Chain of Custody/Sample Receipt Form	10

nvironmental **Work Order Narrative** aboratories, Inc.



Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/29/2013. They were assigned to Work Order 13-04-2011.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

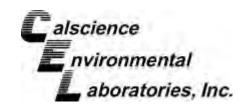
Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontract Information:

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





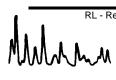




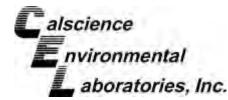
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/29/13 13-04-2011 EPA 3020A Total EPA 6020

Project: DFSP Norwalk

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent		13-04-2011-1-A	04/29/13 10:45	Aqueous	ICP/MS 03	04/29/13	04/29/13 20:27	130429L04A
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
Arsenic	0.0239	0.00100	1		mg/L			
Method Blank		096-06-003-4,099	N/A	Aqueous	ICP/MS 03	04/29/13	04/29/13 19:35	130429L04A
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			







Quality Control - Spike/Spike Duplicate



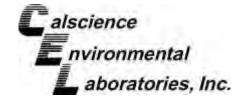
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/29/13 13-04-2011 EPA 3020A Total EPA 6020

Project DFSP Norwalk

Quality Control Sample ID			Matrix		strument	Date Prepared		Date Analyzed	MS/MSD Batch Number	
13-04-1872-1			Aqueous ICP/MS 03		04/29/13		04/29/13	130	429S04	
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Arsenic	0.001575	0.1000	0.1073	106	0.1069	105	73-127	0	0-11	







Quality Control - PDS / PDSD

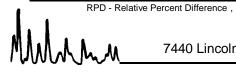


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received Work Order No: Preparation: Method: 04/29/13 13-04-2011 EPA 3020A Total EPA 6020

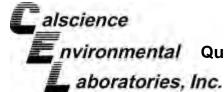
Project DFSP Norwalk

Quality Control Sample ID	Matrix	s Instrun	nent	Date [Prepared	Date Analyzed	PDS/PDSD Batch Number
13-04-1872-1	Aqueo	us ICP/M	IS 03	04/29/13	04/29/13	130429S04
<u>Parameter</u>	SAMPLE CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	<u>Qualifiers</u>
Arsenic	0.001575	0.1000	0.1005	99	75-125	









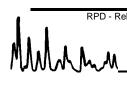
nvironmental Quality Control - Laboratory Control Sample



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-2011 EPA 3020A Total EPA 6020

Project: DFSP Norwalk

Quality Control Sample ID	lity Control Sample ID Matrix		Date Analyzed	Lab File	e ID	LCS Batch Number
096-06-003-4,099	Aqueous	ICP/MS 03	04/29/13	130429-L-04_	_128.icp	130429L04A
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Arsenic		0.1000	0.09993	100	80-120	





Sample Analysis Summary Report

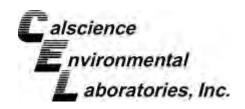


WORK ORDER #: <u>13-04-2011</u>

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-A	Effluent	EPA 6020	EPA 3020A T	04/29/2013 20:27	598	ICP/MS 03	1

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

04/30/13



Glossary of Terms and Qualifiers



Work Order Number: 13-04-2011

Qualifier	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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 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).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
Χ	% Recovery and/or RPD out-of-range.
Z	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

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.

% moisture. All QC results are reported on a wet weight basis.



Calscience Environmental Laboratories, Inc. 7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494

Other CA office locations: Concord and San Luis Obispo

For courier service / sample drop off information, contact sales@calscience.com or call us.

WO # / LAB USE ONLY

13-04-2011

CHAIN OF CUSTODY RECORD

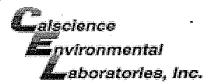
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						Unpreserved	Preserved	Field Filtered	(6) ₁	(g)	1 C6-		MTM.	VOCs (8260)	nates	5035)	SVOCs (8270)	ges (PCBs (8082)	82	etals		o z	Hold		
LAB USE	SAMPLE ID	SAMP		MATRIX	NO. OF	npre	lese	eld	TPF	ם	Ή	ТРН	TEX	SCs	xyge) de	ő	estici	CBs	AHs	22 M	3	1	불		
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1	Effluent	4-29-13	1045	GW	1	<u> </u>	×																X			
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DISTRIBUTION: White with final report, Green and Yellow to Client.

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.





WORK ORDER #: 13-04- 2 0 7

SAMPLE RECEIPT FORM

Cooler ____ of ____

CLIENT: PARSONS DATE:	04/29/13
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sec Temperature °C - 0.2 °C (CF) = °C	diment/tissue)
☐ Sample(s) outside temperature criteria (PM/APM contacted by:).	
☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling	ng.
☐ Received at ambient temperature, placed on ice for transport by Courier.	Initial: Au
Ambient Temperature: □ Air □ Filter	illitial.
CUSTODY SEALS INTACT:	
□ Cooler □ □ No (Not Intact) Not Present □ N/A	Initial:
□ Sample □ □ No (Not Intact) □ Not Present	Initial: <u>VO</u>
SAMPLE CONDITION: Yes	No N/A
Chain-Of-Custody (COC) document(s) received with samples	
COC document(s) received complete	
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.	
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.	
Sampler's name indicated on COC	
Sample container label(s) consistent with COC	
Sample container(s) intact and good condition	
Proper containers and sufficient volume for analyses requested	
Analyses received within holding time	
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours 🗆	
Proper preservation noted on COC or sample container	
☐ Unpreserved vials received for Volatiles analysis	· ·
Volatile analysis container(s) free of headspace □	
Tedlar bag(s) free of condensation CONTAINER TYPE:	
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores® □Terra	Cores® □
Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGBp □1AGB [
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs □1PB [
□250PB	
Air: □Tedlar [®] □Canister Other: □ Trip Blank Lot#: Labeled/e	Checked by:

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Filtered Scanned by:

Reviewed by:





CALSCIENCE

WORK ORDER NUMBER: 13-05-0849

The difference is service



AIR SOIL WATER MARINE CHEMISTRY

Analytical Report For

Client: Parsons Government Services, Inc.

Client Project Name: DFSP Norwalk (NPDES New Permit)

Attention: Mary Lucas

100 West Walnut Street Pasadena, CA 91124-0002

Ranjit X. T. Clarke

Approved for release on 05/31/2013 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.

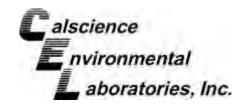


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Client Project Name: DFSP Norwalk (NPDES New Permit)

Work Order Number: 13-05-0849

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8	Frontier Analytical- Dioxins by EPA 8290 - 13050849	54



Work Order Narrative



Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/10/2013. They were assigned to Work Order 13-05-0849.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

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.

Subcontract Information:

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

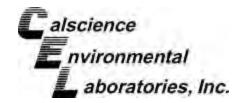


NELAP ID: 03220CA DoD-ELAP ID: L10-41

CSDLAC ID: 10109

SCAQMD ID: 93LA0830

FAX: (714) 894-7501



Subcontractor Analysis Report



Work Order # 13-05-0849

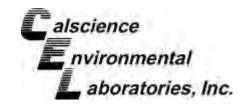
One or more samples in this Work Order have tests that were subcontracted. The subcontract report(s) follows.

For subcontracted tests, please reference the laboratory information noted below.

- 1 EMSL- LA Testing South Pasadena, CA CA ELAP 2283 EPA 100.2 Asbestos
- 2 Frontier Analytical Laboratories El Dorado Hills, CA NELAP 02113CA EPA 8290 - 2,3,7,8-TCDD





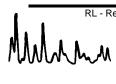




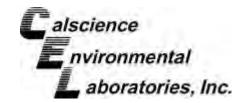
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 05/10/13 13-05-0849 EPA 3510C EPA 8015B (M)

Project: DFSP Norwalk (NPDES New Permit)

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Influent		13-05-0849-1-L	05/10/13 13:00	Aqueous	GC 46	05/14/13	05/16/13 12:29	130514B06
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Diesel	6300	100	1	HD	ug/L			
Surrogates:	REC (%)	Control Limits		<u>Qual</u>				
n-Octacosane	96	68-140						
Method Blank		099-15-282-97	N/A	Aqueous	GC 46	05/14/13	05/16/13 10:01	130514B06
Method Blank		099-15-282-97	N/A	Aqueous	GC 46	05/14/13		130514B06
Method Blank Parameter	Result	099-15-282-97	N/A DF	Aqueous Qual	GC 46 Units	05/14/13		130514B06
	Result ND			•		05/14/13		130514B06
<u>Parameter</u>	· · · · · · · · · · · · · · · · · · ·	RL	<u>DF</u>	•	<u>Units</u>	05/14/13		130514B06
<u>Parameter</u>	· · · · · · · · · · · · · · · · · · ·	RL	<u>DF</u>	•	<u>Units</u>	05/14/13		130514B06
Parameter TPH as Diesel	ND	<u>RL</u> 100	<u>DF</u>	Qual	<u>Units</u>	05/14/13		130514B06









Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received:

Work Order No: Preparation:

05/10/13 13-05-0849 **EPA 3510C**

Method: EPA 8015B (M) Units:

ND

ND

ND

100

100

100

1

1

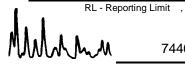
ug/L

Project: DFSP Norwa	alk (NPDES N	lew Pe	rmit)							Pa	ge 1 of 1
Client Sample Number				Sample lumber	Date/Time Collected	Matrix	Instrument	Date Prepared		e/Time alyzed	QC Batch ID
Influent			13-05-0	849-1-L	05/10/13 13:00	Aqueous	GC 46	05/14/13		16/13 2:29	130514B06
Comment(s): -The total conce	entration includes in	dividual c	arbon rar	nge conce	ntrations (estim	nated), if any,	below the RI	_ reported a	s ND.		
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	DF	<u>Qual</u>
C6	ND	100	1		C21-C22			ND	100	1	
C7	250	100	1		C23-C24			ND	100	1	
C8	520	100	1		C25-C28			ND	100	1	
C9-C10	1500	100	1		C29-C32			ND	100	1	
C11-C12	2000	100	1		C33-C36			ND	100	1	
C13-C14	1600	100	1		C37-C40			ND	100	1	
C15-C16	230	100	1		C41-C44			ND	100	1	
C17-C18	ND	100	1		C6-C44 Tota	I		6400	100	1	
C19-C20	ND	100	1								
Surrogates:	REC (%)	Control Limits	Qual								
n-Octacosane	96	68-140									
Method Blank			099-15-	498-69	N/A	Aqueous	GC 46	05/14/13		16/13 D:01	130514B06
Parameter_	Result	<u>RL</u>	DF	Qual	<u>Parameter</u>			Result	RL	DF	Qual
C6	ND	100	1		C21-C22			ND	100	1	
C7	ND	100	1		C23-C24			ND	100	1	
C8	ND	100	1		C25-C28			ND	100	1	
C9-C10	ND	100	1		C29-C32			ND	100	1	
C11-C12	ND	100	1		C33-C36			ND	100	1	

C37-C40

C41-C44

C6-C44 Total



C13-C14

C15-C16

C17-C18

C19-C20

Surrogates:

n-Octacosane

DF - Dilution Factor

ND

ND

ND

ND

REC (%)

100

100

100

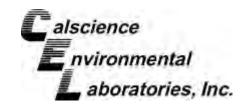
100 Control

Limits

68-140

Qual





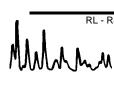


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 05/10/13 13-05-0849 EPA 5030C EPA 8015B (M)

Project: DFSP Norwalk (NPDES New Permit)

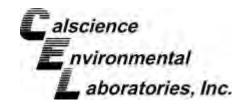
Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Influent		13-05-0849-1-E	05/10/13 13:00	Aqueous	GC 25	05/13/13	05/13/13 22:09	130513B01
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	5500	500	5	HD HD	ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	101	38-134						
1,4 Bromondorobonzono	101	30-134						
Method Blank	101	099-15-704-377	N/A	Aqueous	GC 25	05/13/13	05/13/13 11:02	130513B01
,	Result		N/A	Aqueous Qual	GC 25	05/13/13		130513B01
Method Blank		099-15-704-377		•		05/13/13		130513B01
Method Blank Parameter	Result	099-15-704-377	<u>DF</u>	•	<u>Units</u>	05/13/13		130513B01



DF - Dilution Factor , Qual - Qualifiers







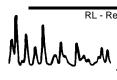
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 05/10/13 13-05-0849 EPA 3520C EPA 1625CM

Project: DFSP Norwalk (NPDES New Permit)

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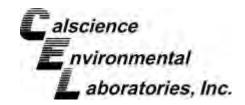
FAX: (714) 894-7501

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Influent		13-05-0849-1-S	05/10/13 13:00	Aqueous	GC/MS III	05/13/13	05/17/13 13:27	130513L08
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
N-Nitrosodimethylamine	84	10	5		ng/L			
Surrogates:	REC (%)	Control Limits		<u>Qual</u>				
1,4-Dichlorobenzene-d4	84	50-130						
Method Blank		099-07-027-777	N/A	Aqueous	GC/MS III	05/13/13	05/17/13 12:34	130513L08
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
N-Nitrosodimethylamine	ND	2.0	1		ng/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Dichlorobenzene-d4	70	50-130						



DF - Dilution Factor , Qual - Qualifiers





Units:



Parsons Government Services, Inc. 100 West Walnut Street

Pasadena, CA 91124-0002

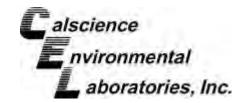
Date Received: Work Order No: Preparation: Method: 05/10/13 13-05-0849 EPA 504.1 Ext. EPA 504.1 ug/L

Project: DFSP Norwalk (NPDES New Permit)

Client Sample Number			L	ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/T Analyz		QC Batch ID
Influent			13-05-	-0849-1-J	05/10/13 13:00	Aqueous	GC 40	05/13/13	05/13/ 16:5		130513L03
Parameter 1,2-Dibromoethane	Result ND	<u>RL</u> 0.010	<u>DF</u> 1	<u>Qual</u>	Parameter 1,2-Dibromo-	3-Chloroprop	oane	Result ND	<u>RL</u> 0.010	<u>DF</u> 1	<u>Qual</u>
Method Blank			099-1	2-520-388	N/A	Aqueous	GC 40	05/13/13	05/13/ 14:5		130513L03
Parameter 1,2-Dibromoethane	<u>Result</u> ND	<u>RL</u> 0.010	<u>DF</u> 1	Qual	Parameter 1,2-Dibromo-	3-Chloroprop	oane	Result ND	<u>RL</u> 0.010	<u>DF</u> 1	Qual









Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received:

Work Order No:

Preparation: Method:

Units:

EPA

EPA 8015B(M) mg/L

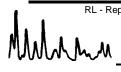
05/10/13

N/A

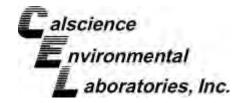
13-05-0849

Project: DFSP Norwalk (NPDES New Permit)

Client Sample Number			Lab Sample Number				Date/Time Collected	Matrix	Instrument	Date Prepared	Date/ Anal		QC Batch ID
Influent			13-05-0)849-1-G	05/10/13 13:00	Aqueous	GC 12	N/A	05/14/13 23:48		130514L01		
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>		
Ethanol	ND	0.10	1		Methanol			ND	0.10	1			
Surrogates:	REC (%)	Control Limits	<u>Qua</u>	<u>l</u>									
Hexafluoro-2-propanol	98	63-147											
Method Blank			099-12	-006-3,762	N/A	Aqueous	GC 12	N/A	05/1 ₋ 17:		130514L01		
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	DF	<u>Qual</u>		
Ethanol	ND	0.10	1		Methanol			ND	0.10	1			
Surrogates:	REC (%)	Control Limits	Qua	<u>ıl</u>									
Hexafluoro-2-propanol	99	63-147											









Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

Preparation: Method:

Units:

05/10/13 13-05-0849 EPA 3510C

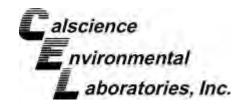
d: EPA 8081A ug/L

Project: DFSP Norwalk (NPDES New Permit)

Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/\ Analy		QC Batch ID
Influent			13-05-	0849-1-D	05/10/13 13:00	Aqueous	GC 51	05/14/13	05/15 12:2		130514L06
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Alpha-BHC	ND	0.050	1		4,4'-DDE			ND	0.050	1	
Gamma-BHC	ND	0.050	1		Endrin			ND	0.050	1	
Beta-BHC	ND	0.050	1		Endrin Aldeh	yde		ND	0.050	1	
Heptachlor	ND	0.050	1		4,4'-DDD			ND	0.050	1	
Delta-BHC	ND	0.050	1		Endosulfan II			ND	0.050	1	
Aldrin	ND	0.050	1		4,4'-DDT			ND	0.050	1	
Heptachlor Epoxide	ND	0.050	1		Endosulfan S	Sulfate		ND	0.050	1	
Endosulfan I	ND	0.050	1		Chlordane			ND	0.50	1	
Dieldrin	ND	0.050	1		Toxaphene			ND	2.0	1	
Surrogates:	REC (%)	Control	Qua	<u>al</u>	Surrogates:			REC (%)	Control	<u>C</u>	<u>Qual</u>
		<u>Limits</u>		_					Limits		
Decachlorobiphenyl	103	50-135			2,4,5,6-Tetra	chloro-m-Xyl	ene	151	50-135		2,7
Method Blank			099-12	:-525-182	N/A	Aqueous	GC 51	05/14/13	05/15 11:0		130514L06
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Alpha-BHC	ND	0.050	1		4.4'-DDE			ND	0.050	1	
Gamma-BHC	ND	0.050	1		Endrin			ND	0.050	1	
Beta-BHC	ND	0.050	1		Endrin Aldeh	vde		ND	0.050	1	
Heptachlor	ND	0.050	1		4.4'-DDD	,		ND	0.050	1	
Delta-BHC	ND	0.050	1		Endosulfan II			ND	0.050	1	
Aldrin	ND	0.050	1		4,4'-DDT			ND	0.050	1	
Heptachlor Epoxide	ND	0.050	1		Endosulfan S	Sulfate		ND	0.050	1	
Endosulfan I	ND	0.050	1		Chlordane			ND	0.50	1	
Dieldrin	ND	0.050	1		Toxaphene			ND	2.0	1	
Surrogates:	<u>REC (%)</u>	Control Limits	Qua	<u>al</u>	Surrogates:			REC (%)	Control Limits	<u>(</u>	<u>Qual</u>









Parsons Government Services, Inc.

