PARSONS

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August 15, 2013

Information Technology Unit
California Regional Water Quality Control Board, Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013

Subject: Second Quarter 2013 Groundwater Discharge Monitoring Report
NPDES No. CAG994004; Compliance File No. CI-7585
DFSP Norwalk Facility, 15306 Norwalk Boulevard, Norwalk, California

In compliance with the subject NPDES Permit, Parsons is submitting this quarterly Discharge Monitoring Report (DMR) on behalf of the Defense Logistics Agency (DLA) Energy for the subject reporting period. The system is installed at the Defense Fuel Support Point Norwalk, at 15306 Norwalk Boulevard, Norwalk, California. This report describes NPDES monitoring activities during the period of April 1 through June 30, 2013.

SUMMARY OF REMEDIATION PROGRESS AND DISCHARGE VOLUMES

Parsons, on behalf of DLA Energy currently operates remediation systems consisting of soil vapor extraction (SVE), groundwater extraction (GWE), and treatment of extracted soil vapors and groundwater to address the entire former tank farm, the former water tank, former truck fueling, and pump house areas.

The GWE systems consists of five vertical extraction wells of which four are 6-inch diameter wells and one is a 4-inch; three bag filter vessels; two MYCELX vessels; two ion exchange vessels; and three granular activated carbon (GAC) vessels. Four wells; GW-2, GW-13, GW-15, and GW-16; were in operation during this reporting period. The treated groundwater is discharged in accordance with the NPDES permit No. CAG994004, CI No. 7585. Overall, the GWE system operated 32.5 percent of the time for the reporting period

and taking into account the planned shutdowns, the GWE system operated 43.2 percent of the time during the second quarter 2013.

The GWE system discharge volumes and field notes are summarized in Table 1. Periodic site visits were conducted to assess and optimize system operation and record operational data. During the second quarter 2013; 673,397 gallons of groundwater were processed and discharged. Total hydrocarbons removed via groundwater treatment during the subject reporting period is 0.0036 gallons (0.0255 pounds). Other than discharge of treated groundwater to the permitted NPDES outfall, no groundwater was managed off-site as an investigation-derived waste.

There were no changes in the operation of the facility that have or would change the character, location, or volume of the groundwater discharge. A summary of the operational periods with dates and groundwater volumes processed is provided in Table 1.

OPERATION, MAINTENANCE, AND MONITORING

Tasks performed for OM&M of the GWE and SVE remediation systems during the reporting period included:

- Weekly maintenance and monitoring of the GWE wells and treatment systems;
- Collecting and analyzing system influent vapor and groundwater samples;
- Changing out MYCELX (MX-7) and bag filters (No. 1, 2, and 3); and
- Groundwater compliance samples from the GWE system were collected on April 15, 22, and 29; June 11 and 26;
- Vapor compliance samples from SVE system were collected on April 22;
- Comprehensive characterization of current groundwater influent including detailed analysis of throughput capacity;
- Installation of a second bed (15 cubic feet capacity) of arsenic ion removal resin;
- GAC in the GWE system was replaced 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 effectiveness of the arsenic ion exchange resin.

In addition, system vapor and effluent water samples were collected and analyzed for compliance with the SCAQMD and NPDES permits. Results for the NPDES effluent

monitoring will be provided in a subsequent section.

Remediation system inspections were performed on a weekly basis. The GWE and SVE systems operated during the second quarter with the following exceptions:

- GWE system was off from:
  - February 14 through April 11 due to high arsenic results reported by laboratory. 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.
  - 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 installed.
  - June 3 through June 10 pending activated carbon change out.
  - June 18 through June 26 to assess surge tank level sensor failure and make repairs.
- SVE system was off from:
  - SVE shut down May 15 due to a ruptured hose between GAC-2 and GAC-3. SVE remained off for the remainder for the duration of the reporting period.

As a result of the GWE system arsenic discharge permit exceedance, a comprehensive evaluation of changes in influent characterization was completed to assess reasons for reduced efficiency of the ion exchange resin. It was determined the appropriate resin is in use; however, increases in pH and competing ions, since initial resin selection in 2009, are diminishing the capacity of the resin for arsenic removal. A second arsenic resin vessel was installed on June 3 to further protect against the possibility of exceeding the permit limits and maintain permit compliance. Field testing is in use at increased intervals to evaluate process efficiency and detect early break-through. Routine sampling of GWE discharge will continue at intervals as required by permit.

SUMMARY OF COMPLIANCE RESULTS

Representative samples of treated groundwater were collected from the system effluent and analyzed for compounds as required by the Monitoring and Reporting Program (MRP).

The sample dates and summary of test results are provided in Table 2. A complete set of laboratory reports are provided in Attachment B. Representative sample results indicate concentrations were below detection limits or did not exceed permit required discharge levels with the exception of arsenic. Arsenic was reportedly detected in the effluent sample collected on April 29 (0.0239 mg/L). Mr. Gensen Kai of RWQCB was notified by telephone on May 1, 2013 of the arsenic discharge exceedance in the effluent samples. A Groundwater Discharge Monitoring Exceedance Report was submitted to Gensen Kai on May 20 detailing actions planned to correct the cause of high arsenic in the representative sample of the GWE treatment system discharge. Field test kits were procured and will be used to assist with early detection of arsenic break-through and understanding process efficiency of the arsenic exchange resin.

Following installation of a second resin vessel and change-out of the activated carbon , the GWE system was restarted on June 10, and as required by permit, representative discharge samples of arsenic were collected on an accelerated sampling schedule (weekly) until four consecutive weekly sample results for arsenic re-established system compliance. Permit compliance was re-established on July 12. Analytical data obtained in July will be included in the next quarterly DMR.

VISUAL OBSERVATIONS

Based on the periodic inspections as documented in Attachment C and referenced in Table 1, the effluent stream was consistently clear and did not contain oil sheen, debris, or other particulate material. No odor has been detected in the effluent sample. Copies of the GWE System Monitoring Logs are provided in Attachment C.

SUMMARY OF NON-COMPLIANCE

As indicated previously, arsenic concentrations in representative samples exceeded the NPDES permit, No. CAG994004, daily maximum discharge limit (0.01 mg/L). The GWE system was shut down May 1 to install a second ion exchange vessel and replace the activated carbon. On June 10, following installation of a second ion exchange vessel and GAC change out, the GWE was restarted. As required by permit, representative discharge samples for arsenic were collected on an accelerated sampling schedule (weekly) until four consecutive weekly sample results for arsenic re-established system compliance.

LABORATORY CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current USEPA procedures or as specified in this Monitoring Program. The laboratory's quality control data is attached. A copy of the laboratory certification is provided in Attachment B.

REPORT CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 15th day of August 2013, at Pasadena, California.

Sincerely,

Joseph R. Walters, P.E.
Senior Engineer

Redwan Hassan, P.G.
Project Manager

PARSONS as a duty authorized representative of the Defense Logistics Agency (DLA) Energy.

Attachments

Attachment A	Table 1	Groundwater Treatment System Operational Data
	Table 2	Analytical Results of Effluent Water Samples
Attachment B	Analytical Laboratory Reports and Electronic Submittal Confirmation	
Attachment C	Groundwater Extraction Treatment System Monitoring Logs	

ATTACHMENT A

Tables

Table 1
Groundwater Treatment System Operation Data
DFSP Norwalk
15306 Norwalk Boulevard, Norwalk, CA

Date	Outlet Totalizer (gals)	Monthly Flow (gals)	Comments
04/11/13	*65,300,650*	*10,569*	Changed arsenic resin, replaced bag and MX-7 filters.System restarted. GWTS operating normally.
04/15/13	*65,384,950*	*84,300*	GWTS operating normally. Sampled effluent for arsenic.
04/16/13	*65,412,660*	*27,710*	GWTS operating normally.
04/19/13	*65,476,520*	*63,860*	GWTS operating normally.
04/22/13	*65,542,644*	*66,124*	GWTS operating normally. Monthly NPDES compliance sample collected.
04/24/13	*65,591,360*	*48,716*	GWTS operating normally.
04/26/13	*65,635,888*	*44,528*	GWTS operating normally.
04/29/13	*65,702,740*	*66,852*	GWTS operating normally. Sampled effluent for arsenic.
04/30/13	*65,729,595*	*26,855*	GWTS operating normally.
Apr-13	***439,514***	***439,514***	
05/01/13	*65,747,842*	*18,247*	System operating normally. Shut down system after high arsenic detected in effluent.
May-13	***18,247***	***18,247***	
06/03/13	*65,749,190*	*1,348*	System restarted after installing second ion exchange bed to system. System operating normally.
06/10/13	*65,752,075*	*2,885*	System restarted after changing activated carbon beds. System operating normally.
06/11/13	*65,773,820*	*21,745*	GWTS operating normally. Quarterly NPDES compliance sample collected.
06/12/13	*65,800,546*	*26,726*	GWTS operating normally.
06/14/13	*65,841,768*	*41,222*	Changed MX-7 and bag filters. System operating normally.
06/17/13	*65,902,185*	*60,417*	GWTS operating normally.
06/18/13	*65,911,543*	*9,358*	System off to repair level sensor malfunction.
06/26/13	*65,922,465*	*10,922*	System restarted. Sampled effluent for arsenic.
06/28/13	*65,963,478*	*41,013*	GWTS operating normally.
Jun-13	***215,636***	***215,636***	
Total	**673,397**	**673,397**	**8633 gpd Average Flow Rate for Quarter**

