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April 13, 2018

Information & Technology Unit California Regional Water Quality Control Board, Los Angeles Region 320 West Fourth Street, Suite 200 Los Angeles, California 90013

Subject: GROUNDWATER DISCHARGE MONITORING REPORT

**QUARTER 1, 2018** 

NPDES No. CAG994004; Compliance File No. CI-7585

Defense Fuel Support Point, Norwalk

15306 Norwalk Boulevard

Norwalk, California

On behalf of The Defense Logistics Agency Installation Operations Energy (DLA), The Source Group, Inc. (SGI) presents this groundwater discharge monitoring report to summarize the National Pollutant Discharge Elimination System (NPDES) monitoring activities for Quarter 1, 2018 at Defense Fuel Support Point (DFSP), Norwalk located at 15306 Norwalk Boulevard, in Norwalk, California (Site).

## SUMMARY OF REMEDIATION PROGRESS AND DISCHARGE VOLUMES

Active remediation systems at the Site consist of a soil vapor extraction system (VES) and a groundwater extraction and treatment system (GWETS) for 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 during the subject reporting period.

The GWETS consists of five vertical extraction wells (four 6-inch diameter wells and one 4-inch diameter well), three bag filter vessels, two MYCELX oil separator vessels, three granular activated carbon (GAC) vessels, and two ion exchange vessels. Four wells (GW-2, GW-13, GW-15, and GW-16) were in operation during this reporting period. As summarized in Table 1, the treated groundwater was discharged in accordance with NPDES Permit No. CAG994004, Compliance File No. CI-7585 with the exception of the acute toxicity sample collected on February 28, 2018 (see Summary of Non-Compliance section).

The GWETS discharge volumes and field notes for the reporting period are summarized in Tables 2A, 2B, and 2C. Periodic site visits were conducted to assess and optimize system operation and record operational data. The total volume of groundwater extracted by the GWETS during this reporting period was approximately 189,822 gallons. Based on the total petroleum hydrocarbons as diesel (TPHd) results for influent water samples and total groundwater extracted, the mass of TPHd removed by the GWETS was approximately 0.1 pounds (Table 2C) during Quarter 1, 2018.

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There were no changes in the operation of the facility that have or would change the character, location, or volume of the groundwater discharge.

## 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). Except as discussed in the Summary of Non-Compliance section below, the sampling results indicate concentrations were below detection limits or did not exceed permit required discharge levels. The sample dates and summary of test results are provided in Table 1. Laboratory analytical reports and chain-of-custody documents are included in Appendix A.

Compliance samples were submitted to a laboratory certified for analyses of requested methods by the California Department of Public Health (CDPH) Environmental Laboratory Approval Program (ELAP). The laboratory analyzed samples in batches with other samples of similar matrix and analyzed quality control samples with each batch to assess method precision and accuracy. Duplicate sample or matrix spike/matrix spike duplicate sample pairs were analyzed to assess method precision. Matrix spike sample results also demonstrate method accuracy. Method blank and laboratory control samples are analyzed to assess potential laboratory contamination and method accuracy without potential matrix interferences, respectively.

## SUMMARY OF NON-COMPLIANCE

The GWETS operated in compliance with NPDES No. CAG994004, CI-7585 during this reporting period with the exception of the acute toxicity sample collected on February 28, 2018. As indicated on Table 1, the GWETS was manually shutdown the same day after the sample was collected as a precautionary measure pending confirmation of permit compliance. Note that discharge was limited to just a handful of days during February 2018 pending the completion of system/compound modification and upgrade work that began during late January 2018 (see Tables 2A and 2B).

Per Section IV, Part B.3 of Monitoring and Reporting Program No. CI-7585 (MRP), SGI immediately notified the LARWQCB with the reporting requirement being waived since the failed result is under the umbrella of our previously submitted November 30, 2017 *Acute Toxicity Testing Exceedance Report*. Investigation measures and additional actions taken to achieve permit compliance were part of SGI's March 2, 2018 notification and included the deployment of a temporary treated groundwater holding tank (i.e., although the system was briefly operated during March 2018 to confirm that the implemented actions/measures were successful, no actual discharge occurred during the month).