Project: DFSP Norwalk (NPDES New Permit)

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

Preparation:
Method:

Units:

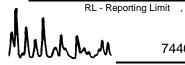
05/10/13 13-05-0849

EPA 3510C EPA 8082

ug/L

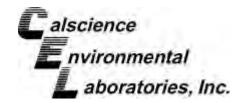
Page 1 of 1

	`										
Client Sample Number			Lab Sample Number		Date/Time Collected	Motrix		Date Prepared	Date/1 Analy		QC Batch ID
Influent			13-05	-0849-1-P	05/10/13 13:00	Aqueous	GC 58	05/14/13	05/16/13 12:46		130514L07
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Aroclor-1016	ND	0.50	1		Aroclor-1248			ND	0.50	1	
Aroclor-1221	ND	0.50	1		Aroclor-1254			ND	0.50	1	
Aroclor-1232	ND	0.50	1		Aroclor-1260			ND	0.50	1	
Aroclor-1242	ND	0.50	1								
Surrogates:	REC (%)	Control Limits	<u>Qu</u>	<u>al</u>	Surrogates:			REC (%)	Control Limits	<u>(</u>	<u>Qual</u>
Decachlorobiphenyl	87	50-135			2,4,5,6-Tetrac	hloro-m-Xyle	ene	98	50-135		
Method Blank			099-12	2-527-393	N/A	Aqueous	GC 58	05/14/13	05/16 11:5		130514L07
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Aroclor-1016	ND	0.50	1		Aroclor-1248			ND	0.50	1	
Aroclor-1221	ND	0.50	1		Aroclor-1254			ND	0.50	1	
Aroclor-1232	ND	0.50	1		Aroclor-1260			ND	0.50	1	
Aroclor-1242	ND	0.50	1								
Surrogates:	REC (%)	Control Limits	Qu	<u>al</u>	Surrogates:			REC (%)	Control Limits	<u>C</u>	<u>Qual</u>
Decachlorobiphenyl											



DF - Dilution Factor ,







Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

Preparation: **EPA 3510C** Method: **EPA 8270C** Units:

ug/L

Project: DFSP Norwalk (NPDES New Permit)

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05/10/13

13-05-0849

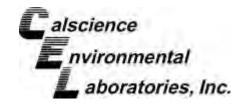
Client Sample Number			Lab Sample Number		Date/Time Collected	Motrice Inchrumo		Date Prepared	Date/Time Analyzed		QC Batch ID
Influent			13-05-0849-1-N		05/10/13 13:00	Aqueous GC/MSTT		05/13/13	05/15/13 13:20		130513L11
<u>Parameter</u>	Result	<u>RL</u>	DI	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitrotolu	iene		ND	5.0	1	
Phenol	ND	5.0	1		2,6-Dinitrotolu	iene		ND	5.0	1	
Bis(2-Chloroethyl) Ether	ND	10	1		Diethyl Phtha	late		ND	5.0	1	
2-Chlorophenol	ND	5.0	1		4-Chlorophen	yl-Phenyl Etl	ner	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1		Fluorene			ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		4,6-Dinitro-2-l	Methylpheno	l	ND	25	1	
1,2-Dichlorobenzene	ND	5.0	1		N-Nitrosodiph	enylamine		ND	5.0	1	
Bis(2-Chloroisopropyl) Ether	ND	5.0	1		4-Bromophen	yl-Phenyl Eth	ner	ND	5.0	1	
N-Nitroso-di-n-propylamine	ND	5.0	1		Hexachlorobe	nzene		ND	5.0	1	
Hexachloroethane	ND	5.0	1		Pentachloropl	henol		ND	5.0	1	
Nitrobenzene	ND	25	1		Phenanthrene	9		ND	5.0	1	
Isophorone	ND	5.0	1		Anthracene			ND	5.0	1	
2-Nitrophenol	ND	10	1		Di-n-Butyl Ph	thalate		7.4	5.0	1	
2,4-Dimethylphenol	ND	5.0	1		Fluoranthene			ND	5.0	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine			ND	50	1	
2,4-Dichlorophenol	ND	5.0	1		Pyrene			ND	5.0	1	
1,2-Diphenylhydrazine	ND	2.0	1		Butyl Benzyl F	Phthalate		ND	5.0	1	
1,2,4-Trichlorobenzene	ND	5.0	1		3,3'-Dichlorob	enzidine		ND	5.0	1	
Naphthalene	8.9	5.0	1		Benzo (a) Ant	thracene		ND	5.0	1	
Hexachloro-1,3-Butadiene	ND	5.0	1		Bis(2-Ethylhe	xyl) Phthalate	е	66	5.0	1	
4-Chloro-3-Methylphenol	ND	5.0	1		Chrysene			ND	5.0	1	
Hexachlorocyclopentadiene	ND	15	1		Di-n-Octyl Ph	thalate		ND	5.0	1	
2,4,6-Trichlorophenol	ND	5.0	1		Benzo (k) Flu	oranthene		ND	5.0	1	
2-Chloronaphthalene	ND	5.0	1		Benzo (b) Flu	oranthene		ND	5.0	1	
Dimethyl Phthalate	ND	5.0	1		Benzo (a) Pyr	ene		ND	5.0	1	
Acenaphthylene	ND	5.0	1		Benzo (g,h,i)	Perylene		ND	5.0	1	
Acenaphthene	ND	5.0	1		Indeno (1,2,3-	-c,d) Pyrene		ND	5.0	1	
2,4-Dinitrophenol	ND	25	1		Dibenz (a,h)	Anthracene		ND	5.0	1	
4-Nitrophenol	ND	5.0	1		, , ,						
Surrogates:	REC (%)	Control Limits		<u>Qual</u>	Surrogates:			REC (%)	Control Limits	<u>(</u>	Qual
2-Fluorophenol	49	15-138			Phenol-d6			32	17-141		
Nitrobenzene-d5	74	56-123			2-Fluorobiphe	envl		64	45-120		
2,4,6-Tribromophenol	98	32-143			p-Terphenyl-c	-		81	46-133		



05/10/13

13-05-0849





Analytical Report



Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

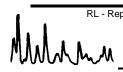
Preparation: **EPA 3510C** Method: **EPA 8270C** Units: ug/L

Page 2 of 2

Project: DFSP Norwalk (NPDES New Permit)

Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Tin Analyze	00 D-(-) ID
Method Blank			099-12	2-818-155	N/A	Aqueous	GC/MS TT	05/13/13	05/15/1 10:47	3 130513L11
Parameter N-Nitrosodimethylamine	<u>Result</u> ND	<u>RL</u> 10	<u>DF</u> 1	Qual	Parameter 2,4-Dinitrotolu	iene		Result ND	<u>RL</u> <u>[</u>	<u>DF Qual</u> 1

Method Blank			033	-12-010-133	N/A Aqueous GC/N/311	03/13/13	10:4		130313211
<u>Parameter</u>	Result	<u>RL</u>	DF	<u>Qual</u>	<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitrotoluene	ND	5.0	1	
Phenol	ND	5.0	1		2,6-Dinitrotoluene	ND	5.0	1	
Bis(2-Chloroethyl) Ether	ND	10	1		Diethyl Phthalate	ND	5.0	1	
2-Chlorophenol	ND	5.0	1		4-Chlorophenyl-Phenyl Ether	ND	5.0	1	
1,3-Dichlorobenzene	ND	5.0	1		Fluorene	ND	5.0	1	
1,4-Dichlorobenzene	ND	5.0	1		4,6-Dinitro-2-Methylphenol	ND	25	1	
1,2-Dichlorobenzene	ND	5.0	1		N-Nitrosodiphenylamine	ND	5.0	1	
Bis(2-Chloroisopropyl) Ether	ND	5.0	1		4-Bromophenyl-Phenyl Ether	ND	5.0	1	
N-Nitroso-di-n-propylamine	ND	5.0	1		Hexachlorobenzene	ND	5.0	1	
Hexachloroethane	ND	5.0	1		Pentachlorophenol	ND	5.0	1	
Nitrobenzene	ND	25	1		Phenanthrene	ND	5.0	1	
Isophorone	ND	5.0	1		Anthracene	ND	5.0	1	
2-Nitrophenol	ND	10	1		Di-n-Butyl Phthalate	ND	5.0	1	
2,4-Dimethylphenol	ND	5.0	1		Fluoranthene	ND	5.0	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine	ND	50	1	
2,4-Dichlorophenol	ND	5.0	1		Pyrene	ND	5.0	1	
1,2-Diphenylhydrazine	ND	2.0	1		Butyl Benzyl Phthalate	ND	5.0	1	
1,2,4-Trichlorobenzene	ND	5.0	1		3,3'-Dichlorobenzidine	ND	5.0	1	
Naphthalene	ND	5.0	1		Benzo (a) Anthracene	ND	5.0	1	
Hexachloro-1,3-Butadiene	ND	5.0	1		Bis(2-Ethylhexyl) Phthalate	ND	5.0	1	
4-Chloro-3-Methylphenol	ND	5.0	1		Chrysene	ND	5.0	1	
Hexachlorocyclopentadiene	ND	15	1		Di-n-Octyl Phthalate	ND	5.0	1	
2,4,6-Trichlorophenol	ND	5.0	1		Benzo (k) Fluoranthene	ND	5.0	1	
2-Chloronaphthalene	ND	5.0	1		Benzo (b) Fluoranthene	ND	5.0	1	
Dimethyl Phthalate	ND	5.0	1		Benzo (a) Pyrene	ND	5.0	1	
Acenaphthylene	ND	5.0	1		Benzo (g,h,i) Perylene	ND	5.0	1	
Acenaphthene	ND	5.0	1		Indeno (1,2,3-c,d) Pyrene	ND	5.0	1	
2,4-Dinitrophenol	ND	25	1		Dibenz (a,h) Anthracene	ND	5.0	1	
4-Nitrophenol	ND	5.0	1						
Surrogates:	REC (%)	Control Limits		<u>Qual</u>	Surrogates:	REC (%)	Control Limits	<u>C</u>	<u>Qual</u>
2-Fluorophenol	58	15-138			Phenol-d6	38	17-141		
Nitrobenzene-d5	79	56-123			2-Fluorobiphenyl	75	45-120		
2,4,6-Tribromophenol	116	32-143			p-Terphenyl-d14	96	46-133		



DF - Dilution Factor Qual - Qualifiers







Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received:
Work Order No:
Preparation:
Method:

05/10/13 13-05-0849 EPA 3520C EPA 8270C(M) Isotope Dilution

Project: DFSP Norwalk (NPDES New Permit)

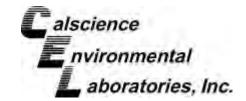
Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Influent		13-05-0849-1-T	05/10/13 13:00	Aqueous	GC/MS DDD	05/13/13	05/15/13 15:20	130513L10
Parameter 1,4-Dioxane	<u>Result</u> ND	<u>RL</u> 1.0	<u>DF</u> 1	<u>Qual</u>	<u>Units</u> ug/L			
Surrogates: Nitrobenzene-d5	REC (%)	Control Limits 56-123		Qual				
1111 05 0112 0110 00	70	30-123						
Method Blank	70	099-09-004-2,295	N/A	Aqueous	GC/MS DDD	05/13/13	05/15/13 13:44	130513L10
	Result ND		N/A <u>DF</u> 1	Aqueous Qual	GC/MS DDD Units ug/L	05/13/13		130513L10



DF - Dilution Factor , Qual - Qualifiers







Parsons Government Services, Inc.

100 West Walnut Street

Pasadena, CA 91124-0002

Date Received: Work Order No:

Preparation:

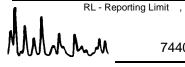
Method: Units:

13-05-0849 **EPA 5030C**

EPA 8260B ug/L

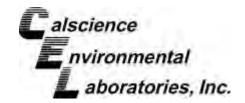
05/10/13

Project: DFSP Norwa	ılk (NPDES	New F	Permit)								Page	e 1 of	2
Client Sample Number				Sample mber		Date/Time Collected	Matrix	Instrument	Date Prepa		te/Time nalyzed	QC Bat	ch ID
Influent			13-05	-0849-1	-A	05/10/13 13:00	Aqueous	GC/MS GGG	05/11/	13 0	5/11/13 17:31	130511	L01
Comment(s): -Results wer	e evaluated to t	he MDL (D	L), conc	entration	ns >= to	the MDL (DL	.) but < RL (LOQ), if found	l, are qual	ified with	a "J" flag	j.	
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual
Benzene	20	0.50	0.11	1		c-1,2-Dichle	oroethene		ND	1.0	0.18	1	
Bromodichloromethane	ND	1.0	0.14	1		t-1,2-Dichlo	roethene		ND	1.0	0.30	1	
Bromoform	ND	1.0	0.50	1		1,2-Dichlor	opropane		ND	1.0	0.11	1	
Bromomethane	ND	5.0	2.4	1		Acrolein			ND	25	9.5	1	
Carbon Tetrachloride	ND	0.50	0.13	1		Acrylonitrile	;		ND	10	0.36	1	
Chlorobenzene	ND	1.0	0.12	1		c-1,3-Dichle	oropropene		ND	0.50	0.12	1	
Chloroethane	ND	2.0	0.25	1		t-1,3-Dichlo	ropropene		ND	0.50	0.14	1	
2-Chloroethyl Vinyl Ether	ND	50	5.1	1		Ethylbenze	ne		8.0	0.50	0.088	1	
Chloroform	ND	1.0	0.16	1		Methylene (Chloride		ND	5.0	0.23	1	
Chloromethane	ND	2.0	1.8	1		1,1,2,2-Tet	rachloroetha	ine	ND	1.0	0.11	1	
Dibromochloromethane	ND	1.0	0.24	1		Tetrachloro	ethene		ND	1.0	0.13	1	
1,2-Dichlorobenzene	ND	1.0	0.14	1		Toluene			4.7	1.0	0.091	1	
1,3-Dichlorobenzene	ND	1.0	0.13	1		1,1,1-Trich	oroethane		ND	1.0	0.14	1	
1,4-Dichlorobenzene	ND	1.0	0.13	1		1,1,2-Trich	oroethane		ND	1.0	0.084	1	
1,1-Dichloroethane	ND	1.0	0.28	1		Trichloroeth	nene		ND	1.0	0.16	1	
1,2-Dichloroethane	2.5	0.50	0.17	1		Vinyl Chlori	de		ND	0.50	0.23	1	
1,1-Dichloroethene	ND	1.0	0.11	1									
Surrogates:	<u>REC (%)</u>	Control Limits	<u>Qı</u>	<u>ıal</u>		Surrogates:	•		REC (%)	Contro Limits	<u>L</u> Q	<u>tual</u>	
1,4-Bromofluorobenzene	103	80-120				Dibromoflu	oromethane		98	80-126	i		
1,2-Dichloroethane-d4	93	80-134				Toluene-d8			102	80-120			



DF - Dilution Factor , Qual - Qualifiers







Parsons Government Services, Inc.

100 West Walnut Street

Pasadena, CA 91124-0002

Date Received: Work Order No:

Units:

Preparation: Method:

05/10/13 13-05-0849 **EPA 5030C**

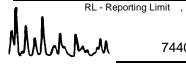
> **EPA 8260B** ug/L

Page 2 of 2

Project: DFSP Norwalk (NPDES New Permit)

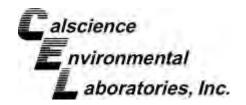
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-026-630	N/A	Aqueous	GC/MS GGG	05/11/13	05/11/13 12:36	130511L01

Method Blank			099-	12-026-6	30	N/A Aqueous	GC/MS GGG	05/11/1		/11/13 12:36	130511	L01
Comment(s): -Results were e	aluated to t	he MDL (D	L), con	centration	ns >= to	the MDL (DL) but < RL (L	.OQ), if found,	are quali	fied with a	a "J" flag		
<u>Parameter</u>	Result	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual	<u>Parameter</u>		Result	RL	<u>MDL</u>	<u>DF</u>	Qι
Benzene	ND	0.50	0.11	1		c-1,2-Dichloroethene		ND	1.0	0.18	1	
Bromodichloromethane	ND	1.0	0.14	1		t-1,2-Dichloroethene		ND	1.0	0.30	1	
Bromoform	ND	1.0	0.50	1		1,2-Dichloropropane		ND	1.0	0.11	1	
Bromomethane	ND	5.0	2.4	1		Acrolein		ND	25	9.5	1	
Carbon Tetrachloride	ND	0.50	0.13	1		Acrylonitrile		ND	10	0.36	1	
Chlorobenzene	ND	1.0	0.12	1		c-1,3-Dichloropropene		ND	0.50	0.12	1	
Chloroethane	ND	2.0	0.25	1		t-1,3-Dichloropropene		ND	0.50	0.14	1	
2-Chloroethyl Vinyl Ether	ND	50	5.1	1		Ethylbenzene		ND	0.50	0.088	1	
Chloroform	ND	1.0	0.16	1		Methylene Chloride		ND	5.0	0.23	1	
Chloromethane	ND	2.0	1.8	1		1,1,2,2-Tetrachloroethan	ne	ND	1.0	0.11	1	
Dibromochloromethane	ND	1.0	0.24	1		Tetrachloroethene		ND	1.0	0.13	1	
1,2-Dichlorobenzene	ND	1.0	0.14	1		Toluene		ND	1.0	0.091	1	
1,3-Dichlorobenzene	ND	1.0	0.13	1		1,1,1-Trichloroethane		ND	1.0	0.14	1	
1,4-Dichlorobenzene	0.16	1.0	0.13	1	J	1,1,2-Trichloroethane		ND	1.0	0.084	1	
1,1-Dichloroethane	ND	1.0	0.28	1		Trichloroethene		ND	1.0	0.16	1	
1,2-Dichloroethane	ND	0.50	0.17	1		Vinyl Chloride		ND	0.50	0.23	1	
1,1-Dichloroethene	ND	1.0	0.11	1								
Surrogates:	REC (%)	Control Limits	<u>Q</u>	<u>ual</u>		Surrogates:		REC (%)	Control Limits	<u>Q</u>	<u>ual</u>	
1,4-Bromofluorobenzene	97	80-120				Dibromofluoromethane	!	93	80-126			
1,2-Dichloroethane-d4	94	80-134				Toluene-d8	!	98	80-120			



DF - Dilution Factor ,

05/10/13



Project: DFSP Norwalk (NPDES New Permit)

Analytical Report



Parsons Government Services, Inc.

100 West Walnut Street

Pasadena, CA 91124-0002

Date Received: Work Order No:

Work Order No: 13-05-0849
Preparation: EPA 5030C
Method: EPA 8260B

Units: ug/L

98

80-120

Page 1 of 1

Client Sample Number				Sample mber		Date/Time Collected	Matrix	Instrument	Date Prepa		ate/Time nalyzed	QC Bat	ch ID
Influent			13-05	5-0849-1	-A	05/10/13 13:00	Aqueous	GC/MS GG	3 05/11/	13	5/11/13 17:31	130511	L01
Comment(s): -Results were	evaluated to the	ne MDL (D	L), cond	entratio	ns >= to	the MDL (DL) but < RL (LOQ), if found	d, are qual	ified with	a "J" flaç	g.	
<u>Parameter</u>	Result	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual
Acetone	15	20	10	1	J	Tert-Butyl A	Alcohol (TBA	A)	4.8	10	4.6	1	J
2-Butanone	7.2	10	2.2	1	J	Diisopropyl	Ether (DIPE	<u> </u>	ND	2.0	0.33	1	
p/m-Xylene	41	1.0	0.24	1		Ethyl-t-Buty	l Ether (ETI	BE)	ND	2.0	0.44	1	
o-Xylene	14	1.0	0.23	1		Tert-Amyl-N	Nethyl Ether	(TAME)	ND	2.0	0.22	1	
Methyl-t-Butyl Ether (MTBE)	0.56	1.0	0.31	1	J								
Surrogates:	REC (%)	Control	Qı	<u>ual</u>		Surrogates:			REC (%)	Contro	<u>ı </u>	Qual	
		Limits								<u>Limits</u>			
1,4-Bromofluorobenzene	103	80-120				Dibromofluo	oromethane		98	80-126	6		
1,2-Dichloroethane-d4	93	80-134				Toluene-d8			102	80-120)		

Method Blank	099-14-001-10,907	N/A	Aqueous GC/MS GGG	05/11/13	12:36	130511L01	

Comment(s): -Results were eva	aluated to th	ne MDL (D	L), conce	ntration	ns >= to	the MDL (DL) but < RL (LOQ), if foun	d, are qual	ified with a	a "J" flag.		
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual	<u>Parameter</u>	Result	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual
Acetone	ND	20	10	1		Tert-Butyl Alcohol (TBA)	ND	10	4.6	1	
2-Butanone	ND	10	2.2	1		Diisopropyl Ether (DIPE)	ND	2.0	0.33	1	
p/m-Xylene	ND	1.0	0.24	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.44	1	
o-Xylene	ND	1.0	0.23	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	0.31	1							
Surrogates:	REC (%)	Control Limits	Qua	<u>al</u>		Surrogates:	REC (%)	Control Limits	Qua	<u>al</u>	
1,4-Bromofluorobenzene	97	80-120				Dibromofluoromethane	93	80-126			

Toluene-d8



1,2-Dichloroethane-d4

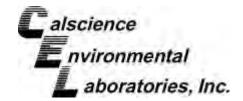
RL - Reporting Limit ,

DF - Dilution Factor ,

80-134

Qual - Qualifiers





Analytical Report



Parsons Government Services, Inc.