Table 2
Analytical Results of Effluent Water Samples
DFSP Norwalk
15306 Norwalk Boulevard, Norwalk, California

Sampling Frequency		Monthly												Quarterly								Annually	
Analytical Method		SM4500 H+B	Field	8015B mod.	EPA8260B			SM5520B	EPA 6010B/EPA 6020					SM2130B	SM4500S2-D	SM4500-CL F	SM2540D	SM2540F	SM5540 C	EPA 420.1	EPA 405.1	EPA821R 02012
Date	Sample Loc.	pH	Temp. °C	TPH µg/L	Benzene µg/L	MTBE µg/L	TBA µg/L	Oil & Grease mg/L	Copper mg/L	Arsenic mg/L	Lead mg/L	Zinc mg/L	Selenium mg/L	Turbidity NTU	Sulfide mg/L	Residual Chlorine mg/L	Total Suspended Solids mg/L	Settleable Solid mL/L/hr	MBAS mg/L	Phenols mg/L	BOD5 20°C mg/L	96 hr Fathead Minnow Survival %
GWTS was shut down February 12th following an arsenic exceedance. GWTS was restarted April 11th after comprehensive characterization of current groundwater influent and replacing the ion exchange resin.																						
04/15/13	Effluent	---	---	---	---	---	---	---	---	0.00118	---	---	---	---	---	---	---	---	---	---	---	---
04/22/13	Effluent	7.04	25.1	ND<100	ND<0.50	ND<0.50	ND<10	ND <1.0	0.00139	0.00619	ND <0.00100	0.00543	ND <0.00100	9.1	ND <0.050	ND <0.10	1.4	ND <0.10	ND <0.10	ND <0.10	---	---
04/29/13	Effluent	---	---	---	---	---	---	---	---	0.0239	---	---	---	---	---	---	---	---	---	---	---	---
GWTS was shut down May 1st following an arsenic exceedance. GWTS was restarted June 10th after Installatioin of a 2nd ion exchange vessel and GAC change-out.																						
06/11/13	Effluent	7.09	25.2	ND<100	ND<0.50	ND<0.50	ND<10	ND <1.0	0.0049	ND <0.00100	ND <0.00100	0.00774	ND <0.00100	0.09	---	---	---	---	---	---	---	---
06/21/13	Effluent	---	---	---	---	---	---	---	---	ND <0.00100	---	---	---	---	---	---	---	---	---	---	---	---
06/26/13	Effluent	---	---	---	---	---	---	---	---	ND <0.00100	---	---	---	---	---	---	---	---	---	---	---	---
RL		0.01	---	100	0.50	0.50	10	1.0	0.00100	0.00100	0.00100	0.00500	0.00100	1.0	0.050	0.10	1.0	0.10	0.10	0.10	1.0	---
MDL		---	---	---	0.14	0.31	4.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Daily Maximum		within 6.5-8.5	100°F (38°C)	100	1	5	12	15	0.02	0.01	0.106	0.158	0.008	150	1	0.1	150	0.3	0.5	1	30	minimum 90%
Monthly Average				--	--	--	--	10	0.01	--	0.053	0.079	0.004	50	--	--	50	0.1	--	--	20	--

Notes: Analytical method for metals analysis changed from EPA 6010B to EPA 6020 to obtain lower reporting limit.

* TPH as Diesel result, TPH as Gasoline not detected (reporting limit 100 ug/L)

Bold = Exceedance of standard
-- = not analyzed/not applicable
mg/L = milligram per liter
µg/L = microgram per liter
NTU = nephelometric turbidity units
TPH = total petroleum hydrocarbon
MTBE = methyl-tert-butyl ether
MBAS = methyl blue active substances (sufactants)
MDL = Method detection limit (or Reporting Limit if MDL not provided)
ML= Minimum Reporting Limit (µg/L)

ATTACHMENT B

Analytical Laboratory Reports

Calscience Environmental Laboratories, Inc.

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 K. K. Clarke

Approved for release on 04/22/2013 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.

Calscience Environmental Laboratories, Inc.

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

Calscience Environmental Laboratories, Inc.

Work Order Narrative

ACCREDITED IN ACCORDANCE WITH nelac

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.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Parsons Government Services, Inc.		Date Received:	04/15/13
100 West Walnut Street		Work Order No:	13-04-1064
Pasadena, CA 91124-0002		Preparation:	EPA 3020A Total
		Method:	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	**13-04-1064-1-A**	**04/15/13 12:20**	**Aqueous**	**ICP/MS 03**	**04/18/13**	**04/18/13 21:32**	**130418L04**

Parameter	Result	RL	DF	Qual	Units
Arsenic	0.00118	0.00100	1		mg/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
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	DF	Qual	Units
Arsenic	0.0577	0.00100	1		mg/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-06-003-4,085**	**N/A**	**Aqueous**	**ICP/MS 03**	**04/18/13**	**04/18/13 17:21**	**130418L04**

Parameter	Result	RL	DF	Qual	Units
Arsenic	ND	0.00100	1		mg/L

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 04/15/13
Work Order No: 13-04-1064
Preparation: EPA 3020A Total
Method: EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-04-1067-1	**Aqueous**	**ICP/MS 03**	**04/18/13**	**04/18/13**	**130418S04**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	0.004321	0.1000	0.1052	101	0.1050	101	80-120	0	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
13-04-1067-1	**Aqueous**	**ICP/MS 03**	**04/18/13**	**04/18/13**	**130418S04**

Parameter	SAMPLE_CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	Qualifiers
Arsenic	0.004321	0.1000	0.1007	96	75-125	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

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

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-4,085	**Aqueous**	**ICP/MS 03**	**04/18/13**	**130418-L-04__133.icp**	**130418L04**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Arsenic	0.1000	0.09631	96	80-120	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

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

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

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.
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.
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.

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Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

☒ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

WO # / LAB USE ONLY: 13-04-1064

Date: 4-15-13

Page: 1 of 1

LABORATORY CLIENT: Parsons

ADDRESS: 100 W. Walnut St

CITY: Pasadena STATE: CA ZIP: 91124

TEL: 626-440-6032 E-MAIL: Mary.Lucas@Parsons.com

CLIENT PROJECT NAME / NUMBER: DFSP-Norwalk

P.O. NO.: 747577-05000

PROJECT CONTACT: Mary Lucas / Cindy Zicker

SAMPLER(S): (PRINT) Glenn Androsko

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6-C36) or (C6-C44)	TPH (	BTEX / MTBE (8260) or (	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Arsenic		
1	Effluent	4-15-13	1220	GW	1		X																	X		
2	Surge Tank	"	1225	GW	1		X																	X		

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature/Affiliation) CEL	Date: 4-15-13	Time: 1336
Relinquished by: (Signature) Rudy	Received by: (Signature/Affiliation) CEL	Date: 4/15/13	Time: 14:20
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	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 nd Yellow copies respectively.

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06/01/10 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-04- 1 0 6 4

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: PARSONS DATE: 04/15/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.3 °C - 0.2 °C (CF) = 2.1 °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: BM

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: BM

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: BM

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® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ Labeled/Checked by: HH

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

Preservative: h: HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered Scanned by: LC

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Calscience Environmental Laboratories, Inc.

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 K. K. 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.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: DFSP Norwalk - Quarterly
Work Order Number: 13-04-1558

Calscience Environmental Laboratories, Inc.