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As the March 20, 2018 results indicate, full compliance with the permit limit was achieved following the implementation of these measures/actions such that accelerated monthly acute toxicity testing will continue during the next reporting period to demonstrate continued compliance so that regular annual monitoring for this parameter can subsequently resume. Note that as also indicated on Table 1, regular quarterly monitoring for copper will resume during Quarter 2, 2018 (see SGI's November 30, 2017 report) as all of the attached monthly accelerated monitoring results for this parameter were below the specified permit limit.

## LABORATORY CERTIFICATION

All analyses were conducted at a laboratory certified for such analyses by the CDPH or approved by the Executive Officer and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this MRP. The laboratory's quality control data is included in the laboratory analytical reports provided in Appendix A. A copy of the laboratory ELAP certification is provided in Appendix B.

## REPORT CERTIFICATION

The DLA report certification is provided in Appendix C.

Sincerely,

Michael Wood, P.E.

Senior Engineer

Muhul Wool

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Principal Geologist

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Attachments and Distribution on Next Page.

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## Attachments:

Table 1 — Summary of Effluent Groundwater Analytical Sampling Results - 1<sup>st</sup> Quarter 2018 Table 2A — Groundwater Extraction and Treatment System Operations Summary - January Table 2B — Groundwater Extraction and Treatment System Operations Summary - February Table 2C — Groundwater Extraction and Treatment System Operations Summary - March

Appendix A – Laboratory Analytical Reports and Chain-of-Custody Documents

Appendix B - Laboratory ELAP Certification

Appendix C - Report Certification

cc: Mr. Paul Cho, LARWQCB

Mr. Jim Covin. LARWQCB

Ms. Carol Devier-Heeney, DLA

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Mr. Everett Ferguson, Water Replenishment District

Ms. Perla Hernandez, Office of Congresswoman Grace Napolitano

Ms. Yvette Shahinian, Office of Congresswoman Linda T. Sánchez

Ms. Yahaira Ortiz, Office of State Senator Tony Mendoza

Mr. Norman Dupont, Richards Watson Gershon

Mr. Adam Ly, Liberty Utilities

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Ms. Tracy Winkler, RAB Community Member

**TABLES** 

## TABLE 1 Summary of Effluent Groundwater Analytical Sampling Results - 1st Quarter 2018

DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

	San	npling Frequency				Monthly									Quarterly	terly					Annually
Lab	oratory A	Analysis Methods		SM 4500 H+B		EPA 8015B (M)	EPA 8260B	EPA 8260B	EPA 6020	SM 5520 B	EPA 6020	SM 2130 B	SM 4500 S2-D	SM 4500-CI F	SM 2540 C	SM 2540 D	SM 2540 F	SM 5540 C	EPA 420.1	SM 5210 B	EPA 2000.0
Da	aily Disch	narge Limitations				100 μg/L	5 μg/L	12 μg/L	10 μg/L	15 mg/L	30 μg/L	150 NTU	1.0 mg/L	0.1 mg/L		75 mg/L	0.3 mL/L	0.5 mg/L	1.0 mg/L	30 mg/L	
Mont	Monthly Discharge Limitations									10 mg/L	15 μg/L	50 NTU				50 mg/L	0.1 mL/L			20 mg/L	
Sample Date	Notes	GWETS Wells On Line	Average Flow Rate	pH <sup>A</sup>	Temp- erature	ТРН	MTBE	ТВА	Arsenic	Oil & Grease	Copper	Turbidity	Sulfides	Residual Chlorine	Total Dissolved Solids	Total Suspended Solids	Settleable Solids	MBAS	Phenois	<b>BOD</b> ₅ 20°C	Acute Toxicity
			(gpm)	pH units	°C	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(μg/L)	(NTU)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mL/L)	(mg/L)	(mg/L)	(mg/L)	(% Survival)
01/11/18		GW-13, GW-15, GW-16	4.5	7.59	20.7	<100	<0.40	<7.0	<6.0		<7.0 <sup>B</sup>										
01/15/18		GW-13, GW-15, GW-16	3.1																		95 <sup>C</sup>
02/26/18	1	GW-2, GW-13, GW-15, GW-16	5.7	7.22	18.5	<100	<0.40	<7.0	<6.0	<5.0	<7.0 <sup>B</sup>	4.7	<0.027	<0.1 <sup>D</sup>	960	<5.0	<0.1	<0.05	<0.15	<5.0	
02/28/18	2	GW-2, GW-13, GW-15, GW-16	6.4																		25 <sup>E</sup>
03/20/18	3,4,5	GW-2, GW-13, GW-15, GW-16	4.4	7.27	17.0	<100	<0.40	<7.0	<6.0		<14 <sup>B</sup>										100 <sup>F</sup>