100 West Walnut Street

Pasadena, CA 91124-0002

Date Received:

Work Order No:

Preparation:

Method: Units: 05/10/13

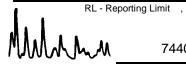
13-05-0849 EPA 3010A Total

EPA 6010B

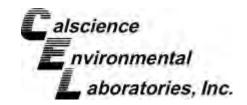
mg/L

Project: DFSP Norwalk (NPDES New Permit) Page 1 of 1

Client Sample Numbe	r		Lab Sam Numb	•	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Influent			13-05-08	349-1-M	05/10/13 13:00	Aqueous	ICP 7300	05/13/13	05/13/13 20:49	130513LA5
_										
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>		Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Antimony	ND	0.0150	1		Lead		ND	0.010	00 1	
Arsenic	0.0721	0.0100	1		Nickel		ND	0.010	00 1	
Beryllium	ND	0.0100	1		Selenium		ND	0.01	50 1	
Cadmium	ND	0.0100	1		Silver		ND	0.005	500 1	
Chromium	ND	0.0100	1		Thallium		ND	0.01	50 1	
Copper	ND	0.0100	1		Zinc		ND	0.010	00 1	
Method Blank			097-01-0	003-13,420	N/A	Aqueous	ICP 7300	05/13/13	05/14/13 12:11	130513LA5
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>		Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Antimony	ND	0.0150	1		Lead		ND	0.010	00 1	
Arsenic	ND	0.0100	1		Nickel		ND	0.010	00 1	
Beryllium	ND	0.0100	1		Selenium		ND	0.015	50 1	
Cadmium	ND	0.0100	1		Silver		ND	0.00	500 1	
Chromium	ND	0.0100	1		Thallium		ND	0.01	50 1	
Copper	ND	0.0100	1		Zinc		ND	0.010	00 1	







Analytical Report



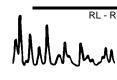
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 05/10/13 13-05-0849 EPA 7470A Total EPA 7470A

Project: DFSP Norwalk (NPDES New Permit)

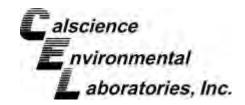
Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Influent		13-05-0849-1-M	05/10/13 13:00	Aqueous	Mercury	05/13/13	05/13/13 17:22	130513L06M
Parameter Mercury	<u>Result</u> ND	<u>RL</u> 0.000200	<u>DF</u> 1	Qual	<u>Units</u> mg/L			
•								
Method Blank		099-12-457-304	N/A	Aqueous	Mercury	05/13/13	05/13/13 17:04	130513L06M









Analytical Report



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

05/10/13 13-05-0849

Project: DFSP Norwalk (NPDES New Permit)

Page 1 of 1

Client Sample Number		Lal	b Sample	Number	Date Collected	Matrix		
Influent		1	3-05-084	9-1	05/10/13	Aqueous		
<u>Parameter</u>	<u>Results</u>	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method
Perchlorate	ND	2.0	1		ug/L	N/A	05/13/13	EPA 314.0
Chromium, Hexavalent	ND	1.0	1		ug/L	N/A	05/10/13	EPA 7199
Cyanide, Total	0.0015	0.0010	1		mg/L	05/22/13	05/22/13	SM 4500-CN E
Method Blank					N/A	Aqueous		
<u>Parameter</u>	<u>Results</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>	<u>Date</u> Prepared	<u>Date</u> Analyzed	Method
Perchlorate	ND	2.0	1		ug/L	N/A	05/13/13	EPA 314.0
Chromium, Hexavalent	ND	1.0	1		ug/L	N/A	05/10/13	EPA 7199
Cyanide, Total	ND	0.0010	1		mg/L	05/22/13	05/22/13	SM 4500-CN E



DF - Dilution Factor , Qual - Qualifiers

Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method:

05/10/13 13-05-0849 EPA 3010A Total EPA 6010B

Quality Control Sample ID			Matrix	ı	nstrument		Date epared	Date Analyzed		MSD Batch lumber
13-05-0879-3			Aqueou	ıs I	CP 7300	05/13/13		05/14/13	130	513SA5
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Antimony	ND	0.5000	0.5504	110	0.5604	112	72-132	2	0-10	
Arsenic	0.06326	0.5000	0.6295	113	0.6428	116	80-140	2	0-11	
Beryllium	ND	0.5000	0.5093	102	0.5220	104	89-119	2	0-8	
Cadmium	ND	0.5000	0.4989	100	0.5122	102	82-124	3	0-7	
Chromium	ND	0.5000	0.4927	99	0.5072	101	86-122	3	0-8	
Copper	ND	0.5000	0.5248	105	0.5405	108	78-126	3	0-7	
Lead	ND	0.5000	0.5052	101	0.5144	103	84-120	2	0-7	
Nickel	ND	0.5000	0.5169	103	0.5352	107	84-120	3	0-7	
Selenium	ND	0.5000	0.5519	110	0.5582	112	79-127	1	0-9	
Silver	ND	0.2500	0.2642	106	0.2722	109	86-128	3	0-7	
Thallium	ND	0.5000	0.4791	96	0.4908	98	79-121	2	0-8	
Zinc	ND	0.5000	0.5502	110	0.5584	112	89-131	1	0-8	







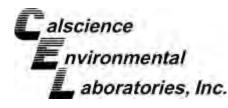
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002

Date Received: Work Order No: Preparation: Method:

05/10/13 13-05-0849 N/A EPA 7199

Quality Control Sample ID			Matrix	lr	nstrument		Date epared	Date Analyzed		/ISD Batch lumber
Influent			Aqueou	ıs IC	14	١	VA	05/10/13	130	510S02
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Chromium, Hexavalent	ND	50	8.4	17	8.3	17	70-130	2	0-25	3







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

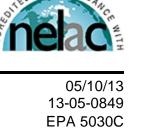
Date Received: Work Order No: Preparation: Method:

05/10/13 13-05-0849 N/A

EPA 314.0

Quality Control Sample ID			Matrix	In	strument		Date epared	Date Analyzed		ISD Batch umber
13-05-0985-3			Aqueou	ıs IC	13	N	I/A	05/13/13	130	513S01
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Perchlorate	ND	50	50	99	48	96	80-120	3	0-15	





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Quality Control - Spike/Spike Duplicate

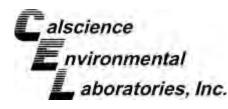
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002

Date Received: Work Order No: Preparation: Method:

EPA 8015B (M)

Quality Control Sample ID			Matrix	In	strument		ate pared	Date Analyzed		ISD Batch umber
13-05-0783-2			Aqueou	ıs G	C 25	05/1	3/13	05/13/13	130	513 S 01
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline	1091	2000	2801	86	2811	86	68-122	0	0-18	







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

Date Received: Work Order No: Preparation: Method:

05/10/13 13-05-0849 EPA 7470A Total **EPA 7470A**

Quality Control Sample ID			Matrix	Instrument		ate pared	Date Analyzed		/ISD Batch lumber
13-05-0882-2			Aqueous	Mercury	05/	13/13	05/13/13	130)513S06
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS MS CONC %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Mercury	ND	0.01000	0.008605 86	0.008160	82	57-141	5	0-10	







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

Date Received: Work Order No: Preparation: Method:

05/10/13 13-05-0849 N/A EPA 8015B(M)

Quality Control Sample ID		Matrix		strument	Date Prepared		Date Analyzed		ISD Batch umber	
13-05-0827-2			Aqueou	ıs G	C 12	N	/A	05/14/13	130	514 S 01
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Ethanol Methanol	ND ND	2.000 2.000	1.780 1.762	89 88	1.778 1.752	89 88	70-130 70-130	0 1	0-25 0-25	









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

Date Received: Work Order No: Preparation: Method:

05/10/13 13-05-0849 EPA 504.1 Ext. EPA 504.1

Quality Control Sample ID			Matrix	Ir	strument		Date epared	Date Analyzed		MSD Batch lumber
Influent			Aqueou	ıs G	C 40	05/	13/13	05/13/13	130	513S03
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
1,2-Dibromoethane	ND	0.2857	0.1990	70	0.2150	75	60-140	8	0-25	
1,2-Dibromo-3-Chloropropane	ND	0.2857	0.2660	93	0.2820	99	60-140	6	0-25	







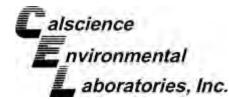


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 05/10/13 13-05-0849 EPA 5030C EPA 8260B

Quality Control Sample ID		Matrix		Instrument		Date epared	Date Analyzed		ISD Batch umber	
13-05-0828-2			Aqueou	ıs	GC/MS GGG	05/	11/13	05/11/13	05/11/13 13051	
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	ND	50.00	49.80	100	47.06	94	78-120	6	0-20	
Carbon Tetrachloride	ND	50.00	49.80	100	47.52	95	67-139	5	0-20	
Chlorobenzene	ND	50.00	52.77	106	50.59	101	80-120	4	0-20	
1,2-Dibromoethane	ND	50.00	51.91	104	50.46	101	80-123	3	0-20	
1,2-Dichlorobenzene	ND	50.00	53.85	108	51.85	104	76-120	4	0-20	
1,2-Dichloroethane	ND	50.00	50.42	101	48.50	97	76-130	4	0-20	
1,1-Dichloroethene	ND	50.00	45.13	90	42.21	84	70-130	7	0-27	
Ethylbenzene	ND	50.00	52.14	104	49.52	99	73-127	5	0-20	
Toluene	ND	50.00	50.85	102	48.14	96	72-126	5	0-20	
Trichloroethene	ND	50.00	44.39	89	41.44	83	74-122	7	0-20	
Vinyl Chloride	ND	50.00	44.29	89	42.17	84	65-131	5	0-24	
p/m-Xylene	ND	100.0	109.4	109	104.4	104	70-130	5	0-30	
o-Xylene	ND	50.00	56.16	112	53.95	108	70-130	4	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	47.29	95	47.93	96	69-123	1	0-20	
Tert-Butyl Alcohol (TBA)	ND	250.0	256.4	103	210.5	84	65-131	20	0-22	
Diisopropyl Ether (DIPE)	2.246	50.00	47.81	91	47.20	90	68-128	1	0-22	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	48.48	97	48.17	96	69-123	1	0-21	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	51.94	104	50.77	102	70-124	2	0-20	
Ethanol	ND	500.0	397.1	79	337.4	67	41-155	16	0-35	



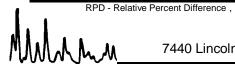




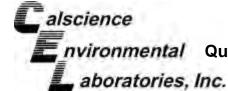


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 05/10/13 13-05-0849 EPA 5030C EPA 8260B

Quality Control Sample ID			Matrix		Instrument		Pate epared	Date Analyzed		ISD Batch umber
13-05-0828-2			Aqueous GC/MS GGG		05/	05/11/13		130	511S01	
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	ND	50.00	49.80	100	47.06	94	78-120	6	0-20	
Carbon Tetrachloride	ND	50.00	49.80	100	47.52	95	67-139	5	0-20	
Chlorobenzene	ND	50.00	52.77	106	50.59	101	80-120	4	0-20	
1,2-Dichlorobenzene	ND	50.00	53.85	108	51.85	104	76-120	4	0-20	
1,2-Dichloroethane	ND	50.00	50.42	101	48.50	97	76-130	4	0-20	
1,1-Dichloroethene	ND	50.00	45.13	90	42.21	84	70-130	7	0-27	
Ethylbenzene	ND	50.00	52.14	104	49.52	99	73-127	5	0-20	
Toluene	ND	50.00	50.85	102	48.14	96	72-126	5	0-20	
Trichloroethene	ND	50.00	44.39	89	41.44	83	74-122	7	0-20	
Vinyl Chloride	ND	50.00	44.29	89	42.17	84	65-131	5	0-24	







nvironmental Quality Control - Laboratory Control Sample



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

Date Received: Work Order No: Preparation: Method:

N/A 13-05-0849 EPA 3010A Total **EPA 6010B**

Project: DFSP Norwalk (NPDES New Permit)

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID		LCS Batch Number
097-01-003-13,420	Aqueous	ICP 7300	05/14/13	130513-la-	527.icp	130513LA5
<u>Parameter</u>	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	ME CL	Qualifiers
Antimony	0.5000	0.5161	103	80-120	73-127	
Arsenic	0.5000	0.5148	103	80-120	73-127	
Beryllium	0.5000	0.5030	101	80-120	73-127	
Cadmium	0.5000	0.5333	107	80-120	73-127	
Chromium	0.5000	0.5102	102	80-120	73-127	
Copper	0.5000	0.4983	100	80-120	73-127	
Lead	0.5000	0.5404	108	80-120	73-127	
Nickel	0.5000	0.5597	112	80-120	73-127	
Selenium	0.5000	0.4850	97	80-120	73-127	
Silver	0.2500	0.2476	99	80-120	73-127	
Thallium	0.5000	0.5487	110	80-120	73-127	
Zinc	0.5000	0.5538	111	80-120	73-127	

Total number of LCS compounds: 12 Total number of ME compounds: 0 Total number of ME compounds allowed: 1 LCS ME CL validation result: Pass



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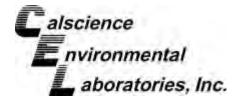
nvironmental Quality Control - Laboratory Control Sample

Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: N/A
Work Order No: 13-05-0849
Preparation: N/A
Method: EPA 7199

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LC	S Batch Number
099-05-123-3,347	Aqueous	IC 14	05/10/13	0032		130510L02
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	<u>Qualifiers</u>
Chromium, Hexavalent		50	50	100	80-120	



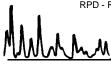




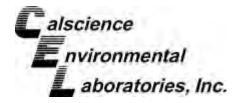


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 N/A EPA 314.0

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	d	LCS/LCSD Batch Number	
099-05-203-1,690	Aqueous		IC 13	N	/A	05/13/13		130513L01	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Perchlorate	25	26	104	25	101	85-115	2	0-15	



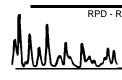




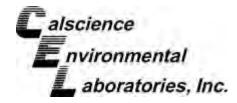


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 N/A SM 4500-CN E

Quality Control Sample ID	Matrix	I	nstrument		ate oared	Date Analyzed	d	LCS/LCSD Batch Number	
099-14-357-43	Aqueous		UV 8	05/2	22/13	113 05/22/13		D0522CNL1	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Cyanide, Total	0.010	0.0085	85	0.0086	86	80-120	2	0-20	





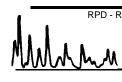




Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 EPA 3510C EPA 8015B (M)

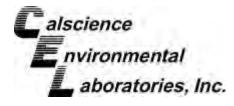
Project: DFSP Norwalk (NPDES New Permit)

Quality Control Sample ID	Matrix	l	Instrument		ate pared	Date Analyzed	d	LCS/LCSD Batch Number	
099-15-282-97	Aqueous		GC 46	05/	14/13	05/16/13		130514B06	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Diesel	4000	4319	108	4287	107	75-117	1	0-13	



RPD - Relative Percent Difference , CL - Control Limit

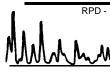




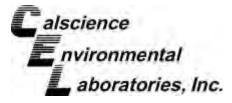


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 EPA 3510C EPA 8015B (M)

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	d	LCS/LCSD Batch Number	
099-15-498-69	Aqueous		GC 46	05/ ⁻	14/13	05/16/13		130514B06	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Diesel	4000	4319	108	4287	107	75-117	1	0-13	



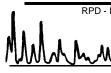






Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 EPA 5030C EPA 8015B (M)

Quality Control Sample ID	Matrix	li	nstrument		ate pared	Date Analyzed	I	LCS/LCSD Batch Number	
099-15-704-377	Aqueous		GC 25	05/ ⁻	13/13	05/13/13		130513B01	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline	2000	1886	94	1887	94	78-120	0	0-10	



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nvironmental Quality Control - Laboratory Control Sample

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

Date Received: Work Order No: Preparation: Method:

EPA 7470A Total **EPA 7470A**

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File	e ID	LCS Batch Number
099-12-457-304	Aqueous	Mercury	05/13/13	130513-L-0	6.icp	130513L06M
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec C	<u>Qualifiers</u>
Mercury		0.01000	0.01051	105	90-122	

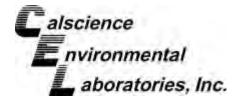


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: N/A
Work Order No: 13-05-0849
Preparation: N/A
Method: EPA 8015B(M)

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-12-006-3,762	Aqueous	GC 12	05/14/13	13051403	130514L01
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL Qualifiers
Ethanol		2.000	1.827	91	76-112
Methanol		2.000	2.008	100	69-117



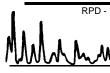




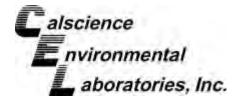


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: N/A
Work Order No: 13-05-0849
Preparation: EPA 3520C
Method: EPA 8270C(M) Isotope Dilution

Quality Control Sample ID	Matrix	Matrix Instrum			ate oared	Date Analyzed	I	LCS/LCSD Batch Number				
099-09-004-2,295	Aqueous	GC	MS DDD	05/1	13/13	05/15/13		130513L10				
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers			
1,4-Dioxane	200.0	219.3	110	220.4	110	50-130	1	0-20				



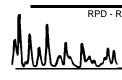




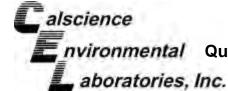


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 EPA 3520C EPA 1625CM

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	d	LCS/LCSD Batch Number				
099-07-027-777	Aqueous		GC/MS III	05/ ⁻	13/13	05/17/13		130513L08				
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers			
N-Nitrosodimethylamine	20.00	20.83	104	19.29	96	50-130	8	0-20				







nvironmental Quality Control - Laboratory Control Sample



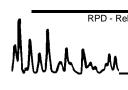
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002

Date Received: Work Order No: Preparation: Method:

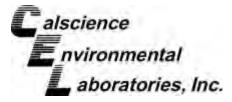
N/A 13-05-0849 EPA 504.1 Ext.

EPA 504.1

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-12-520-388	Aqueous	GC 40	05/13/13	13051303	130513L03
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL Qualifiers
1,2-Dibromoethane		0.2857	0.2620	92	60-140
1,2-Dibromo-3-Chloropropane		0.2857	0.2570	90	60-140









Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 EPA 3510C EPA 8081A

Project: DFSP Norwalk (NPDES New Permit)

Quality Control Sample ID	Ma	Matrix		nt	Date Prepared		ate Ilyzed	LCS/	1	
099-12-525-182	Aque	ous	GC 51		05/14/13	05/1	5/13	1;	30514L06	
Parameter	<u>SPIKE</u> ADDED	LCS CONC	LCS %REC			%REC CL	ME CL	RPD	RPD CL	<u>Qualifiers</u>
Alpha-BHC	0.2500	0.2471	99	0.2358	94	50-135	36-149	5	0-25	
Gamma-BHC	0.2500	0.2480	99	0.2368	95	50-135	36-149	5	0-25	
Beta-BHC	0.2500	0.2415	97	0.2370	95	50-135	36-149	2	0-25	
Heptachlor	0.2500	0.2387	95	0.2198	88	50-135	50-135 36-149		0-25	
Delta-BHC	0.2500	0.2646	106	0.2553	102	50-135	50-135 36-149		0-25	
Aldrin	0.2500	0.2240	90	0.2029	81	50-135	36-149	10 0-25		
Heptachlor Epoxide	0.2500	0.2459	98	0.2350	94	50-135 36-149		4 0-25		
Endosulfan I	0.2500	0.2434	97	0.2364	95	50-135	36-149	3	0-25	
Dieldrin	0.2500	0.2498	100	0.2433	97	50-135	36-149	3	0-25	
4,4'-DDE	0.2500	0.2608	104	0.2503	100	50-135	36-149	4	0-25	
Endrin	0.2500	0.2580	103	0.2523	101	50-135	36-149	2	0-25	
Endrin Aldehyde	0.2500	0.2456	98	0.2538	102	50-135	36-149	3	0-25	
4,4'-DDD	0.2500	0.2624	105	0.2526	101	50-135	36-149	4	0-25	
Endosulfan II	0.2500	0.2556	56 102 0.2496		100	50-135	36-149	2 0-25		
4,4'-DDT	0.2500	0.2559	59 102 0.249		100	50-135 36-149		3 0-25		
Endosulfan Sulfate	0.2500	0.2550	102	0.2487	99	50-135	36-149	3 0-25		

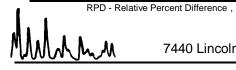
Total number of LCS compounds: 16

Total number of ME compounds: 0

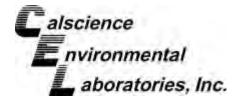
Total number of ME compounds allowed: 1

LCS ME CL validation result : Pass





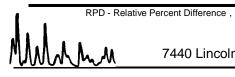


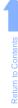


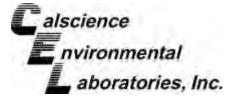


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 EPA 3510C EPA 8082

Quality Control Sample ID	Matrix	Ir	nstrument		ate oared	Date Analyzed	I	LCS/LCSD Batch Number	
099-12-527-393	Aqueous		GC 58	05/14/13		05/16/13		130514L07	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC			<u>RPD</u>	RPD CL	Qualifiers
Aroclor-1260	1.000	0.8895	89	0.8848	88	50-135	1	0-25	









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

Date Received: Work Order No: Preparation: Method:

N/A 13-05-0849 **EPA 3510C EPA 8270C**

Project: DFSP Norwalk (NPDES New Permit)