Work Order Narrative

ACCREDITED IN ACCORDANCE WITH nelac

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.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 04/22/13
Work Order No: 13-04-1558
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: DFSP Norwalk - Quarterly

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	**13-04-1558-1-N**	**04/22/13 12:15**	**Aqueous**	**GC 45**	**04/24/13**	**04/25/13 04:33**	**130424B05**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	93	68-140	

Method Blank	**099-15-282-94**	**N/A**	**Aqueous**	**GC 45**	**04/24/13**	**04/25/13 03:41**	**130424B05**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	97	68-140	

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 04/22/13
Work Order No: 13-04-1558
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: DFSP Norwalk - Quarterly

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	**13-04-1558-1-E**	**04/22/13 12:15**	**Aqueous**	**GC 25**	**04/24/13**	**04/24/13 21:28**	**130424B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	81	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-704-351**	**N/A**	**Aqueous**	**GC 25**	**04/24/13**	**04/24/13 10:47**	**130424B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	81	38-134	

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Effluent	**13-04-1558-1**	**04/22/13**	**Aqueous**

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date 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
pH	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-Cl 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**

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	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-Cl 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

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 04/22/13
Work Order No: 13-04-1558
Preparation: N/A
Method: SM 5540C

Project DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Effluent	**Aqueous**	**UV 8**	**04/23/13**	**04/23/13**	**D0423SURS1**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
MBAS	ND	1.0	0.96	96	0.98	98	70-130	2	0-25	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-04-1420-1	**Aqueous**	**GC 25**	**04/24/13**	**04/24/13**	**130424S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1884	94	1921	96	68-122	2	0-18	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: N/A
Work Order No: 13-04-1558

Project: DFSP Norwalk - Quarterly

Matrix: Aqueous or Solid

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Chlorine, Total Residual	SM 4500-Cl 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	
pH	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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-085-2,642	**Aqueous**	**UV 8**	**04/25/13**	**04/25/13**	**D0425PHEL1**

Parameter	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	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

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**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
MBAS	1.0	0.97	97	80-120	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-853-35	**Aqueous**	**N/A**	**04/24/13**	**04/24/13**	**D0424SL1**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Sulfide, Total	1.0	0.80	80	0.80	80	80-120	0	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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 5520 B

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-081-2,901	**Aqueous**	**N/A**	**04/26/13**	**04/26/13**	**D0426OGL1**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oil and Grease	40.0	39.2	98	38.0	95	80-120	3	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

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

Project: DFSP Norwalk - Quarterly

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**	**D0424TSSL1**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Solids, Total Suspended	100	92	92	80-120	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-282-94	**Aqueous**	**GC 45**	**04/24/13**	**04/25/13**	**130424B05**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	4000	4082	102	3899	97	75-117	5	0-13	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-704-351	**Aqueous**	**GC 25**	**04/24/13**	**04/24/13**	**130424B01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	2000	1954	98	1925	96	78-120	2	0-10	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

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-Cl 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

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Number: 13-04-1558

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.
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.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 4-22-13

PAGE: 1 OF 1

LABORATORY CLIENT: Parsons, Inc.
100 W. Walnut Street
CITY: Paasadena, CA 91124
TEL: 626-440-6032 FAX: E-MAIL Mary.Lucas@Parsons.com

CLIENT PROJECT NAME / NUMBER: DFSP Norwalk - Quarterly
PROJECT CONTACT: Mary Lucas / Cindy Zicker
SAMPLER(S) (SIGNATURE): Glenn Andrusk

P.O. NO.: 747572-05000
QUOTE NO.:
LAB USE ONLY: 13-04-1558

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☒ 5 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	Turbidity (SM 2130B)	Oil & Grease (SM 5520B)	pH (SM 4500 H+B)	TPH-Diesel/Gas (EPA 8015B(M))	~~VOCs + Oxys(EPA 8260B)~~	~~Metals (EPA 6020: As,Cu,Se,Pb,Zn)~~	Total Suspended Solids (SM 2540D)	Settleable Solids (SM 2540F)	Total Sulfides (SM 4500 S-2)	Phenolics (EPA 420.1)	Residual Chlorine (SM 4500 Cl F)	MBAS (SM 5540C)	Comments
1	Effluent		4-22-13	1215	W	14	X	X	X	X	X	X	X	X	X	X	X	X	

Relinquished by: (Signature) Glenn Andrusk	Received by: (Signature) CEC	Date: 4-22-13	Time: 1718
Relinquished by: (Signature)	Received by: (Signature) Dannyle CEC	Date: 4/22/13	Time: 18:05
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 08/28/08

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-04-1558

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: PARSONS DATE: 04/22/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.2 °C (CF) = 2.0 °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: RM

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: RM

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: JN

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® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh (6) ☐VOA**na₂** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na₂** ☑1AGB**s**

☐500AGB ☑500AGJ ☑500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☑1PB (3) ☐1PB**na** ☐500PB

☐250PB ☑250PB**nn** ☐125PB ☑125PB**znna** ☐100PJ ☐100PJ**na₂** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** JN

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

Preservative: **h:** HCL **n:** HNO_3 **na₂:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** _____

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Calscience Environmental Laboratories, Inc.

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 K. K. Clarke

Approved for release on 04/29/2013 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.

Calscience Environmental Laboratories, Inc.

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

Calscience Environmental Laboratories, Inc.

Work Order Narrative

ACCREDITED IN ACCORDANCE WITH nelac

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.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	**13-04-1572-1-A**	**04/22/13 12:15**	**Aqueous**	**GC/MS OO**	**04/23/13**	**04/23/13 16:27**	**130423L01**

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	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)	8.9	10	4.6	1	J
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	0.44	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							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	98	80-120		Dibromofluoromethane	95	80-126	
1,2-Dichloroethane-d4	99	80-134		Toluene-d8	99	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-10,745**	**N/A**	**Aqueous**	**GC/MS OO**	**04/23/13**	**04/23/13 13:19**	**130423L01**

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	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	0.44	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							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	80-120		Dibromofluoromethane	95	80-126	
1,2-Dichloroethane-d4	98	80-134		Toluene-d8	100	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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 3020A Total
Method: EPA 6020
Units: mg/L

Project: DFSP Norwalk

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Effluent	**13-04-1572-1-D**	**04/22/13 12:15**	**Aqueous**	**ICP/MS 03**	**04/24/13**	**04/24/13 18:34**	**130424L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	0.00619	0.00100	1		Selenium	ND	0.00100	1	
Copper	0.00139	0.00100	1		Zinc	0.00543	0.00500	1	
Lead	ND	0.00100	1						

Method Blank	096-06-003-4,094	N/A	Aqueous	ICP/MS 03	04/24/13	04/24/13 17:26	130424L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.00100	1		Selenium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	
Lead	ND	0.00100	1						

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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 3020A Total
Method: EPA 6020

Project DFSP Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-04-1640-2	**Aqueous**	**ICP/MS 03**	**04/23/13**	**04/24/13**	**130424S02**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
13-04-1640-2	**Aqueous**	**ICP/MS 03**	**04/23/13**	**04/24/13**	**130424S02**

Parameter	SAMPLE_CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	Qualifiers
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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-04-1260-1	**Aqueous**	**GC/MS OO**	**04/23/13**	**04/23/13**	**130423S02**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

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

Project: DFSP Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-4,094	**Aqueous**	**ICP/MS 03**	**04/24/13**	**130424-L-02__092.icp**	**130424L02**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: N/A
Work Order No: 13-04-1572
Preparation: EPA 5030C
Method: EPA 8260B

Project: DFSP Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-10,745	**Aqueous**	**GC/MS OO**	**04/23/13**	**04/23/13**	**130423L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	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 : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

WORK ORDER #: 13-04-1572

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

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

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.
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.
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.

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Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

☒ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

WO # / LAB USE ONLY
13-04-1572

Date 4-22-13
Page 1 of 1

LABORATORY CLIENT: Parsons
ADDRESS: 100 W. Walnut St
CITY: Pasadena STATE: CA ZIP:
TEL: 626-440-6032 E-MAIL: Mary.Lucas@Parsons.com

CLIENT PROJECT NAME / NUMBER: DFSP- Norwalk
P.O. NO.: 747576-05000
PROJECT CONTACT: Mary Lucas / Cindy Zicker
SAMPLER(S): (PRINT) Glenn Androsko

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6-C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or ( )	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Metals 6020 As, Cu, Se, Pb, Zn		
1	Effluent	4-22-13	1215	GW									X	X										X		

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature/Affiliation) CEL	Date: 4-22-13	Time: 17:18
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 4/22/13	Time: 18:05
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	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.

06/01/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-04-1572

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: PARSONS DATE: 04/22/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.3 °C - 0.2 °C (CF) = 2.1 °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: RM

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: RM

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: RM

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. RM 4/22/13			
☐ 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® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ Labeled/Checked by: RM

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

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered Scanned by: RL

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Calscience Environmental Laboratories, Inc.

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 K. K. 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.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: DFSP Norwalk
Work Order Number: 13-04-2011

Calscience Environmental Laboratories, Inc.

Work Order Narrative

ACCREDITED IN ACCORDANCE WITH nelac

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.

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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.