## Legend / Notes:

GWETS = Groundwater extraction and treatment system

TPH = Total petroleum hydrocarbons (gasoline range organics [GRO] and diesel range organics [DRO])

MTBE = Methyl tertiary-butyl ether

TBA = tertiary-Butyl alcohol

MBAS = Methylene blue active substances

BOD = Biochemical oxygen demand

gpm = Gallons per minute

mg/L = Micrograms per liter

mg/L = Milligrams per liter

NTU = Nephelometric Turbidity Units

mL/L = Milliliters per liter

<0.40 = Not detected at or above the Method Detection Limit (MDL) shown.

- -- = Not measured or analyzed
- A = Measured in the field using an Oakton® pH Tester Model 30.
- B = Accelerated monthly permit compliance monitoring result (see Note 5 and SGI's January 15, 2018 Groundwater Discharge Monitoring Report for details, including action measures taken to help ensure permit compliance).
- C = Second consecutive passing accelerated monthly permit compliance monitoring result (see SGl's January 15, 2018 report for December 2017 result, and November 30, 2017 Acute Toxicity Testing Exceedance Report for initial notification details, investigative measures and follow up actions taken to help ensure permit compliance).
- D = Measured in the field using a HACH® Chlorine Test Kit Model CN-70.
- E = Discharge terminated the same day pending the analytical result as a precautionary measure (see Notes 2 through 4 for notification details, investigative measures and additional actions taken to achieve permit compliance).
- F = Initial passing accelerated monthly permit compliance monitoring result following failed result from February 2018 (see Notes 2 through 4).
- 1 = GWETS manually shutdown on January 23, 2018 to conduct remediation compound modification and upgrade work and remained off-line until February 22, 2018.
- 2 = LARWQCB notified following receipt of this result from the laboratory per Section IV, Part B.3 of Monitoring and Reporting Program No. CI-7585 (MRP) with the reporting requirement being waived since the failed result is under the umbrella of the previously submitted November 30, 2017 report.
- 3 = All treated groundwater stored in a temporary holding tank (deployed to the site based on the February 28, 2018 acute toxicity test result along with adding a recirculation loop to the system) in order to verify permit compliance prior to resuming discharge.
- 4 = Accelerated acute toxicity test permit compliance monitoring to continue to be conducted during the next reporting period per Section IV, Part A.4 of the MRP.
- 5 = Regular quarterly monitoring for copper to resume during the next reporting period per Section I, Part V of the MRP.