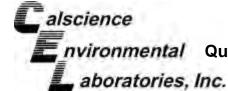
Quality Control Sample ID	Ma	Matrix		Instrument			ate llyzed	LCS/	1	
099-12-818-155	Aque	Aqueous		GC/MS TT		05/1	5/13	1:		
<u>Parameter</u>	<u>SPIKE</u> <u>ADDED</u>	LCS CONC			LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Phenol	100.0	46.53	47	46.42	46	12-151	0-174	0	0-23	
2-Chlorophenol	100.0	80.88	81	80.46	80	45-135	30-150	1	0-18	
1,4-Dichlorobenzene	100.0	62.53	63	62.62	63	36-118	22-132	0	0-26	
N-Nitroso-di-n-propylamine	100.0	69.19	69	68.24	68	52-128	39-141	1	0-13	
1,2,4-Trichlorobenzene	100.0	74.33	74	73.57	74	42-120 29-133		1	0-21	
4-Chloro-3-Methylphenol	100.0	79.09	79	77.65	78	20-150	0-172	2	0-40	
Acenaphthene	100.0	81.99	82	82.61	83	51-137	37-151	1	0-11	
4-Nitrophenol	100.0	40.14	40	40.16	40	20-150	0-172	0	0-40	
2,4-Dinitrotoluene	100.0	92.09	92	91.69	92	25-143	5-143 5-163		0-36	
Pentachlorophenol	100.0	87.93	88	87.27	87	20-150	0-172	1	0-40	
Pyrene	100.0	82.76	83	83.90	84	45-135	30-150	1 0-20		

Total number of LCS compounds: 11 Total number of ME compounds: 0 Total number of ME compounds allowed:

LCS ME CL validation result: Pass







nvironmental Quality Control - Laboratory Control Sample



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-05-0849 EPA 5030C EPA 8260B

Project: DFSP Norwalk (NPDES New Permit)

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab	File ID	LCS Batch Number
099-14-001-10,907	Aqueous	GC/MS GGG	05/11/13	11MAY	′003.rr	130511L01
<u>Parameter</u>	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	ME CL	Qualifiers
Benzene	50.00	50.73	101	80-120	73-127	
Carbon Tetrachloride	50.00	54.34	109	66-138	54-150	
Chlorobenzene	50.00	54.74	109	80-120	73-127	
1,2-Dibromoethane	50.00	52.21	104	80-120	73-127	
1,2-Dichlorobenzene	50.00	56.84	114	80-120	73-127	
1,2-Dichloroethane	50.00	49.70	99	80-129	72-137	
1,1-Dichloroethene	50.00	47.69	95	71-131	61-141	
Ethylbenzene	50.00	55.01	110	80-123	73-130	
Toluene	50.00	52.38	105	79-121	72-128	
Trichloroethene	50.00	49.17	98	80-120	73-127	
Vinyl Chloride	50.00	47.47	95	70-136	59-147	
p/m-Xylene	100.0	116.6	117	75-125	67-133	
o-Xylene	50.00	58.37	117	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	49.04	98	72-126	63-135	
Tert-Butyl Alcohol (TBA)	250.0	268.4	107	71-125	62-134	
Diisopropyl Ether (DIPE)	50.00	47.26	95	69-129	59-139	
Ethyl-t-Butyl Ether (ETBE)	50.00	50.80	102	69-129	59-139	
Tert-Amyl-Methyl Ether (TAME)	50.00	52.96	106	67-133	56-144	
Ethanol	500.0	418.4	84	47-155	29-173	

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





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

Date Received: Work Order No: Preparation: Method:

13-05-0849 EPA 5030C EPA 8260B

N/A

Quality Control Sample ID	Matrix	Instrume	ent Date Analyzed	Lab File	e ID LO	LCS Batch Number				
099-12-026-630	Aqueous	GC/MS G	GG 05/11/13	11MAY00)3.rr	130511L01				
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	<u>Qualifiers</u>				
Benzene		50.00	50.73	101	80-120					
Carbon Tetrachloride		50.00	54.34	109	66-138					
Chlorobenzene		50.00	54.74	109	80-120					
1,2-Dichlorobenzene		50.00	56.84	114	80-120					
1,2-Dichloroethane		50.00	49.70	99	80-129					
1,1-Dichloroethene		50.00	47.69	95	71-131					
Ethylbenzene		50.00	55.01	110	80-123					
Toluene		50.00	52.38	105	79-121					
Trichloroethene		50.00	49.17	98	80-120					
Vinyl Chloride		50.00	47.47	95	70-136					







Sample Analysis Summary Report



WORK ORDER #: <u>13-05-0849</u>

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-M	Influent	EPA 6010B	EPA 3010A T	05/13/2013 20:49	598	ICP 7300	1
1-A	Influent	EPA 8260B	EPA 5030C	05/11/2013 17:31	791	GC/MS GG	2
1-V	Influent	EPA 7199	N/A	05/10/2013 18:09	758	IC 14	1
1-G	Influent	EPA 8015B(M)	N/A	05/14/2013 23:48	684	GC 12	1
1-T	Influent	EPA 8270C(M) Iso	EPA 3520C	05/15/2013 15:20	449	GC/MS DD	1
1-W	Influent	EPA 314.0	N/A	05/13/2013 19:24	758	IC 13	1
1-S	Influent	EPA 1625CM	EPA 3520C	05/17/2013 13:27	449	GC/MS III	1
1-A	Influent	EPA 8260B	EPA 5030C	05/11/2013 17:31	791	GC/MS GG	2
1-E	Influent	EPA 8015B (M)	EPA 5030C	05/13/2013 22:09	797	GC 25	2
1-M	Influent	EPA 7470A	EPA 7470A T	05/13/2013 17:22	769	Mercury	1
1-J	Influent	EPA 504.1	EPA 504.1 E	05/13/2013 16:57	669	GC 40	1
1-D	Influent	EPA 8081A	EPA 3510C	05/15/2013 12:23	500	GC 51	1
1-P	Influent	EPA 8082	EPA 3510C	05/16/2013 12:46	669	GC 58	1
1-N	Influent	EPA 8270C	EPA 3510C	05/15/2013 13:20	513	GC/MS TT	1
1-U	Influent	SM 4500-CN E	N/A	05/22/2013 18:53	735	UV 8	1
1-L	Influent	EPA 8015B (M)	EPA 3510C	05/16/2013 12:29	847	GC 46	1
1-L	Influent	EPA 8015B (M)	EPA 3510C	05/16/2013 12:29	847	GC 46	1

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

05/31/13 1



Glossary of Terms and Qualifiers

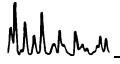


Work Order Number: 13-05-0849

Qualifier	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
E	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 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).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
Χ	% Recovery and/or RPD out-of-range.
Z	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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.



Calscience Environmental Laboratories, Inc. SoCal Laboratory NorCal Service Center 5063 Commercial Circle, Suite H

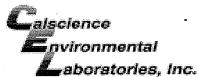
CHAIN OF CUSTODY RECORD

F 5-10-13

Date

	Garden Grove, CA 92841-1427 Concord, CA 94520-857 (714) 895-5494 (925) 689-9022						1		CLIENT PROJECT NAME / NUMBER: P.O. N						<u></u>	of										
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ADDRE	RATORY CLIENT: Parson						***************************************		DF	SP.	CONT	ru	alt		Pe.	cm	<u>;+</u> `)		70	175	フ <u>し</u> S): (PF	PINIT)	nine and the second		
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LAB USE	SAMPLE ID SAMPLING MATRIX					Unpreserved	Preserved	Field Filtered	HOT	Voc's	TPH-	Metals	\$70C's	+5	PeB's	Tedo	NDMA	14 Dioxane	EDB/DBCP	す	Cyanide	Wet Chem	Perchlorate	Asbestos		
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Page 50 of 61



WORK ORDER #: 13-05- 2 5 9

aborstorles, Inc. SAMPLE RECEIPT FORM	Cooler L of L
CLIENT: PARSONS DA	TE: 05/10/13
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen exce	pt sediment/tissue)
Temperature $\frac{2}{\sqrt{2}}$ °C - 0.2 °C (CF) = $\frac{2}{\sqrt{2}}$ °C \angle Blank	nk 🗆 Sample
☐ Sample(s) outside temperature criteria (PM/APM contacted by:).	
☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of s	ampling.
☐ Received at ambient temperature, placed on ice for transport by Courier.	
Ambient Temperature: Air Filter	Initial:
Ambient remperature.	a
CUSTODY SEALS INTACT:	
□ Cooler □ □ No (Not Intact) ☑ Not Present □	N/A Initial:
□ Sample □ □ No (Not Intact) ☑ Not Present	Initiat.
SAMPLE CONDITION: Yes	No N/A
Chain-Of-Custody (COC) document(s) received with samples	
COC document(s) received complete	
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.	
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.	_
Sampler's name indicated on COC	
Sample container label(s) consistent with COC	
Sample container(s) intact and good condition	
Proper containers and sufficient volume for analyses requested	
Analyses received within holding time	
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	
Proper preservation noted on COC or sample container	
☐ Unpreserved vials received for Volatiles analysis	
Volatile analysis container(s) free of headspace	
Tedlar bag(s) free of condensation CONTAINER TYPE:	
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores® □	
Water: ZVOA ZVOAh ZVOAna₂ □125AGB □125AGBh □125AGBp Z1A	.GB □1AGB na ₂ □1AGB s
□500AGB Ø500AGJ □500AGJs □250AGB □250CGB	PB ⊿ 1PB na □500PB

Air: Tedlar[®] Canister Other: Trip Blank Lot#:____ Labeled/Checked by:

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Filtered Scanned by: <u>4</u>C

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope

Reviewed by: Y





LA Testing

520 Mission Street South Pasadena, CA 91030 Phone/Fax: (323) 254-9960 / (323) 254-9982 http://www.latesting.com / pasadenalab@latesting.com

LA Testing Order ID: 321308274 Customer ID: 32CALS51

Customer PO: Project ID:

Attn: Ranjit Clarke

Calscience Environmental Labs, Inc.

7440 Lincoln Way

Garden Grove, CA 92841

Phone: Fax:

(714) 895-5494 (714) 894-7501

Collected: Received: 05/10/2013 05/13/2013

Analyzed:

05/20/2013

Proj: 13-05-0849

Test Report: Determination of Asbestos Structures > 10µm in Water Performed by the 100.2 Method (EPA 600/R-94/134)

ASBESTOS

Sample ID Client / EMSL	Sample Filtration Date/Time	Original Sample Vol. Filtered (ml)	Effective Filter Area (mm²)	Area Analyzed (mm²)	Asbestos Types	Fibers Detected	Analytical Sensitivity MFL	Concentration (million fibers per	Limits	
Influent 321308274-0001	5/15/2013 04:45 PM	3	1288	0.2860	None Detected	ND	1.50	<1.50	0.00 - 5.50	
UV OZONATED - Receive	ed Past Hold Tim	ie								

Analyst(s)

Sherrie Ahmad (1)

Jerry Drapala Ph.D, Laboratory Manager or Other Approved Signatory

Any questions please contact Jerry Drapala.

Initial report from: 05/20/2013 10:07:29

Sample collection and containers provided by the client, acceptable bottle blank level is defined as ≤0.01MFL>10um. ND=None Detected. This report relates only to those items tested. This report may not be reproduced, except in full, without written permission by LA Testing. Samples received in good condition unless otherwise noted.

Samples analyzed by LA Testing South Pasadena, CA CA ELAP 2283

Calscience Environmental Laboratories, Inc.

7440 LINCOLN WAY

GARDEN GROVE, CA 92841-1427

TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: LA Testing

321308274

CHAIN OF CUSTODY RECORD

DATE: 05/13/13

DATE.		00/10/10								
PAGE:	1	OF	1							

LABORA	ATORY CLIENT:					CLIEN	II PROJEC	NAME /	NUMBER	¢.					U. 14U				
also	cience Environmental Laboratories	s, Inc.				4			13-0	5-08	49								
ADDRESS: 7440 Lincoln Way								PROJECT CONTACT:						QUOTE NO.:					
Citry Garden Grove, CA 92841-1427 TEL: [714] 895-5494 F-MAIL rclarke@calscience.com							Ranjit Clarke								AB US	E ONLY			
							SAMPLER(S): (PRINT)												
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May 30, 2013

FAL Project ID: 7894

Mr. Ranjit Clarke Calscience Environmental Laboratories, Inc. 7440 Lincoln Way Garden Grove, CA 92841-1427

Dear Mr. Clarke,

Attached are the results for Frontier Analytical Laboratory project **7894**. This corresponds to your project number **13-05-0849**. One aqueous sample was received on 5/14/2013 in good condition. This sample was extracted and analyzed by EPA Method 8290 for 2,3,7,8-TCDD only. Calscience requested a turnaround time of ten business days for project **7894**.

The following report consists of an Analytical Data section and a Sample Receipt section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your chain of custody, our sample login form and a sample photo. The attached results and electronic data deliverables (EDD) are specifically for the sample referenced in this report only. These results meet all National Environmental Laboratory Accreditation Program (NELAP) requirements and shall not be reproduced except in full. Frontier Analytical Laboratory's State of California NELAP certificate number is **02113CA**. This report and EDD have been emailed to you directly. A hardcopy of the report will not be sent to you unless specifically requested.

If you have any questions regarding project **7894**, please contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Thomas C. Crabtree

Director



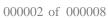
Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: 7894

Received on: <u>05/14/2013</u> Project Due: <u>05/30/2013</u> Storage: <u>R1</u>

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
7804-001-SA	1	13-05-0840	Influent	EDV 8300 TCDD	Λαμερικ	05/10/2013	01:00 pm	06/11/2013



Contents

EPA Method 8290 TCDD

MDL

0.155



FAL ID: 7894-001-MB Client ID: Method Blank Matrix: Aqueous Batch No: X2854

Compound

Date Extracted: 05-28-2013 Date Received: NA Amount: 1.000 L

DL

Qual

ICal: PCDDFAL3-4-26-13 GC Column: DB5 Units: pg/L Acquired: 05-29-2013 WHO TEQ: NA

2,3,7,8-TCDD ND 0.481

Internal Standards % Rec QC Limits Qual 13C-2,3,7,8-TCDD 96.7 40.0 - 135

Cleanup Surrogate 37Cl-2,3,7,8-TCDD 91.3 50.0 - 150

Conc

- Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Chemical Interference
- D Presence of Diphenyl Ethers
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 5/30/2013

Reviewed By: *U*Date: 5/30/2013

at st

EPA Method 8290 TCDD



FAL ID: 7894-001-OPR Client ID: OPR Matrix: Aqueous Batch No: X2854 Date Extracted: 05-28-2013 Date Received: NA Amount: 1.000 L ICal: PCDDFAL3-4-26-13 GC Column: DB5 Units: ng/ml Acquired: 05-29-2013 WHO TEQ: NA

 Compound
 Conc
 QC Limits

 2,3,7,8-TCDD
 8.29
 7.00 - 13.0

 Internal Standards
 % Rec
 QC Limits

 13C-2,3,7,8-TCDD
 82.7
 40.0 - 135

Cleanup Surrogate

37CI-2,3,7,8-TCDD 91.2 50.0 - 150

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Chemical Interference
- D Presence of Diphenyl Ethers
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 5/30/2013

Reviewed By: *U*Date: 5/30/2013

a s

EPA Method 8290 TCDD



FAL ID: 7894-001-SA Client ID: Influent Matrix: Aqueous Batch No: X2854 Date Extracted: 05-28-2013 Date Received: 05-14-2013 Amount: 1.023 L ICal: PCDDFAL3-4-26-13 GC Column: DB5 Units: pg/L Acquired: 05-29-2013 WHO TEQ: NA

Compound Conc DL MDL Qual 2,3,7,8-TCDD ND 0.758 0.155 Internal Standards % Rec QC Limits Qual 13C-2,3,7,8-TCDD 88.0 40.0 - 135

Cleanup Surrogate

37Cl-2,3,7,8-TCDD 85.8 50.0 - 150

- A Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
- B Analyte is present in Method Blank
- C Chemical Interference
- D Presence of Diphenyl Ethers
- E Analyte concentration is above calibration range
- F Analyte confirmation on secondary column
- J Analyte concentration is below calibration range
- M Maximum possible concentration
- ND Analyte Not Detected
- NP Not Provided
- P Pre-filtered through a Whatman 0.7um GF/F filter
- S Sample acceptance criteria not met
- X Matrix interferences
- * Result taken from dilution or reinjection

Analyst: 5/30/2013

Reviewed By: *U*Date: 5/30/2013



Relinquished by: (Signature)

Relinquished by: (Signature)

7440 LINCOLN WAY GARDEN GROVE, CA 92841-1427

TO: Frontier Analytical

CHAIN OF CUSTODY BEGORD
DATE: 05/13/13

•	aboratories, inc.	TEL: (714) 895-5494 . FA)	K: (714) 894-7501	I										PAGE	:	1		_of		1	
	ATORY CLIENT: Cience Environme	ntal Laboratories, Ir	nc.	~(IV	4	-	CLIE	NT PRO	JEC I I		NUMBER:	- 00	40				P.O. NO.				
ADDRE	ss: Lincoln Way			1	T	-110	PRO	JECT C	ONTAC		3-05)-U8	49			_	QUOTE	- 110 -			
GITY Sard	en Grove, CA 92841	-1427		J							Ranjit	Cla	rke				LAB US		v ·	ander:	
TEL:	895-5494	E-MAJL	rke@calscier	ice com			SAMPLER(S): (PRINT)														
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SPECIA	AME DAY 24 HR	72HR 5 DAYS	5 🗶 10 DA	YS	N	lormal	<u> </u>		Т.			KE	QUE	STED	ANA	ALYS	iis				
F	RWQCB REPORTING	ARCHIVE SAMPLE	S UNTIL	1 1																	
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		*****	SAMPLI	NG	<u> </u>		90 (2,														
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Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: 7894

Client:	Calscience
Client Project ID:	13-05-0849
Date Received:	05/14/2013
Time Received:	10:20 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	1
Duplicates:	1
Storage Location:	R1

Method of Delivery:	California Overnight
Tracking Number:	D10010578331434
Shipping Container Received Intact	Yes
Custody seals(s) present?	Yes
Custody seals(s) intact?	Yes
Sample Arrival Temperature (C)	0
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test for residual Chlorine	Yes
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	06/11/2013
Adequate Sample Volume	Yes
pH Range	Between 4 and 9
Anomalies or additional comments:	









CALSCIENCE

WORK ORDER NUMBER: 13-06-0658

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 X. F. Clark

Approved for release on 06/19/2013 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 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.

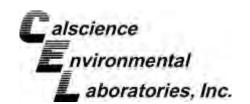


Contents

Client Project Name: DFSP Norwalk - Quarterly

Work Order Number: 13-06-0658

1	Work Order Narrative	3
2	Client Sample Data	4 4 5 6 8
3	Quality Control Sample Data	10 10 17
4	Sample Analysis Summary	26
5	Glossary of Terms and Qualifiers	27
6	Chain of Custody/Sample Receipt Form	28



Work Order Narrative



Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 06/11/2013. They were assigned to Work Order 13-06-0658.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

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.

Subcontract Information:

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



NELAP ID: 03220CA DoD-ELAP ID: L10-41

CSDLAC ID: 10109

SCAQMD ID: 93LA0830

FAX: (714) 894-7501

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 .





Analytical Report



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/11/13 13-06-0658 EPA 3510C EPA 8015B (M)

Project: DFSP Norwalk - Quarterly

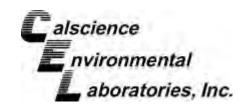
Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EFFLUENT		13-06-0658-1-I	06/11/13 08:30	Aqueous	GC 47	06/12/13	06/12/13 20:51	130612B11
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Diesel	ND	100	1		ug/L			
Surrogates:	REC (%)	Control Limits		<u>Qual</u>				
n-Octacosane	83	68-140						
n colacocano	00	00-140						
Method Blank		099-15-282-105	N/A	Aqueous	GC 47	06/12/13	06/12/13 19:18	130612B11
	Result		N/A	Aqueous Qual	GC 47	06/12/13		130612B11
Method Blank		099-15-282-105		•		06/12/13		130612B11
Method Blank Parameter	Result	099-15-282-105 RL	<u>DF</u>	•	<u>Units</u>	06/12/13		130612B11



DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/11/13 13-06-0658 EPA 5030C EPA 8015B (M)

Project: DFSP Norwalk - Quarterly

Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EFFLUENT		13-06-0658-1-E	06/11/13 08:30	Aqueous	GC 25	06/12/13	06/12/13 17:46	130612B02
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
TPH as Gasoline	ND ND	100	1	<u>Quai</u>	ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Bromofluorobenzene	85	38-134						
,		00 .0.						
Method Blank		099-15-704-416	N/A	Aqueous	GC 25	06/12/13	06/12/13 11:03	130612B02
Method Blank		099-15-704-416		•		06/12/13		130612B02
,	Result ND		N/A <u>DF</u> 1	Aqueous Qual	GC 25 Units ug/L	06/12/13		130612B02
Method Blank Parameter	Result	099-15-704-416 <u>RL</u>	<u>DF</u>	•	<u>Units</u>	06/12/13		130612B02



06/11/13

13-06-0658

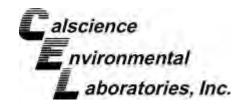
EPA 5030C

EPA 8260B

Page 1 of 2

ug/L





Analytical Report



Parsons Government Services, Inc.