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 04/29/13
Work Order No: 13-04-2011
Preparation: EPA 3020A Total
Method: 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**

Parameter	Result	RL	DF	Qual	Units
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	RL	DF	Qual	Units
Arsenic	ND	0.00100	1		mg/L

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 04/29/13
Work Order No: 13-04-2011
Preparation: EPA 3020A Total
Method: EPA 6020

Project DFSP Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-04-1872-1	**Aqueous**	**ICP/MS 03**	**04/29/13**	**04/29/13**	**130429S04**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	0.001575	0.1000	0.1073	106	0.1069	105	73-127	0	0-11	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
13-04-1872-1	**Aqueous**	**ICP/MS 03**	**04/29/13**	**04/29/13**	**130429S04**

Parameter	SAMPLE_CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	Qualifiers
Arsenic	0.001575	0.1000	0.1005	99	75-125	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

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

Project: DFSP Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-4,099	**Aqueous**	**ICP/MS 03**	**04/29/13**	**130429-L-04__128.icp**	**130429L04A**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Arsenic	0.1000	0.09993	100	80-120	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

WORK ORDER #: 13-04-2011

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

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

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.
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.
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.

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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.

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: **13-04-2011**

Date: M 4-29-13
Page 1 of 1

LABORATORY CLIENT:	Parsons
ADDRESS:	100 W. Walnut St
CITY:	Pasadena
STATE:	CA
ZIP:	91124
TEL:	626-440-6032
E-MAIL:	mary.lucas@parsons.com
CLIENT PROJECT NAME / NUMBER:	DFSP-Norwalk
P.O. NO.:	747577-05000
PROJECT CONTACT:	Mary Lucas / Cindy Zicker
SAMPLER(S): (PRINT)	G. Androsko

TURNAROUND TIME: ☐ SAME DAY ☒ 24 HR ☐ 48 HR ☐ 72 HR ☒ ~~STANDARD~~

☐ COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ___	BTEX / MTBE ☐ 8260 ☐ ___	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	Arsenic 6020	Hold		
1	Effluent	4-29-13	1045	GW	1		X																X			
2	Surge Tank	"	1050	GW	1		X																	X		

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Glenn Androsko	[signature] CEL	4-29-13	1205
[signature]	Dannyle CEL	4/29/13	13:00

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.

11/01/12 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-04-2011

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: PARSONS DATE: 04/29/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.2 °C (CF) = 2.5 °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: [illegible]

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: [illegible]

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: [illegible]

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® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☑250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ Labeled/Checked by: [illegible]

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope Reviewed by: [illegible]

Preservative: **h:** HCL **n:** HNO_3 **na_2:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered Scanned by: [illegible]

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Calscience Environmental Laboratories, Inc.

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 K. K. Clarke

Approved for release on 06/19/2013 by:
Ranjit Clarke
Project Manager

ResultLink

Email your PM

Accredited in accordance with nelac

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.

Calscience Environmental Laboratories, Inc.

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Client Project Name: DFSP Norwalk - Quarterly
Work Order Number: 13-06-0658

Calscience Environmental Laboratories, Inc.

Work Order Narrative

ACCREDITED IN ACCORDANCE WITH nelac

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.

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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.

Calscience Environmental Laboratories, Inc.

Analytical Report

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

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-I**	**06/11/13 08:30**	**Aqueous**	**GC 47**	**06/12/13**	**06/12/13 20:51**	**130612B11**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	83	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-282-105**	**N/A**	**Aqueous**	**GC 47**	**06/12/13**	**06/12/13 19:18**	**130612B11**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	78	68-140	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

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

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-E**	**06/11/13 08:30**	**Aqueous**	**GC 25**	**06/12/13**	**06/12/13 17:46**	**130612B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-704-416**	**N/A**	**Aqueous**	**GC 25**	**06/12/13**	**06/12/13 11:03**	**130612B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	38-134	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/11/13
Work Order No: 13-06-0658
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

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**

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	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	0.44	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							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	80-120		Dibromofluoromethane	107	80-126	
1,2-Dichloroethane-d4	117	80-134		Toluene-d8	106	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/11/13
Work Order No: 13-06-0658
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: DFSP Norwalk - Quarterly

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-11,196**	**N/A**	**Aqueous**	**GC/MS QQ**	**06/12/13**	**06/12/13 22:27**	**130612L03**

Comment(s): -Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	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	0.44	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							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	80-120		Dibromofluoromethane	108	80-126	
1,2-Dichloroethane-d4	113	80-134		Toluene-d8	105	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons Government Services, Inc.		Date Received:	06/11/13
100 West Walnut Street		Work Order No:	13-06-0658
Pasadena, CA 91124-0002		Preparation:	EPA 3020A Total
		Method:	EPA 6020
		Units:	mg/L
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-J**	**06/11/13 08:30**	**Aqueous**	**ICP/MS 03**	**06/12/13**	**06/13/13 14:12**	**130612L03**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.00100	1		Selenium	ND	0.00100	1	
Copper	0.00490	0.00100	1		Zinc	0.00774	0.00500	1	
Lead	ND	0.00100	1						

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-06-003-4,128**	**N/A**	**Aqueous**	**ICP/MS 03**	**06/12/13**	**06/13/13 13:31**	**130612L03**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.00100	1		Selenium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	
Lead	ND	0.00100	1						

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/11/13
Work Order No: 13-06-0658

Project: DFSP Norwalk - Quarterly

Client Sample Number	Lab Sample Number	Date Collected	Matrix
EFFLUENT	**13-06-0658-1**	**06/11/13**	**Aqueous**

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	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
pH	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-Cl 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**		

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	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-Cl 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

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/11/13
Work Order No: 13-06-0658
Preparation: EPA 3020A Total
Method: EPA 6020

Project DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
EFFLUENT	**Aqueous**	**ICP/MS 03**	**06/12/13**	**06/13/13**	**130612S03**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
EFFLUENT	**Aqueous**	**ICP/MS 03**	**06/12/13**	**06/13/13**	**130612S03**

Parameter	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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/11/13
Work Order No: 13-06-0658
Preparation: N/A
Method: SM 5540C

Project DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-06-0717-1	**Aqueous**	**UV 8**	**06/12/13**	**06/12/13**	**D0612SURS1**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
MBAS	ND	1.0	0.95	95	0.94	94	70-130	1	0-25	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-06-0480-1	**Aqueous**	**N/A**	**06/12/13**	**06/12/13**	**D0612OGS1**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oil and Grease	31.7	40.0	70.3	96	71.3	99	80-120	1	0-25	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/11/13
Work Order No: 13-06-0658
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-06-0657-1	**Aqueous**	**GC 25**	**06/12/13**	**06/12/13**	**130612S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1989	99	1936	97	68-122	3	0-18	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/11/13
Work Order No: 13-06-0658
Preparation: EPA 5030C
Method: EPA 8260B

Project DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-06-0605-5	**Aqueous**	**GC/MS QQ**	**06/12/13**	**06/12/13**	**130612S03**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: N/A
Work Order No: 13-06-0658

Project: DFSP Norwalk - Quarterly

Matrix: Aqueous or Solid

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Chlorine, Total Residual	SM 4500-Cl 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	
pH	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	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-4,128	**Aqueous**	**ICP/MS 03**	**06/13/13**	**130312-L-03__053.icp**	**130612L03**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
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	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 13-06-0658
Preparation: N/A
Method: EPA 420.1

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-085-2,659	**Aqueous**	**UV 9**	**06/19/13**	**06/19/13**	**D0619PHEL1**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenolics, Total	0.50	0.44	88	0.41	82	80-120	7	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

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**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
MBAS	1.0	0.95	95	80-120	

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-853-61	**Aqueous**	**N/A**	**06/11/13**	**06/11/13**	**D0611SL2**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Sulfide, Total	1.0	0.85	85	0.85	85	80-120	0	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-081-2,909	**Aqueous**	**N/A**	**06/12/13**	**06/12/13**	**D0612OGL1**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oil and Grease	40.0	38.4	96	39.1	98	80-120	2	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-6,323	**Aqueous**	**N/A**	**06/12/13**	**06/12/13**	**D0612TSSL1**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100	93	93	90	90	80-120	3	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-282-105	**Aqueous**	**GC 47**	**06/12/13**	**06/12/13**	**130612B11**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	4000	3994	100	3929	98	75-117	2	0-13	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP Norwalk - Quarterly

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-15-704-416	**Aqueous**	**GC 25**	**06/12/13**	**13061204**	**130612B02**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
TPH as Gasoline	2000	1944	97	78-120	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

ACCREDITED IN ACCORDANCE WITH nelac

Parsons Government Services, Inc.		Date Received:	N/A
100 West Walnut Street		Work Order No:	13-06-0658
Pasadena, CA 91124-0002		Preparation:	EPA 5030C
		Method:	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**	**12JUN028.rr**	**130612L03**