## **TABLE 2A**

## Groundwater Extraction and Treatment System Operations Summary - January

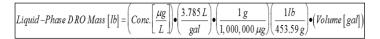
DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	GW-2 Totalizer Reading (gallons)	GW-13 Totalizer Reading (gallons)	GW-15 Totalizer Reading (gallons)	GW-16 Totalizer Reading (gallons)	Groundwater Extracted from North-East Area (gallons)	Groundwater Extracted from North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Groundwater Extracted and Treated Per Day (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed <sup>A</sup> (Ib)
1/1/18	Off line		1,310	3,663	88,317	217,779	11,423,059	4,784,010	77,713,213	0		9,945
1/2/18	Off line		1,310	3,663	88,317	217,779	11,423,059	4,784,010	77,713,213	0		9,945
1/3/18	Off line		1,310	3,663	88,317	217,779	11,423,059	4,784,010	77,713,213	0		9,945
1/4/18	Off line		1,310	3,663	88,317	217,779	11,423,059	4,784,010	77,713,213	0		9,945
1/5/18	Off line		1,310	3,663	88,317	217,779	11,423,059	4,784,010	77,713,213	0		9,945
1/6/18	Off line		1,310	3,663	88,317	217,779	11,423,059	4,784,010	77,713,213	0		9,945
1/7/18	Off line		1,310	3,663	88,317	217,779	11,423,059	4,784,010	77,713,213	0		9,945
1/8/18	Technician	1,2	1,310	3,663	88,317	217,779	11,423,059	4,784,010	77,713,213	0		9,945
1/9/18	*		1,310	5,205	91,214	220,723	11,428,899	4,785,552	77,720,561	7,348		9,945
1/10/18	*		1,310	6,747	94,111	223,666	11,434,740	4,787,094	77,727,909	7,348		9,945
1/11/18	Technician	3	1,310	8,113	96,676	226,273	11,439,911	4,788,460	77,734,415	6,506	73	9,945
1/12/18	*		1,310	8,401	99,427	229,261	11,445,651	4,788,748	77,738,817	4,402		9,945
1/13/18	*		1,310	8,690	102,179	232,249	11,451,391	4,789,037	77,743,220	4,402		9,945
1/14/18	*		1,310	8,979	104,931	235,237	11,457,131	4,789,326	77,747,622	4,402		9,945
1/15/18	Technician	4	1,310	9,268	107,683	238,225	11,462,871	4,789,615	77,752,024	4,402		9,945
1/16/18	*		1,310	9,557	110,435	241,213	11,468,611	4,789,904	77,756,426	4,402		9,945
1/17/18	Technician	5	1,310	9,851	113,235	244,253	11,474,451	4,790,198	77,760,905	4,479		9,945
1/18/18	*		6,657	11,742	116,892	248,211	11,482,066	4,797,436	77,775,526	14,621		9,945
1/19/18	*		12,005	13,633	120,549	252,168	11,489,680	4,804,674	77,790,147	14,621		9,945
1/20/18	*		17,352	15,523	124,206	256,126	11,497,295	4,811,913	77,804,768	14,621		9,945
1/21/18	*		22,699	17,414	127,863	260,084	11,504,910	4,819,151	77,819,389	14,621		9,945
1/22/18	*		28,047	19,305	131,520	264,042	11,512,525	4,826,389	77,834,010	14,621		9,945
1/23/18	Technician	6	32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	11,930		9,945
1/24/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
1/25/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
1/26/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
1/27/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
1/28/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
1/29/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
1/30/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
1/31/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945

	Cumulative Groundwater Discharged by the GWETS to Date (gallons)									
Period	January	Quarter 1, 2018	Quarter 2, 2018	Quarter 3, 2018	Quarter 4, 2018	2018 to Date	April 1996 to Date			
Volume	132,727	132,727				132,727	77,845,940			

Cumulative Mass DRO Removed by the GWETS A (Ib)									
Period	January	Quarter 1 to Date	April 1996 to Date						
Mass	0.08	0.08	9,945.4						



## Legend / Notes:

- 1 = GWETS restarted (off-line since 12/28/17) following confirmation of compliance with copper discharge limit from late December 2017 sampling event.
- 2 = Pump in well GW-2 off-line since 12/11/17 pending replacement.
- 3 = Collected monthly influent, intermediate, and effluent samples for laboratory analysis, including copper sample as part of required accelerated permit compliance monitoring (see Table 1).
- 4 = Collected monthly acute toxicity testing sample for laboratory analysis as part of required accelerated permit compliance monitoring (see Table 1).
- 5 = Pump in well GW-2 brought back online following completion of replacement work.
- 6 = GWETS manually shutdown to conduct system/compound modification and upgrade work.