100 West Walnut Street

Pasadena, CA 91124-0002

Date Received: Work Order No:

Preparation: Method:

Units:

Project: DFSP Norwalk - Quarterly

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EFFLUENT	13-06-0658-1-B	06/11/13 08:30	Aqueous	GC/MS QQ	06/12/13	06/13/13 04:07	130612L03

EFFLUENT			13-06	-0658-1	-В	06/11/13 Aqueous GC/MS Q0 08:30	Q 06/12/		/13/13 04:07	130612	L03
Comment(s): -Results were	evaluated to t	he MDL (D	L), conc	entration	ns >= to	the MDL (DL) but < RL (LOQ), if four	nd, are qual	ified with	a "J" flaç	-	
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	Qual	<u>Parameter</u>	Result	RL	<u>MDL</u>	<u>DF</u>	Qual
Acetone	ND	20	10	1		c-1,3-Dichloropropene	ND	0.50	0.25	1	
Benzene	ND	0.50	0.14	1		t-1,3-Dichloropropene	ND	0.50	0.25	1	
Bromobenzene	ND	1.0	0.30	1		Ethylbenzene	ND	0.50	0.14	1	
Bromochloromethane	ND	1.0	0.48	1		2-Hexanone	ND	10	2.1	1	
Bromodichloromethane	ND	1.0	0.21	1		Isopropylbenzene	ND	1.0	0.58	1	
Bromoform	ND	1.0	0.50	1		p-Isopropyltoluene	ND	1.0	0.16	1	
Bromomethane	ND	5.0	3.9	1		Methylene Chloride	ND	5.0	0.64	1	
2-Butanone	ND	10	2.2	1		4-Methyl-2-Pentanone	ND	10	4.4	1	
n-Butylbenzene	ND	1.0	0.23	1		Naphthalene	ND	10	2.5	1	
sec-Butylbenzene	ND	1.0	0.25	1		n-Propylbenzene	ND	1.0	0.17	1	
tert-Butylbenzene	ND	1.0	0.28	1		Styrene	ND	1.0	0.17	1	
Carbon Disulfide	ND	10	0.41	1		1,1,1,2-Tetrachloroethane	ND	1.0	0.40	1	
Carbon Tetrachloride	ND	0.50	0.23	1		1,1,2,2-Tetrachloroethane	ND	1.0	0.41	1	
Chlorobenzene	ND	1.0	0.17	1		Tetrachloroethene	ND	1.0	0.39	1	
Chloroethane	ND	5.0	2.3	1		Toluene	ND	0.50	0.24	1	
Chloroform	ND	1.0	0.46	1		1,2,3-Trichlorobenzene	ND	1.0	0.51	1	
Chloromethane	ND	5.0	1.8	1		1,2,4-Trichlorobenzene	ND	1.0	0.50	1	
2-Chlorotoluene	ND	1.0	0.24	1		1,1,1-Trichloroethane	ND	1.0	0.30	1	
4-Chlorotoluene	ND	1.0	0.13	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	0.78	1	
Dibromochloromethane	ND	1.0	0.25	1		1,1,2-Trichloroethane	ND	1.0	0.38	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.2	1		Trichloroethene	ND	1.0	0.37	1	
1,2-Dibromoethane	ND	1.0	0.36	1		Trichlorofluoromethane	ND	10	1.7	1	
Dibromomethane	ND	1.0	0.46	1		1,2,3-Trichloropropane	ND	5.0	0.64	1	
1,2-Dichlorobenzene	ND	1.0	0.46	1		1,2,4-Trimethylbenzene	ND	1.0	0.36	1	
1,3-Dichlorobenzene	ND	1.0	0.40	1		1,3,5-Trimethylbenzene	ND	1.0	0.28	1	
1,4-Dichlorobenzene	ND	1.0	0.43	1		Vinyl Acetate	ND	10	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.46	1		Vinyl Chloride	ND	0.50	0.30	1	
1,1-Dichloroethane	ND	1.0	0.28	1		p/m-Xylene	ND	0.50	0.24	1	
1,2-Dichloroethane	ND	0.50	0.24	1		o-Xylene	ND	0.50	0.23	1	
1,1-Dichloroethene	ND	1.0	0.43	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	0.31	1	
c-1,2-Dichloroethene	ND	1.0	0.48	1		Tert-Butyl Alcohol (TBA)	ND	10	4.6	1	
t-1,2-Dichloroethene	ND	1.0	0.37	1		Diisopropyl Ether (DIPE)	ND	2.0	0.33	1	
1,2-Dichloropropane	ND	1.0	0.42	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	0.33	1	
1,3-Dichloropropane	ND	1.0	0.30	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	0.22	1	
2,2-Dichloropropane	ND	1.0	0.36	1		Ethanol	ND	100	50	1	
1,1-Dichloropropene	ND	1.0	0.46	1			.10	.00	00	'	
Surrogates:	REC (%)		<u>Qu</u>	<u>ıal</u>		Surrogates:	REC (%)	Control Limits	<u>C</u>	<u>Qual</u>	
4.4 Duamafluanali a a a a	87	<u>Limits</u>				Dibassafinassagis	107				
1,4-Bromofluorobenzene		80-120				Dibromofluoromethane	-	80-126			
1,2-Dichloroethane-d4	117	80-134				Toluene-d8	106	80-120			

RL - Reporting Limit ,

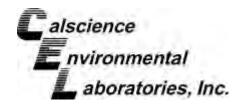
DF - Dilution Factor ,

Qual - Qualifiers



06/11/13





Analytical Report



Parsons Government Services, Inc.

100 West Walnut Street

Pasadena, CA 91124-0002

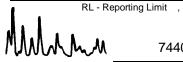
Date Received: Work Order No: 13-06-0658

Preparation: **EPA 5030C** Method: **EPA 8260B**

Units: ug/L

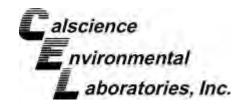
Project: DFSP Norwalk - Quarterly Page 2 of 2

Client Sample Number			Lab Sa Num			Date/Time Collected	Matrix	Instrument	Date Prepa		ate/Time nalyzed	QC Bat	ch ID
Method Blank			099-14	l-001-1	1,196	N/A	Aqueous	GC/MS QQ	06/12/	13 0	6/12/13 22:27	130612	L03
Comment(s): -Results were e	evaluated to the	ne MDL (D	L), conce	ntration	ns >= to	the MDL (DL) but < RL (I	OQ), if found	d, are quali	ified with	n a "J" flag] .	
Parameter	Result	RL	MDL	<u>DF</u>	Qual	<u>Parameter</u>			Result	RL	MDL	DF	Qual
Acetone	ND	20	10	1		c-1,3-Dichlo	propropene		ND	0.50	0.25	1	
Benzene	ND	0.50	0.14	1		t-1,3-Dichlo			ND	0.50	0.25	1	
Bromobenzene	ND	1.0	0.30	1		Ethylbenzer			ND	0.50	0.14	1	
Bromochloromethane	ND	1.0	0.48	1		2-Hexanone)		ND	10	2.1	1	
Bromodichloromethane	ND	1.0	0.21	1		Isopropylbe			ND	1.0	0.58	1	
Bromoform	ND	1.0	0.50	1		p-Isopropylt			ND	1.0	0.16	1	
Bromomethane	ND	5.0	3.9	1		Methylene (ND	5.0	0.64	1	
2-Butanone	ND	10	2.2	1		4-Methyl-2-			ND	10	4.4	1	
n-Butylbenzene	ND	1.0	0.23	1		Naphthalen			ND	10	2.5	1	
sec-Butylbenzene	ND	1.0	0.25	1		n-Propylber			ND	1.0	0.17	1	
tert-Butylbenzene	ND	1.0	0.28	1		Styrene			ND	1.0	0.17	1	
Carbon Disulfide	ND	10	0.41	1		•	achloroetha	ne	ND	1.0	0.40	1	
Carbon Tetrachloride	ND	0.50	0.23	1			achloroetha		ND	1.0	0.41	1	
Chlorobenzene	ND	1.0	0.17	1		Tetrachloro		.0	ND	1.0	0.39	1	
Chloroethane	ND	5.0	2.3	1		Toluene			ND	0.50	0.24	1	
Chloroform	ND	1.0	0.46	1		1,2,3-Trichl	orobenzene		ND	1.0	0.51	1	
Chloromethane	ND	5.0	1.8	1		1,2,4-Trichl			ND	1.0	0.50	1	
2-Chlorotoluene	ND	1.0	0.24	1		1,1,1-Trichl			ND	1.0	0.30	1	
4-Chlorotoluene	ND	1.0	0.13	1				fluoroethane		10	0.78	1	
Dibromochloromethane	ND	1.0	0.25	1		1,1,2-Trichl			ND	1.0	0.38	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.2	1		Trichloroeth			ND	1.0	0.37	1	
1,2-Dibromoethane	ND	1.0	0.36	1		Trichloroflu			ND	10	1.7	1	
Dibromomethane	ND	1.0	0.46	1		1,2,3-Trichl			ND	5.0	0.64	1	
1,2-Dichlorobenzene	ND	1.0	0.46	1			thylbenzene		ND	1.0	0.36	1	
1,3-Dichlorobenzene	ND	1.0	0.40	1			thylbenzene		ND	1.0	0.28	1	
1,4-Dichlorobenzene	ND	1.0	0.43	1		Vinyl Aceta			ND	10	2.8	1	
Dichlorodifluoromethane	ND	1.0	0.46	1		Vinyl Chlori			ND	0.50	0.30	1	
1,1-Dichloroethane	ND	1.0	0.28	1		p/m-Xylene	ao		ND	0.50	0.24	1	
1,2-Dichloroethane	ND	0.50	0.24	1		o-Xylene			ND	0.50	0.23	1	
1,1-Dichloroethene	ND	1.0	0.43	1		•	tyl Ether (M7	TRE)	ND	0.50	0.20	1	
c-1,2-Dichloroethene	ND	1.0	0.48	1		•	Icohol (TBA	,	ND	10	4.6	1	
t-1,2-Dichloroethene	ND	1.0	0.37	1		•	Ether (DIPE	,	ND	2.0	0.33	1	
1,2-Dichloropropane	ND	1.0	0.42	1			l Ether (ETE	,	ND	2.0	0.33	1	
1,3-Dichloropropane	ND	1.0	0.30	1			/lethyl Ether	,	ND	2.0	0.22	1	
2,2-Dichloropropane	ND	1.0	0.36	1		Ethanol	yı Luici	(· / \\vi_ /	ND	100	50	1	
1,1-Dichloropropene	ND	1.0	0.46	1		Littation			ND	100	30	•	
Surrogates:	REC (%)	Control	<u>Qua</u>	<u>al</u>		Surrogates:			REC (%)		ol C	<u>lual</u>	
1 1 Dramafluarahanzana	87	<u>Limits</u> 80-120				Dibrometh	aramathar -		108	Limits 80-12	8		
1,4-Bromofluorobenzene	113					Dibromofluo	nomemane		105				
1,2-Dichloroethane-d4	113	80-134				Toluene-d8			100	80-120	U		



DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation:

13-06-0658 EPA 3020A Total

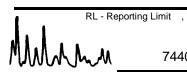
Method: Units: EPA 6020 mg/L

06/11/13

Project: DFSP Norwalk - Quarterly

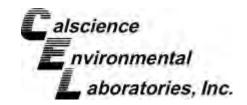
Page 1 of 1

Client Sample Numb	per		Lab Sam Numbe	•	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EFFLUENT			13-06-06	58-1-J	06/11/13 08:30	Aqueous	ICP/MS 03	06/12/13	06/13/13 14:12	130612L03
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	Parameter		Result	<u>RL</u>	DF	- Qual
Arsenic	ND	0.00100	<u>5.</u> 1	<u>Quai</u>	Selenium		ND	0.00		<u> </u>
Copper	0.00490	0.00100	1		Zinc		0.00774	0.00	•	
Lead	ND	0.00100	1							
Method Blank			096-06-0	03-4,128	N/A	Aqueous	ICP/MS 03	06/12/13	06/13/13 13:31	130612L03
Doromotor	Popult	DI	DE	Ougl	Doromotor		Popult	DI	DI	Qual
Parameter	<u>Result</u> ND	<u>RL</u> 0.00100	<u>DF</u> 1	<u>Qual</u>	<u>Parameter</u>		<u>Result</u> ND	<u>RL</u> 0.00	<u>DF</u> 100 1	<u>Qual</u>
Arsenic	ND ND	0.00100	1		Selenium Zinc		ND	0.00		
Copper Lead	ND ND	0.00100	1		ZIIIC		ND	0.00	J00	



DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

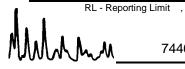
06/11/13 13-06-0658

Project: DFSP Norwalk - Quarterly

Page 1 of 1

Client Sample Number		La	ab Sample	Number	Date Collected	Matrix		
EFFLUENT		•	13-06-065	8-1	06/11/13	Aqueous		
<u>Parameter</u>	Results	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	Method
Phenolics, Total	ND	0.10	1		mg/L	06/19/13	06/19/13	EPA 420.1
Turbidity	0.090	0.050	1		NTU	N/A	06/11/13	SM 2130 B
Solids, Total Suspended	ND	1.0	1		mg/L	06/12/13	06/12/13	SM 2540 D
Solids, Settleable	ND	0.10	1		mL/L/hr	N/A	06/12/13	SM 2540 F
рН	7.09	0.01	1		pH units	N/A	06/11/13	SM 4500 H+ B
Sulfide, Total	ND	0.050	1		mg/L	06/11/13	06/11/13	SM 4500 S2 - D
Chlorine, Total Residual	ND	0.10	1		mg/L	N/A	06/11/13	SM 4500-CI F
Oil and Grease	ND	1.0	1		mg/L	06/12/13	06/12/13	SM 5520 B
MBAS	ND	0.10	1		mg/L	06/12/13	06/12/13	SM 5540C
Method Blank					N/A	Aqueous		
<u>Parameter</u>	<u>Results</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	Method
Phenolics, Total	ND	0.10	1		mg/L	06/19/13	06/19/13	EPA 420.1
Solids, Total Suspended	ND	1.0	1		mg/L	06/12/13	06/12/13	SM 2540 D
Sulfide, Total	ND	0.050	1		mg/L	06/11/13	06/11/13	SM 4500 S2 - D
Chlorine, Total Residual	ND	0.10	1		mg/L	N/A	06/11/13	SM 4500-CI F
Oil and Grease	ND	1.0	1		mg/L	06/12/13	06/12/13	SM 5520 B

mg/L



MBAS

ND

0.10

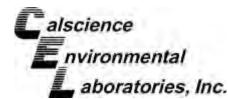
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06/12/13

06/12/13

SM 5540C



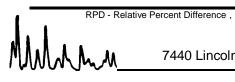


Quality Control - Spike/Spike Duplicate

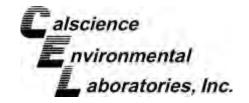


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/11/13 13-06-0658 EPA 3020A Total EPA 6020

Quality Control Sample ID			Matrix	lr	nstrument		Pate epared	Date Analyzed		ISD Batch umber
EFFLUENT			Aqueous	s IC	CP/MS 03	06/	12/13	06/13/13	130	612 S 03
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Arsenic	ND	0.1000	0.1044	104	0.1046	105	73-127	0	0-11	
Copper	0.004897	0.1000	0.09884	94	0.09998	95	72-108	1	0-10	
Lead	ND	0.1000	0.1128	113	0.1135	113	79-121	1	0-10	
Selenium	ND	0.1000	0.09197	92	0.09099	91	59-125	1	0-12	
Zinc	0.007744	0.1000	0.09021	82	0.08838	81	43-145	2	0-39	





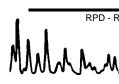


Quality Control - PDS / PDSD



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received Work Order No: Preparation: Method: 06/11/13 13-06-0658 EPA 3020A Total EPA 6020

Quality Control Sample ID	Matrix	k Instrur	ment	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
EFFLUENT	Aqueo	ous ICP/N	/IS 03	06/12/13	06/13/13	130612S03
<u>Parameter</u>	SAMPLE CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	Qualifiers
Arsenic	ND	0.1000	0.1035	103	75-125	
Copper	0.004897	0.1000	0.09984	95	75-125	
Lead	ND	0.1000	0.1071	107	75-125	
Selenium	ND	0.1000	0.08670	87	75-125	
Zinc	0.007744	0.1000	0.09200	84	75-125	





Quality Control - Spike/Spike Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/11/13 13-06-0658 N/A SM 5540C

Quality Control Sample ID			Matrix	lr	nstrument		Date epared	Date Analyzed		ISD Batch lumber
13-06-0717-1			Aqueo	us U	V 8	06/	12/13	06/12/13	D06 ⁻	12SURS1
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
MBAS	ND	1.0	0.95	95	0.94	94	70-130	1	0-25	





Quality Control - Spike/Spike Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/11/13 13-06-0658 N/A SM 5520 B

Quality Control Sample ID			Matrix	lr	nstrument		Date epared	Date Analyzed		/ISD Batch lumber
13-06-0480-1			Aqueou	ıs N	/A	06/	12/13	06/12/13	D06	120GS1
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Oil and Grease	31.7	40.0	70.3	96	71.3	99	80-120	1	0-25	



EPA 8015B (M)

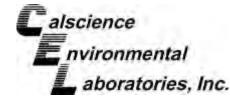
Quality Control - Spike/Spike Duplicate

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

Date Received: Work Order No: Preparation: Method:

Quality Control Sample ID			Matrix	lı	nstrument		Date epared	Date Analyzed		ISD Batch umber
13-06-0657-1			Aqueou	ıs G	C 25	06/	12/13	06/12/13	130	612S01
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1989	99	1936	97	68-122	3	0-18	



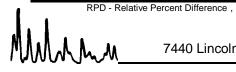


Quality Control - Spike/Spike Duplicate

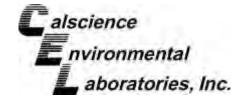


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/11/13 13-06-0658 EPA 5030C EPA 8260B

Quality Control Sample ID			Matrix		Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number	
13-06-0605-5		_	Aqueou	ıs	GC/MS QQ	06/	12/13	06/12/13	130	612S03
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	ND	50.00	51.72	103	54.25	109	78-120	5	0-20	
Carbon Tetrachloride	ND	50.00	57.92	116	61.51	123	67-139	6	0-20	
Chlorobenzene	ND	50.00	50.84	102	51.39	103	80-120	1	0-20	
1,2-Dibromoethane	ND	50.00	56.82	114	59.92	120	80-123	5	0-20	
1,2-Dichlorobenzene	ND	50.00	49.20	98	51.61	103	76-120	5	0-20	
1,2-Dichloroethane	ND	50.00	53.67	107	56.40	113	76-130	5	0-20	
1,1-Dichloroethene	ND	50.00	57.38	115	63.26	127	70-130	10	0-27	
Ethylbenzene	ND	50.00	52.37	105	52.35	105	73-127	0	0-20	
Toluene	ND	50.00	49.67	99	47.51	95	72-126	4	0-20	
Trichloroethene	ND	50.00	51.18	102	53.30	107	74-122	4	0-20	
Vinyl Chloride	ND	50.00	55.97	112	59.01	118	65-131	5	0-24	
p/m-Xylene	ND	100.0	105.8	106	109.1	109	70-130	3	0-30	
o-Xylene	ND	50.00	53.31	107	55.87	112	70-130	5	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	56.43	113	61.00	122	69-123	8	0-20	
Tert-Butyl Alcohol (TBA)	ND	250.0	252.7	101	264.9	106	65-131	5	0-22	
Diisopropyl Ether (DIPE)	ND	50.00	59.01	118	62.08	124	68-128	5	0-22	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	54.51	109	58.25	117	69-123	7	0-21	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	49.05	98	51.35	103	70-124	5	0-20	
Ethanol	ND	500.0	570.7	114	560.3	112	41-155	2	0-35	







Quality Control - Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

N/A 13-06-0658

Matrix: Aqueous or Solic	d							
<u>Parameter</u>	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	<u>RPD</u>	RPD CL	Qualifiers
Chlorine, Total Residual	SM 4500-CI F	EFFLUENT	06/11/13	ND	ND	NA	0-25	
Turbidity	SM 2130 B	EFFLUENT	06/11/13	0.090	0.090	0	0-25	
pН	SM 4500 H+ B	EFFLUENT	06/11/13	7.09	7.11	0	0-25	
Sulfide, Total	SM 4500 S2 - D	13-06-0698-5	06/11/13	ND	ND	NA	0-25	
Solids, Total Suspended	SM 2540 D	13-06-0674-1	06/12/13	138	134	3	0-20	