Parameter	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

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

ACCREDITED IN ACCORDANCE WITH nelac

WORK ORDER #: 13-06-0658

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-G	EFFLUENT	SM 4500-Cl 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-I	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

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

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.
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.
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.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 06-11-2013

PAGE: 1 OF 1

LABORATORY CLIENT: Parsons, Inc.
100 W. Walnut Street
CITY: Paasadena, CA 91124
TEL: | FAX: | E-MAIL

CLIENT PROJECT NAME / NUMBER: DFSP Norwalk - Quarterly
PROJECT CONTACT: MARY LUCAS
SAMPLER(S): (SIGNATURE) Milton L. Douglas
P.O. NO.:
QUOTE NO.:
LAB USE ONLY 13-06-0658

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☒ 5 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MAT-RIX	NO. OF CONT.	Turbidity (SM 2130B)	Oil & Grease (SM 5520B)	pH (SM 4500 H+B)	TPH-Diesel/Gas (EPA 8015B(M))	VOCs + Oxys(EPA 8260B)	Metals (EPA 6020: As,Cu,Se,Pb,Zn)	Total Suspended Solids (SM 2540D)	Settleable Solids (SM 2540F)	Total Sulfides (SM 4500 S-2)	Phenolics (EPA 420.1)	Residual Chlorine (SM 4500 Cl F)	MBAS (SM 5540C)	Comments
1	EFFLUENT	GWTS	6-11-13	0830	W	14	X	X	X	X	X	X	X	X	X	X	X	X	

Relinquished by: (Signature) Milton L. Douglas	Received by: (Signature) CEL	Date: 6/11/13	Time: 1300
Relinquished by: (Signature)	Received by: (Signature) CEL	Date: 6/11/13	Time: 1415
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Revised: 08/28/08

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-06-0658

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: PARSONS

DATE: 06/11/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.7 °C - 0.2 °C (CF) = 2.5 °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: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑(6) VOA**h** ☐VOA**na₂** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na₂** ☑1AGB**s**

☐500AGB ☑500AGJ ☑500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☑(5) 1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☑125PB**znna** ☐100PJ ☐100PJ**na₂** ☐_____ ☐_____ ☐_____

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:** HNO_3 **na₂:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** _____

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Calscience Environmental Laboratories, Inc.

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 K. K. Clarke

Approved for release on 06/28/2013 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.

Calscience Environmental Laboratories, Inc.

Contents

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

Calscience Environmental Laboratories, Inc.

Work Order Narrative

ACCREDITED IN ACCORDANCE WITH nelac

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.

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/21/13
Work Order No: 13-06-1486
Preparation: EPA 3020A Total
Method: 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	**13-06-1486-1-A**	**06/21/13 11:40**	**Aqueous**	**ICP/MS 03**	**06/25/13**	**06/25/13 20:03**	**130625L04A**

Parameter	Result	RL	DF	Qual	Units
Arsenic	ND	0.00100	1		mg/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-06-003-4,135**	**N/A**	**Aqueous**	**ICP/MS 03**	**06/25/13**	**06/25/13 19:19**	**130625L04A**

Parameter	Result	RL	DF	Qual	Units
Arsenic	ND	0.00100	1		mg/L

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/21/13
Work Order No: 13-06-1486
Preparation: EPA 3020A Total
Method: EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-06-1388-2	**Aqueous**	**ICP/MS 03**	**06/25/13**	**06/25/13**	**130625S04**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	0.004394	0.1000	0.1116	107	0.1116	107	73-127	0	0-11	

RPD - Relative Percent Difference , CL - Control Limit

Return to Contents

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
13-06-1388-2	**Aqueous**	**ICP/MS 03**	**06/25/13**	**06/25/13**	**130625S04**

Parameter	SAMPLE_CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	Qualifiers
Arsenic	0.004394	0.1000	0.1057	101	75-125	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

ACCREDITED IN ACCORDANCE WITH nelac

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

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-4,135	**Aqueous**	**ICP/MS 03**	**06/25/13**	**130625-L-04__139.icp**	**130625L04A**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Arsenic	0.1000	0.1025	103	80-120	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

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

Return to Contents

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

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.
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.
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.

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Calscience Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

☒ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

WO # / LAB USE ONLY
13-06-1486

Date 6-21-13

Page 1 of 1

LABORATORY CLIENT: Parsons

ADDRESS: 100 W. Walnut St

CITY: Pasadena STATE: CA ZIP: 91124

TEL: 626-440-6032 E-MAIL: Mary.Lucas@Parsons.com

CLIENT PROJECT NAME / NUMBER: DFSP- Norwalk

P.O. NO.: 747577-05000

PROJECT CONTACT: Mary Lucas / Cindy Zicker

SAMPLER(S): (PRINT) Glenn Androsko

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID: LOG CODE:

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6-C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or ( )	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Arsenic (6020)		
1	Effluent	6-21-13	1140	GW	1		X																	X		

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature/Affiliation) - CCL	Date: 6-21-13	Time: 1545
Relinquished by: (Signature) - CCL	Received by: (Signature/Affiliation) Dannyle CCL	Date: 6/21/13	Time: 1545
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	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.

06/01/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-06-1486

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Parsons DATE: 06/21/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 1.4 °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: BV

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: BV

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: MM

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® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** MM

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

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** VC

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Calscience Environmental Laboratories, Inc.

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 K. K. 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 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.

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: DFSP - Norwalk
Work Order Number: 13-06-1762

Calscience Environmental Laboratories, Inc.

Work Order Narrative

ACCREDITED IN ACCORDANCE WITH nelac

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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Calscience Environmental Laboratories, Inc.

Analytical Report

Parsons Government Services, Inc.		Date Received:	06/26/13
100 West Walnut Street		Work Order No:	13-06-1762
Pasadena, CA 91124-0002		Preparation:	EPA 3005A Total
		Method:	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	**13-06-1762-1-A**	**06/26/13 12:45**	**Aqueous**	**ICP/MS 03**	**06/28/13**	**06/28/13 19:01**	**130628L02**

Parameter	Result	RL	DF	Qual	Units
Arsenic	ND	0.00100	1		mg/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-06-003-4,136**	**N/A**	**Aqueous**	**ICP/MS 03**	**06/28/13**	**06/28/13 18:37**	**130628L02**

Parameter	Result	RL	DF	Qual	Units
Arsenic	ND	0.00100	1		mg/L

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 06/26/13
Work Order No: 13-06-1762
Preparation: EPA 3005A Total
Method: EPA 6020

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
13-06-1699-1	**Aqueous**	**ICP/MS 03**	**06/28/13**	**06/28/13**	**130628S02**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	0.01044	0.1000	0.1170	107	0.1179	107	80-120	1	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

ACCREDITED IN ACCORDANCE WITH nelac

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

Project DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
13-06-1699-1	**Aqueous**	**ICP/MS 03**	**06/28/13**	**06/28/13**	**130628S02**

Parameter	SAMPLE_CONC	SPIKE_ADDED	PDS_CONC	PDS %REC	%REC CL	Qualifiers
Arsenic	0.01044	0.1000	0.1078	97	75-125	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

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

Project: DFSP - Norwalk

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-4,136	**Aqueous**	**ICP/MS 03**	**06/28/13**	**130628-L-02__075.icp**	**130628L02**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Arsenic	0.1000	0.09917	99	80-120	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

WORK ORDER #: 13-06-1762

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

Return to Contents

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

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.
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.

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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.

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY
13-06-1762

Date 6-26-13
Page 1 of 1

LABORATORY CLIENT: Parsons
ADDRESS: 100 W. Walnut St.
CITY: Pasadena STATE: CA ZIP:
TEL: 626-440-6032 E-MAIL: Mary.Lucas@Parsons.com

CLIENT PROJECT NAME / NUMBER: DFSP- Norwalk
P.O. NO.: 747577-05000
PROJECT CONTACT: Mary Lucas / Cindy Zicker
SAMPLER(S): (PRINT) Glenn Androsko

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	☐ TPH(g) ☐ GRO	☐ TPH(d) ☐ DRO	TPH ☐ C6-C36 ☐ C6-C44	TPH ____	BTEX / MTBE ☐ 8260 ☐ ____	VOCs (8260)	Oxygenates (8260)	Prep (5035) ☐ En Core ☐ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs ☐ 8270 ☐ 8270 SIM	T22 Metals ☐ 6010/747X ☐ 6020/747X	Cr(VI) ☐ 7196 ☐ 7199 ☐ 218.6	Arsenic 6020			
1	Effluent	6-26-13	1245	GW	1		X																X			

Relinquished by: (Signature) Glenn Androsko	Received by: (Signature/Affiliation) COELT	Date: 6-26-13	Time: 1415
Relinquished by: (Signature)	Received by: (Signature/Affiliation) Dannyle COELT	Date: 6/26/13	Time: 16:30
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	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.