GWETS = Groundwater extraction and treatment system  $\mu g/L$  - Micrograms per liter

lb = Pounds

DRO = Diesel range organics

- A = Hydrocarbon removal is calculated using analytical laboratory result for DRO (if not detected, half the detection limit is used) from sample collected on: 1/11/18 (laboratory report attached).
- -- = Not applicable
- \* = Operational values interpolated from chart recorder data or previous monitoring event.

## TABLE 2B Groundwater Extraction and Treatment System Operations Summary - February

DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	GW-2 Totalizer Reading (gallons)	GW-13 Totalizer Reading (gallons)	GW-15 Totalizer Reading (gallons)	GW-16 Totalizer Reading (gallons)	Groundwater Extracted from North-East Area (gallons)	Groundwater Extracted from North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Groundwater Extracted and Treated Per Day (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed <sup>A</sup> (lb)
2/1/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/2/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/3/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/4/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/5/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/6/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/7/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/8/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/9/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/10/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/11/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/12/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/13/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/14/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/15/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/16/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/17/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/18/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/19/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/20/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/21/18	Off line		32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/22/18	Technician	1	32,410	20,848	134,504	267,271	11,518,738	4,832,295	77,845,940	0		9,945
2/23/18	*		35,685	22,264	137,129	270,103	11,524,195	4,836,986	77,855,935	9,995		9,945
2/24/18	*		38,960	23,680	139,753	272,935	11,529,651	4,841,678	77,865,930	9,995		9,945
2/25/18	*		42,236	25,097	142,378	275,767	11,535,108	4,846,369	77,875,925	9,995		9,945
2/26/18	Technician	2,3,4	44,931	26,262	144,538	278,097	11,539,598	4,850,230	77,884,150	8,225	130	9,945
2/27/18	*		47,521	27,922	147,097	280,723	11,544,783	4,854,480	77,893,845	9,695		9,945
2/28/18	Technician	5,6	49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	9,190		9,945

	Cumulative Groundwater Discharged by the GWETS (gallons)										
Period         February         Quarter 1, 2018         Quarter 2, 2018         Quarter 3, 2018         Quarter 4, 2018         2018 to Date         April 1996 to Date											
Volume	57,095	189,822	-		-	189,822	77,903,035				

Cumulative Mass DRO Removed by the GWETS A (Ib)									
Period	February	Quarter 1 to Date	April 1996 to Date						
Mass	0.05	0.13	9,945.4						



## Legend / Notes:

- 1 = GWETS restarted (off-line since 1/23/18) following completion of system/compound modification and upgrade work.
- 2 = Collected monthly process and intermediate samples for laboratory analysis.
- 3 = Collected quarterly effluent samples for laboratory analysis (see Table 1).
- 4 = Measured residual chlorine in the field using HACH Test Kit Model CN-70.
- 5 = Collected monthly acute toxicity testing sample for laboratory analysis as part of required accelerated permit compliance monitoring (see Table 1).
- 6 = GWETS manually shutdown upon departure as a precautionary measure pending confirmation of compliance with all discharge limits from the February 2018 sampling events.

GWETS = Groundwater extraction and treatment system  $\mu g/L$  - Micrograms per liter

lb = Pounds DRO = Diesel range organics

- A = Hydrocarbon removal is calculated using analytical laboratory result for DRO (if not detected, half the detection limit is used) from sample collected on: 2/26/18 (laboratory report attached).
- -- = Not applicable
- \* = Operational values interpolated from chart recorder data or previous monitoring event.