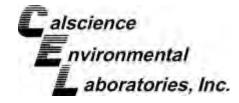
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002

Work Order No: 13-06-0658
Preparation: EPA 3020A Total
Method: EPA 6020

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File	ID LO	CS Batch Number
096-06-003-4,128	Aqueous	ICP/MS 03	06/13/13	130312-L-03_	_053.icp	130612L03
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	<u>Qualifiers</u>
Arsenic		0.1000	0.09709	97	80-120	
Copper		0.1000	0.1007	101	80-120	
Lead		0.1000	0.09526	95	80-120	
Selenium		0.1000	0.09486	95	80-120	
Zinc		0.1000	0.1016	102	80-120	



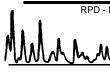




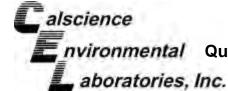


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-0658 N/A EPA 420.1

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	d	LCS/LCSD Batch Number	
099-05-085-2,659	Aqueous		UV 9	06/	19/13	06/19/13		D0619PHEL1	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Phenolics, Total	0.50	0.44	88	0.41	82	80-120	7	0-20	





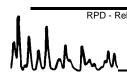


nvironmental Quality Control - Laboratory Control Sample

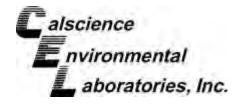


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-0658 N/A SM 5540C

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-093-2,521	Aqueous	UV 8	06/12/13	NONE	D0612SURL1
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL Qualifiers
MBAS		1.0	0.95	95	80-120



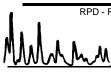




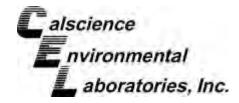


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-0658 N/A SM 4500 S2 - D

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	t	LCS/LCSD Batch Number	
099-15-853-61	Aqueous		N/A	06/	11/13	06/11/13		D0611SL2	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Sulfide. Total	1.0	0.85	85	0.85	85	80-120	0	0-20	



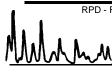




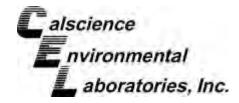


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-0658 N/A SM 5520 B

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	k	LCS/LCSD Batch Number	
099-05-081-2,909	Aqueous		N/A	06/	12/13	06/12/13		D0612OGL1	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Oil and Grease	40.0	38.4	96	39.1	98	80-120	2	0-20	



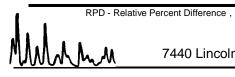




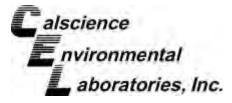


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-0658 N/A SM 2540 D

Quality Control Sample ID	Matrix	Matrix Instrument			ate pared	Date Analyzed	d	LCS/LCSD Batch Number	
099-09-010-6,323	Aqueous		N/A	06/12/13		06/12/13	D0612TSSL1		
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Solids, Total Suspended	100	93	93	90	90	80-120	3	0-20	



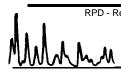


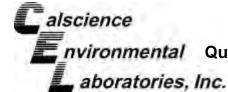




Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-0658 EPA 3510C EPA 8015B (M)

Quality Control Sample ID	Matrix	Matrix Instrument			ate pared	Date Analyzed	d	LCS/LCSD Batch Number	
099-15-282-105	Aqueous		GC 47	06/	12/13	06/12/13		130612B11	
<u>Parameter</u>	<u>SPIKE</u> ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
TPH as Diesel	4000	3994	100	3929	98	75-117	2	0-13	



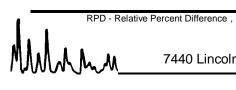


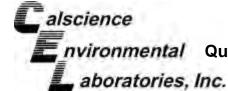
nvironmental Quality Control - Laboratory Control Sample



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-0658 EPA 5030C EPA 8015B (M)

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File I	D L	CS Batch Number
099-15-704-416	Aqueous	GC 25	06/12/13	13061204	ı	130612B02
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
TPH as Gasoline		2000	1944	97	78-120	





nvironmental Quality Control - Laboratory Control Sample



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

Date Received: Work Order No: Preparation: Method:

N/A 13-06-0658 **EPA 5030C EPA 8260B**

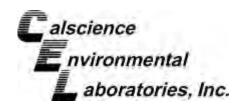
Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab	File ID	LCS Batch Number			
099-14-001-11,196	Aqueous	GC/MS QQ	06/12/13	12JUN	028.rr	130612L03			
<u>Parameter</u>	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	ME CL	Qualifiers			
Benzene	50.00	50.50	101	80-120	73-127				
Carbon Tetrachloride	50.00	56.39	113	66-138	54-150				
Chlorobenzene	50.00	48.10	96	80-120	73-127				
1,2-Dibromoethane	50.00	56.38	113	80-120	73-127				
1,2-Dichlorobenzene	50.00	50.45	101	80-120	73-127				
1,2-Dichloroethane	50.00	52.06	104	80-129 72-137					
1,1-Dichloroethene	50.00	58.29	117	71-131	61-141				
Ethylbenzene	50.00	50.59	101	80-123	73-130				
Toluene	50.00	46.91	94	79-121	72-128				
Trichloroethene	50.00	49.41	99	80-120	73-127				
Vinyl Chloride	50.00	57.34	115	70-136	59-147				
p/m-Xylene	100.0	103.3	103	75-125	67-133				
o-Xylene	50.00	52.39	105	75-125	67-133				
Methyl-t-Butyl Ether (MTBE)	50.00	56.66	113	72-126	63-135				
Tert-Butyl Alcohol (TBA)	250.0	228.5	91	71-125	62-134				
Diisopropyl Ether (DIPE)	50.00	57.06	114	69-129	59-139				
Ethyl-t-Butyl Ether (ETBE)	50.00	53.40	107	69-129	59-139				
Tert-Amyl-Methyl Ether (TAME)	50.00	47.66	95	67-133	56-144				
Ethanol	500.0	547.0	109	47-155	29-173				

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







Sample Analysis Summary Report

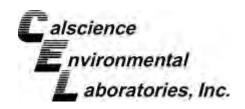


WORK ORDER #: 13-06-0658

Lab Sample Client Sample Number ID		Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location	
1-G	EFFLUENT	SM 4500-CI F	N/A	06/11/2013 17:05	688	BUR16	1	
1-H	EFFLUENT	SM 5520 B	N/A	06/12/2013 18:00	691	N/A	1	
1-N	EFFLUENT	EPA 420.1	N/A	06/19/2013 15:10	686	UV 9	1	
1-L	EFFLUENT	SM 2540 F	N/A	06/12/2013 19:20	691	N/A	1	
1-G	EFFLUENT	SM 5540C	N/A	06/12/2013 15:03	687	UV 8	1	
1-K	EFFLUENT	SM 2540 D	N/A	06/12/2013 13:40	722	N/A	1	
1-G	EFFLUENT	SM 2130 B	N/A	06/11/2013 20:18	650	TUR 3	1	
1-J	EFFLUENT	EPA 6020	EPA 3020A T	06/13/2013 14:12	598	ICP/MS 03	1	
1-B	EFFLUENT	EPA 8260B	EPA 5030C	06/13/2013 4:07	510	GC/MS QQ	2	
1-E	EFFLUENT	EPA 8015B (M)	EPA 5030C	06/12/2013 17:46	797	GC 25	2	
1-G	EFFLUENT	SM 4500 H+ B	N/A	06/11/2013 19:12	688	PH 1	1	
1-l	EFFLUENT	EPA 8015B (M)	EPA 3510C	06/12/2013 20:51	682	GC 47	1	
1-M	EFFLUENT	SM 4500 S2 - D	N/A	06/11/2013 20:00	687	N/A	1	

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

06/19/13



Glossary of Terms and Qualifiers



Work Order Number: 13-06-0658

Qualifier	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
E	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 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).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.

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.





7440 LINCOLN WAY

GARDEN GROVE, CA 92841-1432

TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

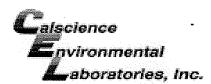
DATE: 06-U.2013

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LABORATORY CLIENT: Parsons, Inc.							CLIENT PROJECT NAME / NUMBER:								P.O. NO.:	P.O. NO.:					
100 W. Walnut Street							DFSP Norwalk - Quarterly PROJECT CONTACT:								QUOTE NO.:	QUOTE NO.:					
CITY:								MARY LUCAS													
	Paasadena, CA 91124						SAMPLER(S): (SIGNATURE) LAB USE ONLY 13-06-065										٦				
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LAB USE	• • • • • • • • • • • • • • • • • • •	DESCRIPTION	DATE	TIME	RIA		Turbidity (SM 2130B)	Oil & Grease (SM 5520B)	pH (SM 4500 H+B)	품	VOCs + Oxys(EPA 8260B)	Metals (EPA 6020:	Total Suspended Solids (SM	Settleable Solids (SM 2540F)	Total Sulfides (SM 4500 S-2)	Phenolics (EPA 420.1)	Residual Chlorine (SM 4500 Cl	MBAS (SM 5540C)	_		
ONLY							_	_	-		-			_	•			_	Com	ments	-
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Revised: 08/28/08





WORK ORDER #: 13-06- @ 6 5

LE RECEIPT FORM Cooler <u></u> of <u></u>

DARSONIS DATE: 06 ////13

CLIENT: DATE DATE
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)
Temperature °C - 0.2°C (CF) = S °C ☐ Blank ☐ Sample
☐ 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 Courier.
Ambient Temperature: Air Filter Initial:
CUSTODY SEALS INTACT:
□ Cooler □ □ No (Not Intact) ☑ Not Present □ N/A Initial: _ 🕰
□ Sample □ □ No (Not Intact) □ Not Present Initial: 🔟
SAMPLE CONDITION: Yes No N/A
Chain-Of-Custody (COC) document(s) received with samples
COC document(s) received complete
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.
Sampler's name indicated on COC □ □ □
Sample container label(s) consistent with COC
Sample container(s) intact and good condition
Proper containers and sufficient volume for analyses requested ☐ ☐ ☐
Analyses received within holding time
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours
Proper preservation noted on COC or sample container
☐ Unpreserved vials received for Volatiles analysis
Volatile analysis container(s) free of headspace
Tedlar bag(s) free of condensation
CONTAINER TYPE:
Solid: 40zCGJ 80zCGJ 160zCGJ Sleeve () EnCores TerraCores
Water: □VOA ☑VOAh □VOAna₂ □125AGB □125AGBh □125AGBp □1AGB □1AGBna₂ ☑1AGBs
□500AGB ☑500AGJ ☑500AGJs □250AGB □250CGB □250CGBs ☑1PB □1PBna □500PB
□250PB
Air: □Tedlar [®] □Canister Other: □ Trip Blank Lot#: Labeled/Checked by:
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: Preservative: h: HCL n: HNOp nac:NapScQp na: NaQH n: H2PQ4 s: H2SQ4 u: Ultra-pure znna: ZnAco+NaQH f: Filtered Scanned by:





CALSCIENCE

WORK ORDER NUMBER: 13-06-1486

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 X. F. Clark

Approved for release on 06/28/2013 by: Ranjit Clarke

Project Manager



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements 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.

ResultLink >

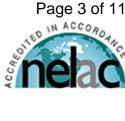
Email your PM >



Contents

Client Project Name: DFSP - Norwalk Work Order Number: 13-06-1486

1	Work Order Narrative	3
2	Client Sample Data	4 4
3	Quality Control Sample Data	5 5 7
4	Sample Analysis Summary	8
5	Glossary of Terms and Qualifiers	9
6	Chain of Custody/Sample Receipt Form	10



Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 06/21/2013. They were assigned to Work Order 13-06-1486.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

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.

Subcontract Information:

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





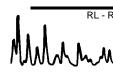


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/21/13 13-06-1486 EPA 3020A Total EPA 6020

Project: DFSP - Norwalk

Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent		13-06-1486-1-A	06/21/13 11:40	Aqueous	ICP/MS 03	06/25/13	06/25/13 20:03	130625L04A
Parameter Arsenic	<u>Result</u> ND	<u>RL</u> 0.00100	<u>DF</u> 1	Qual	<u>Units</u> mg/L			
7 HOGING					3			
Method Blank		096-06-003-4,135	N/A	Aqueous	ICP/MS 03	06/25/13	06/25/13 19:19	130625L04A







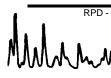
Quality Control - Spike/Spike Duplicate



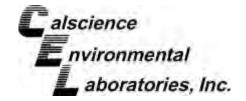
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/21/13 13-06-1486 EPA 3020A Total EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID			Matrix	ln	strument		ate pared			ISD Batch umber
13-06-1388-2			Aqueous	IC	P/MS 03	06/2	25/13	06/25/13	130	625S04
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC 2	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Arsenic	0.004394	0.1000	0.1116	107	0.1116	107	73-127	0	0-11	







Quality Control - PDS / PDSD

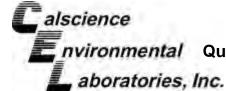


Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received Work Order No: Preparation: Method: 06/21/13 13-06-1486 EPA 3020A Total EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrum	nent	Date [Prepared	Date Analyzed F	PDS/PDSD Batch Number
13-06-1388-2	Aqueo	us ICP/M	S 03	06/25/13	06/25/13	130625S04
<u>Parameter</u>	SAMPLE CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	<u>Qualifiers</u>
Arsenic	0.004394	0.1000	0.1057	101	75-125	





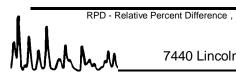
nvironmental Quality Control - Laboratory Control Sample



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-1486 EPA 3020A Total EPA 6020

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File	e ID	LCS Batch Number
096-06-003-4,135	Aqueous	ICP/MS 03	06/25/13	130625-L-04_	_139.icp	130625L04A
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Arsenic		0.1000	0.1025	103	80-120	





Sample Analysis Summary Report



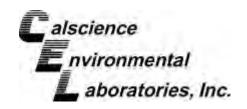
WORK ORDER #: 13-06-1486

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location	
1-A	Effluent	EPA 6020	EPA 3020A T	06/25/2013 20:03	598	ICP/MS 03	1	

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



06/27/13



Glossary of Terms and Qualifiers



Work Order Number: 13-06-1486

Qualifier	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
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HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
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J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	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

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.

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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 Environmental Laboratories, Inc. NorCal Service Center NorCal Service Center

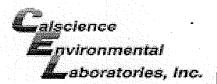
CHAIN OF CUSTODY RECORD

E,	7440 Lincoln Way Garden Grove, CA	02841_1427	5063 Co	mmercial , CA 9452	Circle,	Suite I	-		WO	#/LA	B USE	6	4.		D .	1	Date	}		6° 0	<u> </u>					
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CITY	<u>180 W. U</u>	Valnut St	STATE	***************************************	***************************************		ZIP	~~~~																		
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USE ONLY	SAMPLE ID	DATE	TIME	MATRIX	OF CONT.	duD	Pres	Field	표	표	TPH (BTE	8	ŏ	ᇤ	SVO	Pest	PCB	₽	T22	S	Air-	Air-	4		
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DISTRIBUTION: White with final report, Green and Yellow to Client.

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.

Return to Contents



WORK ORDER #: **13-06-** ☐ 任 图 **6**

SAMPLE RECEIPT FORM cooler ____ of ___

CLIENT: Parsons		DATE: 06 /21/13
	The state of the s	

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)
Temperature °C - 0.2 °C (CF) = 1.2 °C □ Blank □ Sample
☐ 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 Courier.
Ambient Temperature: Air Filter Initial:
Ambient remperature.
CUSTODY SEALS INTACT:
□ Cooler □ □ No (Not Intact) ✓ Not Present □ N/A Initial: ✓
□ Sample □ □ □ No (Not Intact) ☑ Not Present Initial: ∭ ∥
SAMPLE CONDITION: Yes No N/A
Chain-Of-Custody (COC) document(s) received with samples
COC document(s) received complete
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.
Sampler's name indicated on COC
Sample container label(s) consistent with COC
Sample container(s) intact and good condition
Proper containers and sufficient volume for analyses requested
Analyses received within holding time
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours □ □ □
Proper preservation noted on COC or sample container
☐ Unpreserved vials received for Volatiles analysis
Volatile analysis container(s) free of headspace
Tedlar bag(s) free of condensation
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores® □TerraCores® □
Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGBp □1AGB □1AGBna₂ □1AGBs
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs □1PB □1PBna □500PB
□250PB
Air: Tedlar Canister Other: Trip Blank Lot#: Labeled/Checked by: M.Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: Preservative: h: HCL n: HNO3 na2:Na2S>O3 na: NaOH p: HaPO4 s: H2SO4 u: Ultra-pure znna: ZnAc2+NaOH f: Filtered Scanned by: W.C





CALSCIENCE

WORK ORDER NUMBER: 13-06-1762

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 X. V. Clarke

Approved for release on 07/2/2013 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 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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3	Quality Control Sample Data	5 5 7
4	Sample Analysis Summary	8
5	Glossary of Terms and Qualifiers	9
6	Chain of Custody/Sample Receipt Form	10



Work Order Narrative



Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 06/26/2013. They were assigned to Work Order 13-06-1762.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

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.

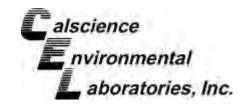
Subcontract Information:

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

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Mulhan







Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/26/13 13-06-1762 EPA 3005A Total EPA 6020

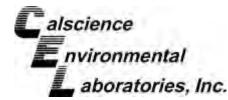
Project: DFSP - Norwalk

Page 1 of 1

Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent		13-06-1762-1-A	06/26/13 12:45	Aqueous	ICP/MS 03	06/28/13	06/28/13 19:01	130628L02
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Arsenic	ND	0.00100	1		mg/L			
Method Blank		096-06-003-4,136	N/A	Aqueous	ICP/MS 03	06/28/13	06/28/13 18:37	130628L02
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
Arsenic	ND	0.00100	1		mg/L			







Quality Control - Spike/Spike Duplicate



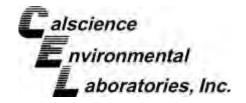
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 06/26/13 13-06-1762 EPA 3005A Total EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID			Matrix	lr	nstrument		Date epared	Date Analyzed		MSD Batch lumber
13-06-1699-1			Aqueous	s IC	CP/MS 03	06/2	28/13	06/28/13	130	628S02
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifiers
Arsenic	0.01044	0.1000	0.1170	107	0.1179	107	80-120	1	0-20	







Quality Control - PDS / PDSD



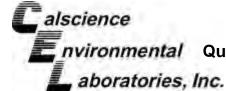
Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received Work Order No: Preparation: Method: 06/26/13 13-06-1762 EPA 3005A Total EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrum	nent	Date [Prepared	Date Analyzed F	PDS/PDSD Batch Number
13-06-1699-1	Aqueo	us ICP/M	S 03	06/28/13	06/28/13	130628S02
<u>Parameter</u>	SAMPLE_CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	<u>Qualifiers</u>
Arsenic	0.01044	0.1000	0.1078	97	75-125	







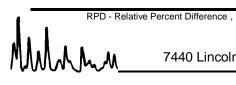
nvironmental Quality Control - Laboratory Control Sample



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-06-1762 EPA 3005A Total EPA 6020

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File	e ID	LCS Batch Number
096-06-003-4,136	Aqueous	ICP/MS 03	06/28/13	130628-L-02_	_075.icp	130628L02
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec C	<u>Qualifiers</u>
Arsenic		0.1000	0.09917	99	80-120	





Sample Analysis Summary Report

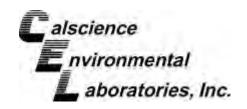


WORK ORDER #: <u>13-06-1762</u>

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-A	Effluent	EPA 6020	EPA 3005A T	06/28/2013 19:01	598	ICP/MS 03	1

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

07/02/13



Glossary of Terms and Qualifiers



Work Order Number: 13-06-1762

Qualifier	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	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 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).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
Χ	% Recovery and/or RPD out-of-range.
Z	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

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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.

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 Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
Other CA office locations: Concord and San Luis Obispo
For courier service / sample drop off information,
contact sales@calscience.com or call us.