11/01/12 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-06- 1 7 6 2

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: PARSONS

DATE: 06/26/13

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.6 °C - 0.2 °C (CF) = 2.4 °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: AM

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: AM

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: SH

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® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** SH

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

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** RJ

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ATTACHMENT C

Groundwater Extraction Treatment System

Monitoring Logs

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: Th 4-11-13 TIME: 1440 WEATHER: Sunny 75°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	37	P3	23	P2-P3	0		
BF2 (Center)	P4	36	P5	35	P4-P5	0		
BF3 (West)	P6	39	P7	39	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	15	P9	37	P8-P9	0		
MX-21 (large)	P9	37	P10	5	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	5	P11	28	P10-P11	0		
GAC - 2	P11	28	P12	24	P11-P12	0		
GAC - 3	P12	24	P13	23	P12-P13	0		
Ion Exchange	P13	23	P14	11	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
8	Wells: GW-2	5.6	1019149.5	10153021	-	
4	Wells: GW-13	4.3	677065.5	674146.0	-	
1	Wells: GW-2/13	9.5	12507474.0	12500924.3	-	
1	Wells: GW-15	3.9	556522.5	554972.0	-	
5	Wells: GW-16	8.6	4735667.4	4733104.1	-	
3	Wells: GW-15/16	14.0	1472236.5	1467166.5	-	
40	NPDES Discharge	37	65300650	65290081	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____(degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify)_____

NOTES / DAILY TASK SUMMARY

Restarted system @ 1150 after arsenic resin change out. Replaced MX-7, BF-1, 2 + 3 filters.

Field tested Arsenic level @ effluent. <2ppb

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: M 4-15-13 TIME: 1015 WEATHER: Cloudy 65°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	38	P3	~~44~~ 37	P2-P3	0		
BF2 (Center)	P4	38	P5	37	P4-P5	0		
BF3 (West)	P6	42	P7	42	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	~~37~~ 38	P9	37	P8-P9	0		
MX-21 (large)	P9	37	P10	~~45~~ 32	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	~~45~~ 32	P11	30	P10-P11	0		
GAC - 2	P11	30	P12	27	P11-P12	0		
GAC - 3	P12	27	P13	26	P12-P13	0		
Ion Exchange	P13	26	P14	10	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
3	Wells: GW-2	5.8	1050104.0	1019149.5	-	
1	Wells: GW-13	4.2	701142.8	677065.5	-	
8	Wells: GW-2/13	9.4	12558930.8	12507474.0	-	
4	Wells: GW-15	3.6	576115.1	556522.5	-	
5	Wells: GW-16	4.3	4759115.8	4735667.4	-	
6	Wells: GW-15/16	8.3	1519588.0	1472236.5	-	
40	NPDES Discharge	38	65384950	65300650	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

Change P-3, P-8 & P-10 pressure gauges.
Sampled effluent and surge tank for arsenic.
Field tested arsenic level @ surge tank ~40ppb.

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: T 4-16-13 TIME: 1515 WEATHER: Sunny 74°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	37	P3	36	P2-P3	0		
BF2 (Center)	P4	37	P5	36	P4-P5	0		
BF3 (West)	P6	40	P7	40	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	37	P9	35	P8-P9	0		
MX-21 (large)	P9	35	P10	32	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	32	P11	28	P10-P11	0		
GAC - 2	P11	28	P12	25	P11-P12	0		
GAC - 3	P12	25	P13	24	P12-P13	0		
Ion Exchange	P13	24	P14	10	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
9	Wells: GW-2	5.9	1660360.0	1050104.0	-	
6	Wells: GW-13	4.1	708417.0	701142.8	-	
8	Wells: GW-2/13	9.6	12575500.8	12558930.8	-	
8	Wells: GW-15	3.2	582178.5	576115.1	-	
6	Wells: GW-16	4.2	4766527.0	4759115.8	-	
1	Wells: GW-15/16	8.5	1534283.4	1519588.0	-	
50	NPDES Discharge	39	65412660	65384950	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: F 4-19-13 TIME: 1240 WEATHER: _____

OPERATOR NAME: G. Androsko REV'D BY: _____

PRESSURE READINGS

EQUIPMENT	Inlet Pressure (psig)		Outlet Pressure (psig)			Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	37	P3	35	P2-P3	0		
BF2 (Center)	P4	34	P5	34	P4-P5	0		
BF3 (West)	P6	39	P7	39	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	36	P9	35	P8-P9	0		
MX-21 (large)	P9	35	P10	30	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	30	P11	26	P10-P11	0		
GAC - 2	P11	26	P12	22	P11-P12	0		
GAC - 3	P12	22	P13	21	P12-P13	0		
Ion Exchange	P13	21	P14	8	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
0	Wells: GW-2	6.1	1085071.5	1060360.0	-	
2	Wells: GW-13	4.4	725433.4	708417.0	-	
7	Wells: GW-2/13	9.7	1261519.9	1257500.8	-	
0	Wells: GW-15	3.7	595611.0	582178.5	-	
0	Wells: GW-16	4.3	4783621.0	4766527.0	-	
4	Wells: GW-15/16	88	1564586.0	1534283.4	-	
10	NPDES Discharge	38	65476520	65412660	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

Field tested arsenic level @ effluent <0.2 ppb

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: M 4-22-13 TIME: 1030 WEATHER: Sunny 80°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	38	P3	37	P2-P3	0		
BF2 (Center)	P4	38	P5	36	P4-P5	0		
BF3 (West)	P6	41	P7	41	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	38	P9	36	P8-P9	0		
MX-21 (large)	P9	36	P10	31	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	31	P11	28	P10-P11	0		
GAC - 2	P11	28	P12	24	P11-P12	0		
GAC - 3	P12	24	P13	23	P12-P13	0		
Ion Exchange	P13	23	P14	10	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
5	Wells: GW-2	5.9	1110556.5	1085071.5	-	
5	Wells: GW-13	4.3	743596.0	725433.4	-	
0	Wells: GW-2/13	9.5	12655022.0	12615019.9	-	
0	Wells: GW-15	4.7	611951.0	595611.0	-	
0	Wells: GW-16	4.1	4800741.2	4783621.0	-	
0	Wells: GW-15/16	9.2	1607212.7	1569586.0	-	
35	NPDES Discharge	35	65542644	65476520	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP 25.1 (degrees, C) pH 7.13 Data collection instrument used (check one): ☒ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

Sampled effluent.

DFSP Norwalk
GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: W 4-24-13 TIME: 1310 WEATHER: Cloudy 70°

OPERATOR NAME: G.Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT	Inlet Pressure (psig)		Outlet Pressure (psig)			Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	39	P3	38	P2-P3	0		
BF2 (Center)	P4	39	P5	38	P4-P5	0		
BF3 (West)	P6	43	P7	42	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	40	P9	39	P8-P9	0		
MX-21 (large)	P9	37	P10	32	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	32	P11	29	P10-P11	0		
GAC - 2	P11	29	P12	25	P11-P12	0		
GAC - 3	P12	25	P13	25	P12-P13	0		
Ion Exchange	P13	25	P14	10	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
6	Wells: GW-2	5.9	1128587.5	1110556.5	-	
4	Wells: GW-13	4.3	756777.0	743596.0	-	
1	Wells: GW-2/13	9.3	12683573.5	12655022.0	-	
0	Wells: GW-15	4.5	625631.0	611951.0	-	
3	Wells: GW-16	4.1	4812924.0	4800741.2	-	
1	Wells: GW-15/16	8.8	1634582.5	1607312.7	-	
50	NPDES Discharge	34	65691360	65542644	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: F 4-26-13 TIME: 1010 WEATHER: Sunny 75°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	39	P3	38	P2-P3	0		
BF2 (Center)	P4	38	P5	37	P4-P5	0		
BF3 (West)	P6	42	P7	41	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	38	P9	35	P8-P9	0		
MX-21 (large)	P9	35	P10	30	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	30	P11	27	P10-P11	0		
GAC - 2	P11	27	P12	23	P11-P12	0		
GAC - 3	P12	23	P13	22	P12-P13	0		
Ion Exchange	P13	22	P14	8	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
4	Wells: GW-2	6.2	1144756.6	1128587.5	-	
8	Wells: GW-13	4.4	768449.2	756777.0	-	
5	Wells: GW-2/13	9.5	12708767.7	12683573.5	-	
4	Wells: GW-15	4.0	636915.2	625631.0	-	
3	Wells: GW-16	4.3	48237846.2	4812924.0	-	
5	Wells: GW-15/16	8.5	1657397.2	1634582.5	-	
90	NPDES Discharge	33	65635888	65591360	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

Replaced soakease sock in surge tank.