## **TABLE 2C**

## Groundwater Extraction and Treatment System Operations Summary - March

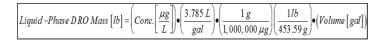
DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

Date	Data Source	Notes	GW-2 Totalizer Reading (gallons)	GW-13 Totalizer Reading (gallons)	GW-15 Totalizer Reading (gallons)	GW-16 Totalizer Reading (gallons)	Groundwater Extracted from North-East Area (gallons)	Groundwater Extracted from North-West Area (gallons)	NPDES Discharge Totalizer Reading (gallons)	Groundwater Extracted and Treated Per Day * (gallons)	Influent DRO (ug/L)	Cumulative DRO Removed <sup>A</sup> (lb)
3/1/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/2/18	Off line	1	49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/3/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/4/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/5/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/6/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/7/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/8/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/9/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/10/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/11/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/12/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/13/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/14/18	Off line		49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	0		9,945
3/15/18	Technician	2	49,976	29,495	149,522	283,212	11,549,697	4,858,508	77,903,035	1,736		9,945
3/16/18	Technician	3	51,664	30,306	150,748	284,696	11,552,407	4,861,007	77,903,035	3,473		9,945
3/17/18	Off line		51,664	30,306	150,748	284,696	11,552,407	4,861,007	77,903,035	0		9,945
3/18/18	Off line		51,664	30,306	150,748	284,696	11,552,407	4,861,007	77,903,035	0		9,945
3/19/18	Technician	4	51,664	30,306	150,748	284,696	11,552,407	4,861,007	77,903,035	4,185		9,945
3/20/18	Technician	5	54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	2,092	ND <60	9,945
3/21/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/22/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/23/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/24/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/25/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/26/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/27/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/28/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/29/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/30/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945
3/31/18	Off line		54,181	31,231	152,043	286,236	11,555,242	4,864,449	77,903,035	0		9,945

	Cumulative Groundwater Discharged by the GWETS (gallons)										
Period	March *	Quarter 1, 2018	Quarter 2, 2018	Quarter 3, 2018	Quarter 4, 2018	2018 to Date	April 1996 to Date				
Volume	0	189,822				189,822	77,903,035				

Cumulative Mass DRO Removed by the GWETS A (Ib)								
Period	March	Quarter 1 to Date	April 1996 to Date					
Mass	0.003	0.13	9,945.4					



## Legend / Notes:

- 1 = LARWQCB notified following laboratory confirmation that insufficient test species survival was achieved from the February 2018 acute toxicity analytical data (see Table 1).
- 2 = Pumps turned back on following deployment of a temporary treated groundwater storage tank and installation of a recirculation loop to allow for more thorough system flushing.
- 3 = Pumps manually shutdown with all stored water being recirculated over the weekend to continue with flushing internally prior to planned monthly sampling next week.
- 4 = Internal recirculation stopped and pumps turned back on to resume flushing efforts prior to sampling the next day.
- 5 = Collected regular monthly samples, as well as accelerated copper and acute toxicity testing samples, followed by manually shutting down pumps pending confirmation of compliance with all permit limits prior to resuming discharge.

GWETS = Groundwater extraction and treatment system

lb = Pounds DRO = Diesel range organics

μg/L - Micrograms per liter

- A = Hydrocarbon removal is calculated using analytical laboratory results for DRO (if not detected, half the detection limit is used) from sample collected on: 3/20/18 (laboratory report attached).
- -- = Not applicable
- \* = No actual discharge occurred during March 2018 as all extracted and treated groundwater was stored in a temporary holding tank pending confirmation of compliance with all discharge limits from the monthly sampling event.

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

Page 1 of 1 The Source Group, Inc.