13-06-1762

WO # / LAB USE ONLY

Date 6-26-13
Page / of /

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CITY:		Pasadena			A	~~~		ZIP:	***************************************	M	914	Lu	دمت	/c	ina	_y 2	ick	er			Gle	nn l	4na	rost	co		
TEL:	100 W. Walnut St. CITY: Pasadena CA TEL: 626-440-6032 Mary. Lucas a Parsons com								DFSP- Norwalk 747577-08000 PROJECT CONTACT: SAMPLER(S): (PRINT) Mary Lucas / Cindy Zicker Glenn Androsko REQUESTED ANALYSES										and a second								
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LAB USE	CABA	PLE ID	SAMF	LING	MATRIX	NO. OF	Unpreserved	Preserved	Field Filtered	TPH	TPH	тРН □ С6-С36	I	EX /	VOCs (8260)	ygen	g) ds	SVOCs (8270)	sticid	PCBs (8082)	Hs [2 Me	ĵ.	2			
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WORK ORDER #: **13-06-** ☐ ② ⑤

SAMPLE RECEIPT FORM Cooler of

CLIENT: PARSON'S DAT	e. <u>06</u>	5/36/13
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen exception of the control	nk 🗆	ent/tissue) Sample
☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of same law of same		Initial: Ay
CUSTODY SEALS INTACT: Cooler	N/A	Initial:
SAMPLE CONDITION: Chain-Of-Custody (COC) document(s) received with samples COC document(s) received complete Collection date/time, matrix, and/or # of containers logged in based on sample labels.	_ N	_
□ No analysis requested. □ Not relinquished. □ No date/time relinquished. Sampler's name indicated on COC. □ Sample container label(s) consistent with COC. □ Sample container(s) intact and good condition. □	0	
Proper containers and sufficient volume for analyses requested		
Proper preservation noted on COC or sample container		
Tedlar bag(s) free of condensation		es® □
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs □1F □250PB □250PBn □125PB □125PBznna □100PJ □100PJna₂ □ Air: □Tedlar® □Canister Other: □ Trip Blank Lot#: Laborate Cartering Conference of Class In large Residue 7: Ziples/Recognible Reg. 5: Envelope	PB □1P □eled/Chec	Bna □500PB □ :ked by: ⑤#

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Filtered Scanned by:





CALSCIENCE

WORK ORDER NUMBER: 13-04-1559

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 X. T. Clarke

Approved for release on 04/30/2013 by: Ranjit Clarke

Project Manager



Email your PM >

ResultLink >

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements 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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Work Order Narrative



Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 04/22/2013. They were assigned to Work Order 13-04-1559.

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 an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

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:

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.

Subcontract Information:

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



NELAP ID: 03220CA DoD-ELAP ID: L10-41

CSDLAC ID: 10109

SCAQMD ID: 93LA0830 FAX: (714) 894-7501





Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

Preparation:

Method: Units:

04/22/13 13-04-1559

N/A EPA 8260B (M)

ppb (v/v)

Project: DFSP - Norwalk

Page 1 of 2

Client Sample Number			L	ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/T Analy		QC Batch ID
Effluent			13-04	-1559-1-A	04/22/13 00:00	Air	GC/MS AA	N/A	N/A 04/24/ 06:04		130423L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	5.0	1		Tert-Butyl Alco	ohol (TBA)		ND	10	1	
Toluene	ND	5.0	1		Diisopropyl Eth	ner (DIPE)		ND	10	1	
Ethylbenzene	ND	5.0	1		Ethyl-t-Butyl Et	ther (ETBE	()	ND	10	1	
p/m-Xylene	ND	10	1		Tert-Amyl-Metl	hyl Ether (T	AME)	ND	10	1	
o-Xylene	ND	5.0	1		Ethanol			ND	50	1	
Methyl-t-Butyl Ether (MTBE)	ND	10	1								
Surrogates:	<u>REC (%)</u>	Control Limits	<u>Q</u> ı	<u>ual</u>	Surrogates:			REC (%)	Control Limits	<u>C</u>	<u>Qual</u>
1,4-Bromofluorobenzene	101	47-156			1,2-Dichloroeth	nane-d4		98	47-156		
Toluene-d8	99	47-156									
After GAC-2			13-04	-1559-2-A	04/22/13 00:00	Air	Air GC/MS AA		04/24/13 06:54		130423L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	5.0	1		Tert-Butyl Alco	hol (TBA)		ND	10	1	
Toluene	ND	5.0	1		Diisopropyl Eth	, ,		ND	10	1	
Ethylbenzene	ND	5.0	1		Ethyl-t-Butyl Et	ther (ETBE	()	ND	10	1	
p/m-Xylene	ND	10	1		Tert-Amyl-Metl	hyl Ether (T	AME)	ND	10	1	
o-Xylene	ND	5.0	1		Ethanol	,	•	ND	50	1	
Methyl-t-Butyl Ether (MTBE)	ND	10	1								
Surrogates:	REC (%)	Control Limits	<u>Q</u> ı	<u>ual</u>	Surrogates:			REC (%)	Control Limits	<u>C</u>	<u>Qual</u>
1,4-Bromofluorobenzene	101	47-156			1,2-Dichloroeth	nane-d4		97	47-156		
Toluene-d8	100	47-156									
After GAC-1			13-04	-1559-3-A	04/22/13 00:00	Air	GC/MS AA	N/A	04/24/13 07:48		130423L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	5.0	1		Tert-Butyl Alco	ohol (TBA)		ND	10	1	
Toluene	ND	5.0	1		Diisopropyl Eth	` ,		ND	10	1	
Ethylbenzene	ND	5.0	1		Ethyl-t-Butyl Et		()	ND	10	1	
p/m-Xylene	ND	10	1		Tert-Amyl-Metl	•	•	ND	10	1	
o-Xylene	ND	5.0	1		Ethanol	`	-	ND	50	1	
Methyl-t-Butyl Ether (MTBE)	ND	10	1								
Surrogates:	REC (%)	Control Limits	<u>Q</u> ı	<u>ual</u>	Surrogates:			REC (%)	Control Limits	<u>C</u>	<u>Qual</u>
1,4-Bromofluorobenzene Toluene-d8	101 98	47-156 47-156			1,2-Dichloroeth	nane-d4		97	47-156		



DF - Dilution Factor

Qual - Qualifiers





Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received:

Work Order No:

Preparation: Method:

Units:

EPA 8260B (M)

13-04-1559 N/A

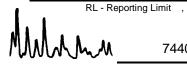
04/22/13

ppb (v/v)

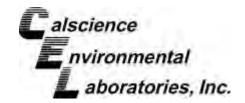
Project: DFSP - Norwalk

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Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/ Analy		QC Batch ID
Influent			13-04-	1559-4-A	04/22/13 00:00			N/A	04/24/13 09:25		130423L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	8.0	1.6		Tert-Butyl Alco	ohol (TBA)		ND	16	1.6	
Toluene	ND	8.0	1.6		Diisopropyl Eth	ner (DIPE)		ND	16	1.6	
Ethylbenzene	ND	8.0	1.6		Ethyl-t-Butyl E	ther (ETBE	·)	ND	16	1.6	
p/m-Xylene	ND	16	1.6		Tert-Amyl-Met	hyl Ether (1	AME)	ND	16	1.6	
o-Xylene	ND	8.0	1.6		Ethanol			ND	80	1.6	
Methyl-t-Butyl Ether (MTBE)	ND	16	1.6								
Surrogates:	REC (%)	Control Limits	<u>Qu</u>	<u>al</u>	Surrogates:			REC (%)	Control Limits	<u>C</u>	<u>Qual</u>
1,4-Bromofluorobenzene	110	47-156			1,2-Dichloroeth	nane-d4		97	47-156		
Toluene-d8	99	47-156			•						
Method Blank			099-13	3-041-1,280	N/A	Air	GC/MS AA	N/A	04/23 16:		130423L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Benzene	ND	5.0	1		Tert-Butyl Alco	hol (TBA)		ND	10	1	
Toluene	ND	5.0	1		Diisopropyl Eth	, ,		ND	10	1	
Ethylbenzene	ND	5.0	1		Ethyl-t-Butyl E	ther (ETBE	()	ND	10	1	
p/m-Xylene	ND	10	1		Tert-Amyl-Met	hyl Ether (1	AME)	ND	10	1	
o-Xylene	ND	5.0	1		Ethanol	• ,	•	ND	50	1	
Methyl-t-Butyl Ether (MTBE)	ND	10	1								
Surrogates:	REC (%)	Control Limits	Qua	<u>al</u>	Surrogates:			REC (%)	Control Limits	<u>C</u>	<u>Qual</u>
1,4-Bromofluorobenzene Toluene-d8	102 99	47-156 47-156			1,2-Dichloroetl	nane-d4		103	47-156		









Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002

Project: DFSP - Norwalk

Date Received:

Work Order No:

Preparation: Method: Units:

04/22/13

13-04-1559 N/A

EPA TO-15M ppb (v/v)

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Floject. Di SF - Noiwa	ain									га	ge 1 01 3
Client Sample Number			L	ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared		/Time llyzed	QC Batch ID
Effluent			13-04	-1559-1-A	04/22/13 00:00	Air	GC/MS AA	N/A		24/13 5:04	130423L01
Comment(s): -The method has	been modified to	o use Ted	lar Bags	instead of S	Summa canisters	s and is no	t NY NELAC a	accredited.			
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	RL	<u>DF</u>	<u>Qual</u>
Acetone	ND	50	1		c-1,3-Dichloro	propene		ND	0.50	1	
Benzyl Chloride	ND	1.5	1		c-1,2-Dichloro	ethene		ND	0.50	1	
Bromodichloromethane	ND	0.50	1		t-1,2-Dichloroe	ethene		ND	0.50	1	
Bromoform	ND	0.50	1		t-1,3-Dichlorop	ropene		ND	1.0	1	
Bromomethane	ND	0.50	1	1 4-Ethyltoluene					0.50	1	
2-Butanone	2.4	1.5	1	1 Hexachloro-1,3-Butadiene					1.5	1	
Carbon Disulfide	ND	10	1		2-Hexanone			ND	1.5	1	
Carbon Tetrachloride	ND	0.50	1		Methylene Chl	oride		ND	5.0	1	
Chlorobenzene	ND	0.50	1		4-Methyl-2-Pe	ntanone		ND	1.5	1	
Chloroethane	ND	0.50	1		Styrene			ND	1.5	1	
Chloroform	0.98	0.50	1		Tetrachloroeth	ene		ND	0.50	1	
Chloromethane	0.80	0.50	1		Trichloroethen	е		ND	0.50	1	
Dibromochloromethane	ND	0.50	1		Trichlorofluoro	methane		ND	1.0	1	
Dichlorodifluoromethane	0.89	0.50	1		1,1,2-Trichlord	-1,2,2-Trif	luoroethane	ND	1.5	1	
1,1-Dichloroethane	ND	0.50	1		1,1,1-Trichlord	ethane		ND	0.50	1	
1,1-Dichloroethene	ND	0.50	1		1,1,2-Trichlord	ethane		ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		1,3,5-Trimethy	lbenzene		ND	0.50	1	
Dichlorotetrafluoroethane	ND	2.0	1		1,1,2,2-Tetrac	hloroethan	e	ND	1.0	1	
1,2-Dichlorobenzene	ND	0.50	1		1,2,4-Trimethy	lbenzene		ND	1.5	1	

Control Surrogates: **REC (%)** <u>Limits</u> 1,4-Bromofluorobenzene 101 57-129 Toluene-d8 99 78-156

ND

ND

ND

ND

0.50

0.50

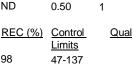
0.50

0.50

1

1

Qual



1

2.0

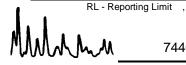
2.0

ND

ND

ND

98



1,2-Dichloroethane

1,2-Dichloropropane

1,3-Dichlorobenzene

1,4-Dichlorobenzene

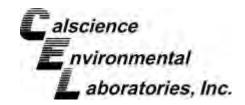
1,2,4-Trichlorobenzene

1,2-Dichloroethane-d4

Vinyl Acetate

Vinyl Chloride

Surrogates:





Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received:

Work Order No:

Preparation: Method:

04/22/13 13-04-1559

N/A

EPA TO-15M ppb (v/v)

Page 2 of 5 Project: DFSP - Norwalk

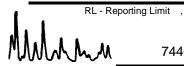
Units:

Client Sample Number			L	ab Sample Number	Date/Time Collected Matrix		Instrument	Date Prepared	Date/ Anal		QC Batch ID
After GAC-2				-1559-2-A	04/22/13 00:00	Air	GC/MS AA	N/A	04/24/13 06:54		130423L01
Comment(s): -The method has	s been modified to	o use Ted	lar Bags	instead of S	Summa canisters	s and is no	t NY NELAC a	ccredited.			
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	DF	<u>Qual</u>
Acetone	ND	50	1		c-1,3-Dichloro	propene		ND	0.50	1	
Benzyl Chloride	ND	1.5	1		c-1,2-Dichloro	ethene		ND	0.50	1	
Bromodichloromethane	ND	0.50	1		t-1,2-Dichloroe	ethene		ND	0.50	1	
Bromoform	ND	0.50	1		t-1,3-Dichlorop	oropene		ND	1.0	1	
Bromomethane	ND	0.50	1		4-Ethyltoluene			ND	0.50	1	
2-Butanone	1.5	1.5	1		Hexachloro-1,3-Butadiene			ND	1.5	1	
Carbon Disulfide	ND	10	1		2-Hexanone			ND	1.5	1	

Carbon Disulfide 2-Hexanone 10 1.5 ND Methylene Chloride ND Carbon Tetrachloride 0.50 1 5.0 4-Methyl-2-Pentanone Chlorobenzene ND 0.50 ND 1.5 1 Chloroethane ND 0.50 Styrene ND 1.5 Chloroform ND Tetrachloroethene ND 0.50 0.50 Chloromethane 0.69 0.50 Trichloroethene ND 0.50 Dibromochloromethane ND Trichlorofluoromethane ND 0.50 1.0 Dichlorodifluoromethane 0.74 0.50 1,1,2-Trichloro-1,2,2-Trifluoroethane ND 1.5 1 1,1-Dichloroethane ND 1,1,1-Trichloroethane ND 0.50 1 0.50 1 1,1-Dichloroethene ND 0.50 1 1,1,2-Trichloroethane ND 0.50 1 ND ND 1,2-Dibromoethane 0.50 1,3,5-Trimethylbenzene 0.50 1 ND 1,1,2,2-Tetrachloroethane ND Dichlorotetrafluoroethane 2.0 1.0 1 ND 1,2-Dichlorobenzene ND 0.50 1,2,4-Trimethylbenzene 1.5 1 1,2-Dichloroethane ND 0.50 1,2,4-Trichlorobenzene ND 2.0 1 1 1,2-Dichloropropane ND 0.50 Vinyl Acetate ND 2.0

1,4-Dichlorobenzene ND 0.50 Control REC (%) Control Surrogates: **REC (%)** Qual Surrogates: <u>Limits</u> 101 97 1,4-Bromofluorobenzene 57-129 1,2-Dichloroethane-d4

1



1,3-Dichlorobenzene

Toluene-d8

ND

100

0.50

78-156

Vinyl Chloride

ND

0.50

Limits

47-137

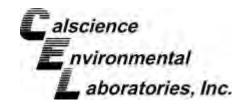
Qual

04/22/13

N/A

13-04-1559





Analytical Report



Parsons Government Services, Inc.

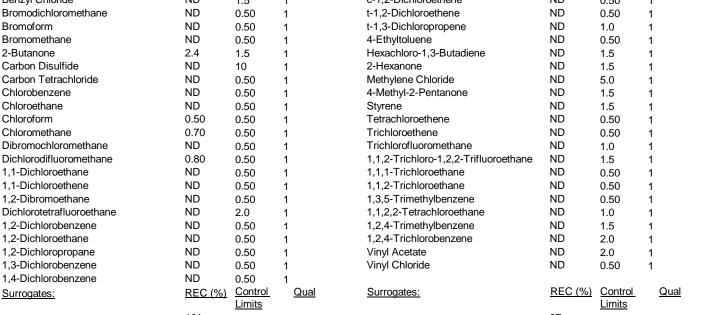
100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

Work Order No:
Preparation:

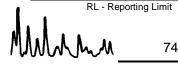
Method: EPA TO-15M units: ppb (v/v)

Project: DFSP - Norwalk Page 3 of 5

Client Sample Number				ab Sample Number	Date/Time Collected Matrix		Instrument	Date Prepared		Time yzed	QC Batch ID
After GAC-1			13-04	-1559-3-A	04/22/13 00:00	Air	GC/MS AA	N/A	04/2 07:	4/13 :48	130423L01
Comment(s): -The method has been	n modified to		_	instead of S	umma canisters	and is no	t NY NELAC a				
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Acetone	ND	50	1		c-1,3-Dichlorop	propene		ND	0.50	1	
Benzyl Chloride	ND	1.5	1		c-1,2-Dichloroe	ethene		ND	0.50	1	
Bromodichloromethane	ND	0.50	1		t-1,2-Dichloroe	ND	0.50	1			
Bromoform	ND	0.50	1		t-1,3-Dichloropropene				1.0	1	

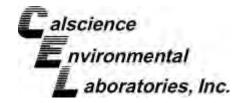


Limits
1,4-Bromofluorobenzene
101
57-129
1,2-Dichloroethane-d4
97
47-137
Toluene-d8
98
78-156



DF - Dilution Factor , Qual - Qualifiers







Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No:

Method:

Units:

Work Order No: Preparation:

N/A EPA TO-15M ppb (v/v)

Project: DFSP - Norwalk

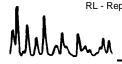
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04/22/13

13-04-1559

Influent 13-04-1559-4-A 04/22/13 Air GC/MS AA N/A 04/24/13 130423L 00:00 09:25	Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	Influent	13-04-1559-4-A		Air	GC/MS AA	N/A		130423L01

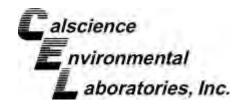
Comment(s): -The method has been	Summa canisters and is not NY NELAC	accredited.							
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual
Acetone	ND	80	1.6		c-1,3-Dichloropropene	ND	0.80	1.6	
Benzyl Chloride	ND	2.4	1.6		c-1,2-Dichloroethene	ND	0.80	1.6	
Bromodichloromethane	ND	0.80	1.6		t-1,2-Dichloroethene	ND	0.80	1.6	
Bromoform	ND	0.80	1.6		t-1,3-Dichloropropene	ND	1.6	1.6	
Bromomethane	ND	0.80	1.6		4-Ethyltoluene	ND	0.80	1.6	
2-Butanone	3.5	2.4	1.6		Hexachloro-1,3-Butadiene	ND	2.4	1.6	
Carbon Disulfide	ND	16	1.6		2-Hexanone	ND	2.4	1.6	
Carbon Tetrachloride	ND	0.80	1.6		Methylene Chloride	ND	8.0	1.6	
Chlorobenzene	ND	0.80	1.6		4-Methyl-2-Pentanone	ND	2.4	1.6	
Chloroethane	ND	0.80	1.6		Styrene	ND	2.4	1.6	
Chloroform	1.4	0.80	1.6		Tetrachloroethene	ND	0.80	1.6	
Chloromethane	1.4	0.80	1.6		Trichloroethene	ND	0.80	1.6	
Dibromochloromethane	ND	0.80	1.6		Trichlorofluoromethane	ND	1.6	1.6	
Dichlorodifluoromethane	1.6	0.80	1.6		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.4	1.6	
1,1-Dichloroethane	ND	0.80	1.6		1,1,1-Trichloroethane	ND	0.80	1.6	
1,1-Dichloroethene	ND	0.80	1.6		1,1,2-Trichloroethane	ND	0.80	1.6	
1,2-Dibromoethane	ND	0.80	1.6		1,3,5-Trimethylbenzene	ND	0.80	1.6	
Dichlorotetrafluoroethane	ND	3.2	1.6		1,1,2,2-Tetrachloroethane	ND	1.6	1.6	
1,2-Dichlorobenzene	ND	0.80	1.6		1,2,4-Trimethylbenzene	ND	2.4	1.6	
1,2-Dichloroethane	ND	0.80	1.6		1,2,4-Trichlorobenzene	ND	3.2	1.6	
1,2-Dichloropropane	ND	0.80	1.6		Vinyl Acetate	ND	3.2	1.6	
1,3-Dichlorobenzene	ND	0.80	1.6		Vinyl Chloride	ND	0.80	1.6	
1,4-Dichlorobenzene	ND	0.80	1.6						
Surrogates:	REC (%)	Control Limits	Qua	<u>al</u>	Surrogates:	REC (%)	Control Limits	<u>Qua</u>	<u>al</u>
1,4-Bromofluorobenzene	110	57-129			1,2-Dichloroethane-d4	97	47-137		
Toluene-d8	99	78-156							



04/22/13

N/A





Analytical Report



Parsons Government Services, Inc.