Field test kit showed 7 ppb in effluent

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: M 4-29-13 TIME: 0920 WEATHER: Cloudy 68°

OPERATOR NAME: G. Androske REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	40	P3	38	P2-P3	0		
BF2 (Center)	P4	40	P5	37	P4-P5	0		
BF3 (West)	P6	43	P7	42	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	40	P9	36	P8-P9	0		
MX-21 (large)	P9	36	P10	29	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	29	P11	26	P10-P11	0		
GAC - 2	P11	26	P12	23	P11-P12	0		
GAC - 3	P12	23	P13	23	P12-P13	0		
Ion Exchange	P13	23	P14	8	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
0	Wells: GW-2	6.1	1170761.0	1144756.6	-	
9	Wells: GW-13	4.0	786290.0	768449.2	-	
0	Wells: GW-2/13	9.4	12748473.2	12708767.7	-	
49	Wells: GW-15	4.1	654040.7	636915.2	-	
4	Wells: GW-16	4.2	4841212.1	4823784.2	-	
3	Wells: GW-15/16	8.4	1693075.4	1657397.2	-	
30	NPDES Discharge	32	65702740	65635888	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify)_____

NOTES / DAILY TASK SUMMARY

Checked Effluent and Surge Tank for arsenic using test kit.
Effluent = 9ppb
Surge Tank = 30ppb
Collected Effluent sample for arsenic (6020) and Surge Tank on hold

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: 4-30-13 Tues TIME: 1237 WEATHER: Cloudy 70°

OPERATOR NAME: M. Gradilas REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	39	P3	36	P2-P3	0		
BF2 (Center)	P4	39	P5	35	P4-P5	0		
BF3 (West)	P6	42	P7	40	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	38	P9	34	P8-P9	0		
MX-21 (large)	P9	34	P10	27	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	27	P11	24	P10-P11	0		
GAC - 2	P11	24	P12	21	P11-P12	0		
GAC - 3	P12	21	P13	21	P12-P13	0		
Ion Exchange	P13	21	P14	6	P13-P14	0		

FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
Wells: GW-2	6.3	1181187.1	1170761.0	-	
Wells: GW-13	4.1	7930944.0	786290.0	-	
Wells: GW-2/13	9.4	12763769.4	12748473.2	-	
Wells: GW-15	4.0	6605390	654040.7	-	
Wells: GW-16	4.1	4847851.1	4841212.1	-	
Wells: GW-15/16	8.4	1706771.5	1693075.4	-	
NPDES Discharge	31	65729595	65702740	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify) _____ **[If collecting NPDES samples today, record effluent temperature (deg, C) and pH]**

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: 5-1-13 W TIME: 0725 WEATHER: Cloudy 67°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	38	P3	36	P2-P3	0		
BF2 (Center)	P4	39	P5	35	P4-P5	0		
BF3 (West)	P6	42	P7	41	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	38	P9	34	P8-P9	0		
MX-21 (large)	P9	34	P10	26	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	26	P11	23	P10-P11	0		
GAC - 2	P11	23	P12	21	P11-P12	0		
GAC - 3	P12	21	P13	21	P12-P13	0		
Ion Exchange	P13	21	P14	7	P13-P14	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
8	Wells: GW-2	6.3	1187899.2	1181187.1	-	
7	Wells: GW-13	4.1	0797418.2	793094.0	-	
7	Wells: GW-2/13	9.5	12774200.4	12763769.4	-	
0	Wells: GW-15	4.0	6647260	6605390	-	
3	Wells: GW-16	4.3	4852294.3	4847851.1	-	
8	Wells: GW-15/16	8.3	1715940.0	1706771.5	-	
35	NPDES Discharge	30	65747842	65729555	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

System shut down after arsenic exceedence of permit reported by lab. @0730

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: 06-03-13 TIME: 1508 WEATHER: Sunny

OPERATOR NAME: Milton L. Gradillas REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	41	P3	38	P2-P3	0		
BF2 (Center)	P4	0	P5	37	P4-P5	0		P4 GAUGE NOT READING
BF3 (West)	P6	43	P7	42	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	39	P9	36	P8-P9	0		
MX-21 (large)	P9	36	P10	29	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	29	P11	26	P10-P11	0		
GAC - 2	P11	26	P12	24	P11-P12	0		
GAC - 3	P12	24	P13	23.5	P12-P13	0		
Ion Exchange (Bed 1)	P13	23.5	P14	11	P13-P14	0		
Ion Exchange (Bed 2)	P14	11	P15	6.5	P14-P15	0		

FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
Wells: GW-2	5.4	1189149.0	1187899.2	-	
Wells: GW-13	4.5	798372.0	797418.2	-	
Wells: GW-2/13	9.1	12776070.0	12774200.4	-	
Wells: GW-15	3.0	665563.0	664721.0	-	
Wells: GW-16	4.2	4853299.0	4852294.3	-	
Wells: GW-15/16	8.7	1717840.0	1715940.0	-	
NPDES Discharge	28	65749190	65747842	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg. C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify)_____

NOTES / DAILY TASK SUMMARY

Added a second ion exchange bed to system. Restarted system @ 1400
Shutdown system @ 1545

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: M 6-10-13 TIME: 0940 WEATHER: Cloudy 65°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	41	P3	37	P2-P3	0		
BF2 (Center)	P4	40	P5	36	P4-P5	0		
BF3 (West)	P6	43	P7	41	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	39	P9	36	P8-P9	0		
MX-21 (large)	P9	36	P10	30	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	30	P11	29	P10-P11	0		
GAC - 2	P11	29	P12	26	P11-P12	0		
GAC - 3	P12	26	P13	26	P12-P13	0		
Ion Exchange (Bed 1)	P13	26	P14	15	P13-P14	0		
Ion Exchange (Bed 2)	P14	15	P15	0	P14-P15	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
5	Wells: GW-2	5.4	1189756.2	1189149.0	-	
8	Wells: GW-13	4.6	798910.0	798372.0	-	
5	Wells: GW-2/13	9	12777107.5	12776070.0	-	
8	Wells: GW-15	3.5	666029.2	665563.0	-	
3	Wells: GW-16	4.4	4853854.0	4853299.0	-	
6	Wells: GW-15/16	8.8	1718928.2	1717840.0	-	
60	NPDES Discharge	23	65752075	65749190	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg. C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

Restarted system @ 0800. 2nd ion exchange vessel on line + new acidified carbon installed in carbon beds.

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: 6-11-13 TIME: 1010 WEATHER: SUNNY

OPERATOR NAME: Milton L. Gradillas REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	41	P3	38	P2-P3	0		
BF2 (Center)	P4	40	P5	36	P4-P5	0		
BF3 (West)	P6	42	P7	41	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	39	P9	36	P8-P9	0		
MX-21 (large)	P9	36	P10	28	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	28	P11	27	P10-P11	0		
GAC - 2	P11	27	P12	23	P11-P12	0		
GAC - 3	P12	23	P13	22.5	P12-P13	0		
Ion Exchange (Bed 1)	P13	22.5	P14	~~N/R~~ 9	P13-P14	0		
Ion Exchange (Bed 2)	P14	~~N/R~~ 9	P15	2	P14-P15	0		

FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
Wells: GW-2	5.5	1197850.9	1189756.2	-	
Wells: GW-13	5.1	8058315	798910.0	-	
Wells: GW-2/13	9.3	12790667	12777107.5	-	
Wells: GW-15	3.2	670646.3	666029.2	-	
Wells: GW-16	4.3	4860029.1	4853844.0	-	
Wells: GW-15/16	8.3	1731140.3	1718928.2	-	
NPDES Discharge	28	65773820	65752075	-	

NPDES Sample Collection (circle one): MONTHLY, (QUARTERLY), ANNUAL, OTHER (specify) [If collecting NPDES samples today, record effluent temperature (deg. C) and pH]

TEMP 25.2 (degrees, C) pH 6.59 Data collection instrument used (check one): ☑ Horiba U-10 or ☐ Other (please specify)

NOTES / DAILY TASK SUMMARY

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: W 6-12-13 TIME: 1320 WEATHER: Cloudy 75°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	37	P3	26	P2-P3	0		
BF2 (Center)	P4	36	P5	24	P4-P5	0		
BF3 (West)	P6	39	P7	29	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	27	P9	25	P8-P9	0		
MX-21 (large)	P9	25	P10	20	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	20	P11	18	P10-P11	0		
GAC - 2	P11	18	P12	16	P11-P12	0		
GAC - 3	P12	16	P13	16	P12-P13	0		
Ion Exchange (Bed 1)	P13	16	P14	9	P13-P14	0		
Ion Exchange (Bed 2)	P14	9	P15	3	P14-P15	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
5	Wells: GW-2	5.6	1206496.0	1197850.9	-	
9	Wells: GW-13	5.2	813680.0	805831.5	-	
5	Wells: GW-2/13	9.4	12805717.4	12790667.7	-	
2	Wells: GW-15	3.2	675422.8	670646.3	-	
2	Wells: GW-16	4.2	4866682.8	4860029.1	-	
6	Wells: GW-15/16	8.4	1744237.8	1731140.3	-	
40	NPDES Discharge	16	65800546	65773820	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg. C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

DFSP Norwalk
GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: F 6-14-13 TIME: 1145 WEATHER: Sunny 75°

OPERATOR NAME: G. Andrzko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	39	P3	39	P2-P3	0		
BF2 (Center)	P4	39	P5	39	P4-P5	0		
BF3 (West)	P6	41	P7	41	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	40	P9	37	P8-P9	0		
MX-21 (large)	P9	37	P10	31	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	31	P11	30	P10-P11	0		
GAC - 2	P11	30	P12	25	P11-P12	0		
GAC - 3	P12	25	P13	24	P12-P13	0		
Ion Exchange (Bed 1)	P13	24	P14	11	P13-P14	0		
Ion Exchange (Bed 2)	P14	11	P15	2	P14-P15	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
3	Wells: GW-2	5.6	1222104.3	1206496.0	-	
7	Wells: GW-13	4.5	827338.4	813680.0	-	
1	Wells: GW-2/13	9.5	12831993.5	12805717.4	-	
9	Wells: GW-15	2.8	683470.0	675422.8	-	
3	Wells: GW-16	4.2	4878324.0	4866662.8	-	
9	Wells: GW-15/16	8.0	1766420.5	1744237.8	-	
60	NPDES Discharge	31	6584768	6580054	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg. C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

System off from 0805 to 1000 to repair leak and change out MX-7, BF-1, 2+3 filters.

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: 6-17-13 TIME: 0750 WEATHER: Cloudy 66°

OPERATOR NAME: Milton L. Gradillas REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	38	P3	37	P2-P3	0		
BF2 (Center)	P4	37	P5	36	P4-P5	0		
BF3 (West)	P6	41	P7	42	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	40	P9	37	P8-P9	0		
MX-21 (large)	P9	37	P10	33	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	33	P11	31	P10-P11	0		
GAC - 2	P11	31	P12	27.5	P11-P12	0		
GAC - 3	P12	27.5	P13	28	P12-P13	0		
Ion Exchange (Bed 1)	P13	28	P14	13	P13-P14	0		
Ion Exchange (Bed 2)	P14	13	P15	3	P14-P15	0		

FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
Wells: GW-2	5.8	1245769.0	1222104.3	-	
Wells: GW-13	4.6	8466150	827338.4	-	
Wells: GW-2/13	4.8	12870309.6	12831993.5	-	
Wells: GW-15	5.2	6948759	683470.0	-	
Wells: GW-16	4.3	4895597.0	4878324.0	-	
Wells: GW-15/16	7.8	1797936	1766420.5	-	
NPDES Discharge	33	65902185	65841768	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg. C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify) _____

NOTES / DAILY TASK SUMMARY

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: M 6-24-13 TIME: ~~1430~~ 1030 WEATHER: Sunny 77°

OPERATOR NAME: G. Andrasko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	20	P3	14	P2-P3	0		
BF2 (Center)	P4	19	P5	15	P4-P5	0		
BF3 (West)	P6	20	P7	20	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	17	P9	16	P8-P9	0		
MX-21 (large)	P9	16	P10	15	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	15	P11	12	P10-P11	0		
GAC - 2	P11	12	P12	9	P11-P12	0		
GAC - 3	P12	9	P13	9	P12-P13	0		
Ion Exchange (Bed 1)	P13	9	P14	4	P13-P14	0		
Ion Exchange (Bed 2)	P14	4	P15	3	P14-P15	0		

FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
Wells: GW-2	—	1254303.1		-	
Wells: GW-13	—	853237.5		-	
Wells: GW-2/13	—	12884863.0		-	
Wells: GW-15	—	701739.0		-	
Wells: GW-16	—	4901777.2		-	
Wells: GW-15/16	—	1812444.6		-	
NPDES Discharge	15	65911543		-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg. C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify)_____

NOTES / DAILY TASK SUMMARY

~~Removed~~ HG Started treating water from surge tank and 2ndary containment. Removed obstruction from the surge tank ~~@~~ outlet. Reconnected to the tank and restarted system @ 11:39 (Did not turn on well pumps)

DFSP Norwalk
GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: W 6-26-13 TIME: 1448 WEATHER: Sunny 85°

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	41	P3	31	P2-P3	0		
BF2 (Center)	P4	40	P5	30	P4-P5	0		
BF3 (West)	P6	43	P7	36	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	32	P9	30	P8-P9	0		
MX-21 (large)	P9	30	P10	28	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	28	P11	25	P10-P11	0		
GAC - 2	P11	25	P12	22	P11-P12	0		
GAC - 3	P12	22	P13	22	P12-P13	0		
Ion Exchange (Bed 1)	P13	22	P14	13	P13-P14	0		
Ion Exchange (Bed 2)	P14	13	P15	5	P14-P15	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
0	Wells: GW-2	5.6	1258661.0	1254303.1	-	
2	Wells: GW-13	5.2	854563.6	853239.5	-	
0	Wells: GW-2/13	9.7	12890862.5	12884863.0	-	
9	Wells: GW-15	4.7	703090.0	701739.0	-	
2	Wells: GW-16	4.1	4902972.8	4901777.2	-	
7	Wells: GW-15/16	9.4	1815319.5	1812444.6	-	
60	NPDES Discharge	22	65922465	65911543	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify) **[If collecting NPDES samples today, record effluent temperature (deg. C) and pH]**

TEMP (degrees, C) pH Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify)

NOTES / DAILY TASK SUMMARY

Restarted system at 1010. Collected Effluent ssmple for arsenic

DFSP Norwalk

GWTS Environmental Compliance / Operation Maintenance Worksheets

PARSONS DAILY INSPECTION MAINTENANCE LOGSHEET

DATE: F 6-28-13 TIME: 1110 WEATHER: Sunny 85

OPERATOR NAME: G. Androsko REV'D BY:

PRESSURE READINGS

EQUIPMENT		Inlet Pressure (psig)		Outlet Pressure (psig)		Delta P (psig)	Filter Change Guide	COMMENTS
BAG FILTERS (BF)							If > 25 psig; change filter	
BF1 (East)	P2	40	P3	37	P2-P3	0		
BF2 (Center)	P4	39	P5	36	P4-P5	0		
BF3 (West)	P6	42	P7	41	P6-P7	0		
MYCELX							If > 15 psig; change filter	
MX-7 (small)	P8	38	P9	36	P8-P9	0		
MX-21 (large)	P9	36	P10	32	P9-P10	0		
GAC FILTERS							If > 10 psig; notify.	
GAC - 1	P10	32	P11	30	P10-P11	0		
GAC - 2	P11	30	P12	26	P11-P12	0		
GAC - 3	P12	26	P13	24	P12-P13	0		
Ion Exchange (Bed 1)	P13	24	P14	12	P13-P14	0		
Ion Exchange (Bed 2)	P14	12	P15	3	P14-P15	0		

	FLOW METERS	Instantaneous Flow (GPM)	Totalizer Reading (GAL)	Last Totalizer Reading (GAL)	Flow Volume (GAL)	
9	Wells: GW-2	4.6	1273410.0	1258661.0	-	
5	Wells: GW-13	4.9	867886.2	854563.6	-	
6	Wells: GW-2/13	9.5	12916118.3	12890862.5	-	
7	Wells: GW-15	4.2	714237.8	703090.0	-	
6	Wells: GW-16	4.0	4913607.2	4902972.8	-	
0	Wells: GW-15/16	9.0	1839521.5	1815319.5	-	
70	NPDES Discharge	31	65963478	65922465	-	

NPDES Sample Collection (circle one): MONTHLY, QUARTERLY, ANNUAL, OTHER (specify)_____ [If collecting NPDES samples today, record effluent temperature (deg, C) and pH]

TEMP_____ (degrees, C) pH_____ Data collection instrument used (check one): ☐ Horiba U-10 or ☐ Other (please specify)_____

NOTES / DAILY TASK SUMMARY 7.62 @ 26.1°C

pH rdgs: Surge Tank = ~~7.38~~ 7.54 After GAC-1 = 7.57 After GAC-2 = 7.48 After GAC-3 = 7.51
After Bed-1 = 7.59 After Bed-2/Effluent = 7.52 @ 25.4°C

Arsenic Field Tests: Surge Tank = 25ppb After GAC-3 = 16ppb After Bed-1 = 7ppb After Bed-2 = <2ppb