100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation:

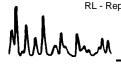
13-04-1559

Method: EPA TO-15M ppb (v/v)

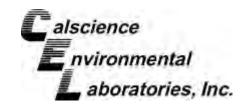
Page 5 of 5 Project: DFSP - Norwalk

Units:

Client Sample Number				Lab Sample Number	Collected Matrix Instrument			Date Prepared	Date/ Analy		QC Batch ID
Method Blank			09	9-12-981-2,934	N/A	Air	GC/MS AA	N/A	04/23/13 16:52		130423L01
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Parameter</u>			Result	<u>RL</u>	<u>DF</u>	Qual
Acetone	ND	50	1		c-1,3-Dichloro	propene		ND	0.50	1	
Benzyl Chloride	ND	1.5	1		c-1,2-Dichloro			ND	0.50	1	
Bromodichloromethane	ND	0.50	1		t-1,2-Dichloro	ethene		ND	0.50	1	
Bromoform	ND	0.50	1		t-1,3-Dichloro	propene		ND	1.0	1	
Bromomethane	ND	0.50	1		4-Ethyltoluene)		ND	0.50	1	
2-Butanone	ND	1.5	1		Hexachloro-1,	3-Butadiene	;	ND	1.5	1	
Carbon Disulfide	ND	10	1		2-Hexanone			ND	1.5	1	
Carbon Tetrachloride	ND	0.50	1		Methylene Ch	loride		ND	5.0	1	
Chlorobenzene	ND	0.50	1		4-Methyl-2-Pe	ntanone		ND	1.5	1	
Chloroethane	ND	0.50	1		Styrene	ND	1.5	1			
Chloroform	ND	0.50	1		Tetrachloroeth	nene		ND	0.50	1	
Chloromethane	ND	0.50	1		Trichloroether	ne		ND	0.50	1	
Dibromochloromethane	ND	0.50	1		Trichlorofluoro	omethane		ND	1.0	1	
Dichlorodifluoromethane	ND	0.50	1		1,1,2-Trichlor	o-1,2,2-Triflu	uoroethane	ND	1.5	1	
1,1-Dichloroethane	ND	0.50	1		1,1,1-Trichlor	oethane		ND	0.50	1	
1,1-Dichloroethene	ND	0.50	1		1,1,2-Trichlor	oethane		ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		1,3,5-Trimethy	ylbenzene		ND	0.50	1	
Dichlorotetrafluoroethane	ND	2.0	1		1,1,2,2-Tetrac	hloroethane	•	ND	1.0	1	
1,2-Dichlorobenzene	ND	0.50	1		1,2,4-Trimethy	ylbenzene		ND	1.5	1	
1,2-Dichloroethane	ND	0.50	1		1,2,4-Trichlor	obenzene		ND	2.0	1	
1,2-Dichloropropane	ND	0.50	1		Vinyl Acetate			ND	2.0	1	
1,3-Dichlorobenzene	ND	0.50	1		Vinyl Chloride			ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1								
Surrogates:	REC (%)	Control Limits		<u>Qual</u>	Surrogates:			REC (%)	Control Limits	<u>C</u>	<u>Qual</u>
1,4-Bromofluorobenzene	102	57-129			1,2-Dichloroet	hane-d4		103	47-137		
Toluene-d8	99	78-156									









Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/22/13 13-04-1559 N/A EPA TO-3M

Project: DFSP - Norwalk

Page 1 of 1

1 Toject. Di Si - Norwaik							1 0	ige i oi i
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent		13-04-1559-1-A	04/22/13 00:00	Air	GC 13	N/A	04/23/13 17:22	130423L02
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
VOCs >/= C3 As Hexane	ND	3.0	1		ppm (v/v	v)		
After GAC-2		13-04-1559-2-A	04/22/13 00:00	Air	GC 13	N/A	04/23/13 17:35	130423L02
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
VOCs >/= C3 As Hexane	ND	3.0	1		ppm (v/v	v)		
After GAC-1		13-04-1559-3-A	04/22/13 00:00	Air	GC 13	N/A	04/23/13 17:45	130423L02
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	Units			
VOCs >/= C3 As Hexane	ND	3.0	1		ppm (v/v	v)		
Influent		13-04-1559-4-A	04/22/13 00:00	Air	GC 13	N/A	04/23/13 17:56	130423L02
Parameter	Result	RL	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
VOCs >/= C3 As Hexane	5.4	3.0	1		ppm (v/v	v)		
Method Blank		099-12-713-1,711	N/A	Air	GC 13	N/A	04/23/13 09:48	130423L02
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
VOCs >/= C3 As Hexane	ND	3.0	1		ppm (v/v	v)		







Quality Control - Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: 04/22/13 13-04-1559 N/A EPA TO-3M

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
Influent	Air	GC 13	N/A	04/23/13	130423D02
					_
<u>Parameter</u>	Sample Conc	DUP Conc	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
VOCs >/= C3 As Hexane	5.352	5.418	1	0-20	



alscience nvironmental Qu aboratories, Inc.

nvironmental Quality Control - Laboratory Control Sample

Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: N/A
Work Order No: 13-04-1559
Preparation: N/A
Method: EPA TO-3M

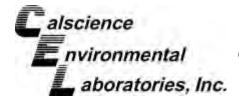
Project: DFSP - Norwalk

Quality Control Sample ID	ality Control Sample ID Matrix		Date Analyzed	Lab File I) LC	S Batch Number
099-12-713-1,711	Air	GC 13	04/23/13	13042305		130423L02
<u>Parameter</u>		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
VOCs >/= C3 As Hexane		400.0	410.4	103	80-120	



FAX: (714) 894-7501





Quality Control - LCS/LCS Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1559 N/A EPA TO-15M

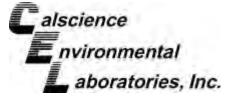
Project: DFSP - Norwalk

Quality Control Sample ID		Matrix Instrument		Date Prepared	Date Analyzed		LCS			
099-12-981-2,934		Air	GC/MS A	4	N/A	04/2	3/13	1	30423L01	
Parameter	<u>SPIKE</u> <u>ADDED</u>	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	25.00	27.01	108	27.23	109	50-150	33-167	1	0-35	
Benzene	25.00	25.19	101	25.68	103	60-156	44-172	2	0-40	
Benzyl Chloride	25.00	29.33	117	28.95	116	50-150	33-167	1	0-35	
Bromodichloromethane	25.00	27.93	112	28.17	113	50-150	33-167	1	0-35	
Bromoform	25.00	30.88	124	30.56	122	50-150	33-167	1	0-38	
Bromomethane	25.00	30.02	120	29.38	118	50-150	33-167	2	0-35	
2-Butanone	25.00	26.55	106	26.78	107	50-150	33-167	1	0-35	
Carbon Disulfide	25.00	25.22	101	25.25	101	50-150	33-167	0	0-35	
Carbon Tetrachloride	25.00	30.20	121	30.13	121	64-154	49-169	0	0-32	
Chlorobenzene	25.00	26.45	106	26.49	106	50-150	33-167	0	0-35	
Chloroethane	25.00	29.30	117	29.13	117	50-150	33-167	1	0-35	
Chloroform	25.00	26.20	105	25.99	104	50-150	33-167	1	0-35	
Chloromethane	25.00	28.46	114	28.63	115	50-150	33-167	1	0-35	
Dibromochloromethane	25.00	29.46	118	29.23	117	50-150	33-167	1	0-35	
Dichlorodifluoromethane	25.00	28.29	113	30.25	121	50-150	33-167	7	0-35	
Diisopropyl Ether (DIPE)	25.00	23.39	94	23.06	92	60-140	47-153	1	0-30	
1,1-Dichloroethane	25.00	26.63	107	26.73	107	50-150	33-167	0	0-35	
1,1-Dichloroethene	25.00	26.67	107	27.09	108	50-150	33-167	2	0-35	
1,2-Dibromoethane	25.00	27.65	111	27.71	111	54-144	39-159	0	0-36	
Dichlorotetrafluoroethane	25.00	29.41	118	28.87	115	50-150	33-167	2	0-35	
1,2-Dichlorobenzene	25.00	27.56	110	27.17	109	34-160	13-181	1	0-47	
1,2-Dichloroethane	25.00	28.52	114	28.72	115	69-153	55-167	1	0-35	
1,2-Dichloropropane	25.00	26.49	106	27.00	108	67-157	52-172	2	0-35	
1,3-Dichlorobenzene	25.00	27.94	112	27.87	111	50-150	33-167	0	0-35	
1,4-Dichlorobenzene	25.00	27.71	111	27.56	110	36-156	16-176	1	0-47	
c-1,3-Dichloropropene	25.00	27.27	109	27.84	111	61-157	45-173	2	0-35	
c-1,2-Dichloroethene	25.00	25.63	103	26.05	104	50-150	33-167	2	0-35	
t-1,2-Dichloroethene	25.00	25.89	104	26.10	104	50-150	33-167	1	0-35	
t-1,3-Dichloropropene	25.00	28.98	116	29.30	117	50-150	33-167	1	0-35	
Ethanol	100.0	95.14	95	93.91	94	60-140	47-153	1	0-30	
Ethyl-t-Butyl Ether (ETBE)	25.00	26.46	106	26.66	107	60-140	47-153	1	0-30	
Ethylbenzene	25.00	26.57	106	26.66	107	52-154	35-171	0	0-38	



RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Parsons Government Services, Inc. 100 West Walnut Street Pasadena, CA 91124-0002 Date Received: Work Order No: Preparation: Method: N/A 13-04-1559 N/A EPA TO-15M

Project: DFSP - Norwalk

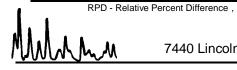
Quality Control Sample ID	Mat	rix	Instrumen	t	Date Prepared		ate lyzed	LCS	/LCSD Batch Number	1
099-12-981-2,934	Air		GC/MS AA	١	N/A	04/23/13		130423L01		
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
4-Ethyltoluene	25.00	27.03	108	26.83	107	50-150	33-167	1	0-35	
Hexachloro-1,3-Butadiene	25.00	25.47	102	24.97	100	50-150	33-167	2	0-35	
2-Hexanone	25.00	28.68	115	28.61	114	50-150	33-167	0	0-35	
Methyl-t-Butyl Ether (MTBE)	25.00	24.20	97	24.29	97	50-150	33-167	0	0-35	
Methylene Chloride	25.00	24.44	98	24.61	98	50-150	33-167	1	0-35	
4-Methyl-2-Pentanone	25.00	28.39	114	28.71	115	50-150	33-167	1	0-35	
o-Xylene	25.00	27.07	108	27.03	108	52-148	36-164	0	0-38	
p/m-Xylene	50.00	53.95	108	53.50	107	42-156	23-175	1	0-41	
Styrene	25.00	26.86	107	26.93	108	50-150	33-167	0	0-35	
Tert-Amyl-Methyl Ether (TAME)	25.00	27.98	112	28.40	114	60-140	47-153	2	0-30	
Tert-Butyl Alcohol (TBA)	50.00	68.71	137	68.95	138	60-140	47-153	0	0-30	
Tetrachloroethene	25.00	27.85	111	27.82	111	56-152	40-168	0	0-40	
Toluene	25.00	25.62	102	25.73	103	56-146	41-161	0	0-43	
Trichloroethene	25.00	27.14	109	27.38	110	63-159	47-175	1	0-34	
Trichlorofluoromethane	25.00	28.49	114	28.27	113	50-150	33-167	1	0-35	
1,1,2-Trichloro-1,2,2-Trifluoroethane	25.00	27.75	111	27.67	111	50-150	33-167	0	0-35	
1,1,1-Trichloroethane	25.00	28.31	113	28.18	113	50-150	33-167	0	0-35	
1,1,2-Trichloroethane	25.00	26.29	105	26.81	107	65-149	51-163	2	0-37	
1,3,5-Trimethylbenzene	25.00	27.07	108	27.10	108	50-150	33-167	0	0-35	
1,1,2,2-Tetrachloroethane	25.00	26.33	105	26.32	105	50-150	33-167	0	0-35	
1,2,4-Trimethylbenzene	25.00	27.89	112	27.92	112	50-150	33-167	0	0-35	
1,2,4-Trichlorobenzene	25.00	25.43	102	25.45	102	50-150	33-167	0	0-35	
Vinyl Acetate	25.00	27.19	109	27.05	108	50-150	33-167	1	0-35	
Vinyl Chloride	25.00	29.32	117	28.77	115	45-177	23-199	2	0-36	

Total number of LCS compounds: 56

Total number of ME compounds: 0

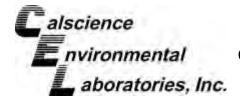
Total number of ME compounds allowed: 3

LCS ME CL validation result: Pass



7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 .





Quality Control - LCS/LCS Duplicate



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

Date Received: Work Order No: Preparation: Method:

N/A 13-04-1559 N/A

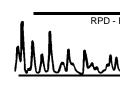
EPA 8260B (M)

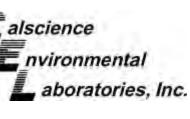
Project: DFSP - Norwalk

Quality Control Sample ID		Matrix	Instrumen	ıt	Date Prepared		ate alyzed	LCS	1	
099-13-041-1,280		Air	GC/MS A	4	N/A	04/2	3/13	1		
<u>Parameter</u>	<u>SPIKE</u> ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	<u>RPD</u>	RPD CL	Qualifiers
Benzene	25.00	25.19	101	25.68	103	60-156	44-172	2	0-40	
Toluene	25.00	25.62	102	25.73	103	56-146	41-161	0	0-43	
Ethylbenzene	25.00	26.57	106	26.66	107	52-154	35-171	0	0-38	
p/m-Xylene	50.00	53.95	108	53.50	107	42-156	23-175	1	0-41	
o-Xylene	25.00	27.07	108	27.03	108	52-148	36-164	0	0-38	
Methyl-t-Butyl Ether (MTBE)	25.00	24.20	97	24.29	97	45-147	28-164	0	0-25	
Tert-Butyl Alcohol (TBA)	50.00	68.71	137	68.95	138	60-140	47-153	0	0-35	
Diisopropyl Ether (DIPE)	25.00	23.39	94	23.06	92	60-140	47-153	1	0-35	
Ethyl-t-Butyl Ether (ETBE)	25.00	26.46	106	26.66	107	60-140	47-153	1	0-35	
Tert-Amyl-Methyl Ether (TAME)	25.00	27.98	112	28.40	114	60-140	47-153	2	0-35	
Ethanol	100.0	95.14	95	93.91	94	47-137	32-152	1	0-35	
1,1-Difluoroethane	25.00	28.52	114	28.45	114	78-156	65-169	0	0-35	
Isopropanol	25.00	26.30	105	26.12	104	78-156	65-169	1	0-35	

Total number of LCS compounds: 13 Total number of ME compounds: 0 Total number of ME compounds allowed:

LCS ME CL validation result: Pass





Sample Analysis Summary Report

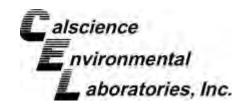


WORK ORDER #: 13-04-1559

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location		
1-A	Effluent	EPA TO-3M	N/A	04/23/2013 17:22	846	GC 13	2		
1-A	Effluent	EPA TO-15M	N/A	04/24/2013 6:04	702	GC/MS AA	2		
1-A	Effluent	EPA 8260B (M)	N/A	04/24/2013 6:04	702	GC/MS AA	2		
2-A	After GAC-2	EPA TO-3M	N/A	04/23/2013 17:35	846	GC 13	2		
2-A	After GAC-2	EPA TO-15M	N/A	04/24/2013 6:54	702	GC/MS AA	2		
2-A	After GAC-2	EPA 8260B (M)	N/A	04/24/2013 6:54	702	GC/MS AA	2		
3-A	After GAC-1	EPA TO-3M	N/A	04/23/2013 17:45	846	GC 13	2		
3-A	After GAC-1	EPA TO-15M	N/A	04/24/2013 7:48	702	GC/MS AA	2		
3-A	After GAC-1	EPA 8260B (M)	N/A	04/24/2013 7:48	702	GC/MS AA	2		
4-A	Influent	EPA TO-3M	N/A	04/23/2013 17:56	846	GC 13	2		
4-A	Influent	EPA TO-15M	N/A	04/24/2013 9:25	702	GC/MS AA	2		
4-A	Influent	EPA 8260B (M)	N/A	04/24/2013 9:25	702	GC/MS AA	2		

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

04/30/13



Glossary of Terms and Qualifiers



Work Order Number: 13-04-1559

Qualifier	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 was reported without further 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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
E	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 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).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.



SoCal Laboratory

Calscience Environmental Laboratories, Inc.

NorCal Service Center

CHAIN OF CUSTODY RECORD

	SoCal Laboratory 7440 Lincoln Way			└ 5063 Co	Service Ce mmercial	Circle,		-1		WO	# <u>/ L</u> A	3 <u>U</u> SE	ONLY	<u></u>			1	Date	·	L	4-2	<u> </u>	13			·····	
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С	COELT EDF GLOBAL ID						LOG CODE				TPH (d) or DRO or (C6-C36) or (C6-C44)					(35)							J+MTBE				THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO PERSON NAMED
SPECI	AL INSTRUCTIONS:										336) o					Core Prep (5035)						Cr(VI) [7196 or 7199 or 218.6]	- VOCs (TO-14A) or (TO-15))			
	V.)- 9 2)		30) or			re Pre				270)	747X)	39 or	A) or	<u>~</u>			
							p		g	2	RO or		BTEX / MTBE (8260) or		Oxygenates (8260)	ra Co	6	081)		PNAs (8310) or (8270)	722 Metals (6010/747X)	or 718	0-14	Air - TPH (g) [TO-3]			
							serve	ved	iltere	or G	or DI		MTB	8260)	ates	Core / Terra	(827)	es (8	3082)	3310)	tals (6	7196	L) SO	(g)			
LAB USE	SAMPLE ID		SAMPLI	ING	MATRIX	NO. OF	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	(p) Hc	TPH (_	TEX /	VOCs (8260)	xygen	Cor	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	NAs (22 Me	(V)	- VC	브			
ONLY	NAMES SUMMARIO SUMMARIO SONO SONO SONO SONO SONO SONO SONO SO	DAT	E	TIME		CONT.		Δ.	<u> </u>		F	=	B.	>	$\stackrel{\circ}{\dashv}$	ᇤ	Ś	Δ.		Δ.			Ā	A			_
	Effluent	4-22	-13		Air	_1_																	X	X			_
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Relin	quished by: (Signature)	$\overline{\Lambda}$	0	L		R	eceive	d by: (Signat	ured A	ffiliatio	on)	//_	······································						Date	: -Z2,	12		Time	7/0	, manusumbun	
Reline	quished by: (Signature)	Rend	In MI	7 /		R	eceive	d by: (Signat	ure/A	ffiliation			CG						Date	- <u>2</u> - - -	2/1	73	Time	18 18	20S	
Relin	quished by: (Signature)		V IV			R	eceive	d by: (Signat	ure/A	ffiliati	on)				**************************************				Date	$\frac{t}{t}$	-/-		Time	×		

DISTRIBUTION: White with final report, Green and Yellow to Client.

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.



WORK ORDER #: **13-04-** □ □ □ □

SAMPLE RECEIPT FORM Cooler () of ()

CLIENT: PARSONS	DATE:	04 /	/13
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen	except se	diment/tissue)
Temperature°C - 0.2°C (CF) =°C	Blank	☐ Sample	•
☐ Sample(s) outside temperature criteria (PM/APM contacted by:).			
☐ Sample(s) outside temperature criteria but received on ice/chilled on same da	y of sampl	ing.	
□ Received at ambient tem∕perature, placed on ice for transport by Coເ	urier.		
Ambient Temperature: 🗹 Air 🗆 Filter		Initial:	RY
CUSTODY SEALS INTACT:			
☐ Cooler ☐ ☐ No (Not Intact) ☐ Not Present	☑ N/A	Initial	: RM
□ Sample □ □ No (Not Intact) ☑ Not Present	,	Initial	- V- /
SAMPLE CONDITION:	res .	No	N/A
Chain-Of-Custody (COC) document(s) received with samples			
COC document(s) received complete		ď	
Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
\square No analysis requested. \square Not relinquished. \square No date/time relinquished.			
Sampler's name indicated on COC	ZÍ		
Sample container label(s) consistent with COC	Ø		
Sample container(s) intact and good condition	Ø		
Proper containers and sufficient volume for analyses requested	Ø		
Analyses received within holding time	乜		
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours			
Proper preservation noted on COC or sample container			
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace			
Tedlar bag(s) free of condensation CONTAINER TYPE:			
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve () □EnCores	® □Terra	ıCores [®] □_	
Water: □VOA □VOAh □VOAna₂ □125AGB □125AGBh □125AGBp	□1AGB	□1AGB na ₂ [∃1AGB s
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs	□1PB	□1PB na □	500PB
□250PB □250PB n □125PB □125PB znna □100PJ □100PJ na ₂ □	П _		
Air: Tedlar® Canister Other: Trip Blank Lot#: Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Env 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 ₄ u: Ultra-pure znna: ZnAc ₂ +NaO	elope	Checked by: Reviewed by: Scanned by:	00_