## **APPENDIX A** Laboratory Analytical Reports and Chain-of-Custody Documents The Source Group, Inc.



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

Fax: (818) 998-7258

January 26, 2018

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

Re: DFSP Norwalk GWETS NPDES Monthly / 04-NDLA-013

A5332437 / 8A11021

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 01/11/18 16:14 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Viorel Vasile

**Operations Manager** 



Client:The Source Group, Inc. (SH)AA Project No: A5332437Project No:04-NDLA-013Date Received: 01/11/18Project Name:DFSP Norwalk GWETS NPDES MonthlyDate Reported: 01/26/18

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8260B TPHGASOLINEBTEXOXY					
Effluent	8A11021-01	Water	5	01/11/18 11:18	01/11/18 16:14
Arsenic Total EPA 200.7					
Effluent	8A11021-01	Water	5	01/11/18 11:18	01/11/18 16:14
Diesel Range Organics 8015M					
Effluent	8A11021-01	Water	5	01/11/18 11:18	01/11/18 16:14





Client:The Source Group, Inc. (SH)AA Project No: A5332437Project No:04-NDLA-013Date Received: 01/11/18Project Name:DFSP Norwalk GWETS NPDES MonthlyDate Reported: 01/26/18Method:TPHG/BTEX/Oxygenates by GC/MSUnits: ug/L

 Date Sampled:
 01/11/18

 Date Prepared:
 01/15/18

 Date Analyzed:
 01/15/18

 AA ID No:
 8A11021-01

 Client ID No:
 Effluent

 Matrix:
 Water

 Dilution Factor:
 1

Dilution Factor:	1	MDL	MRL
8260B TPHGASOLINEBTEXOXY	(EPA 8260B)		
tert-Butyl alcohol (TBA) Gasoline Range Organics	<7.0 <40	7.0 40	10 100
(GRO) Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	2.0

Surrogates		%REC Limits
4-Bromofluorobenzene	106%	70-140
Dibromofluoromethane	127%	70-140
Toluene-d8	100%	70-140





The Source Group, Inc. (SH) Client: AA Project No: A5332437 **Project No:** 04-NDLA-013 Date Received: 01/11/18 **Project Name: DFSP Norwalk GWETS NPDES Monthly** Date Reported: 01/26/18 Method: Diesel Range Organics by GC/FID

Units: ug/L

**Date Sampled:** 01/11/18 **Date Prepared:** 01/15/18 **Date Analyzed:** 01/15/18 AA ID No: 8A11021-01 Client ID No: Effluent Water Matrix:

**Dilution Factor:** MDL 1 MRL

Diesel Range Organics 8015M (EPA 8015M)

60 100 Diesel Range Organics as <60

Diesel

**Surrogates %REC Limits** o-Terphenyl 71% 50-150



Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DESP Norwalk GW/ETS NRDES Monthly

Date Received: 01/26/18

Project Name: DFSP Norwalk GWETS NPDES Monthly Date Reported: 01/26/18

**Method:** Total Metals by ICP Atomic Emission Spectroscopy

	Total Motalo by 101	THE PITTIE	olon opooli oooopy					
AA I.D. No.	Client I.D. No.	Sampled	Prepared Analyzed	Dilution	Result	Units	MDL	MRL
Arsenic Total	EPA 200.7 (EPA 200.7	<u>)</u>						
8A11021-01	Effluent	01/11/18	01/16/18 01/17/18	1	<0.0060	mg/L	0.006	0.007





Client:The Source Group, Inc. (SH)AA Project No: A5332437Project No:04-NDLA-013Date Received: 01/11/18Project Name:DFSP Norwalk GWETS NPDES MonthlyDate Reported: 01/26/18

Analyte	F Result	Reporting Limit	Units		Source Result		%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS	S - Qualit	y Control								
Batch B8A1516 - EPA 5030B		-								
Blank (B8A1516-BLK1)				Prepare	ed & Anal	yzed: 0	1/15/18			
tert-Amyl Methyl Ether (TAME)	< 0.30	0.30	ug/L							
Benzene	< 0.20	0.20	ug/L							
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L							
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L							
Ethylbenzene	< 0.20	0.20	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	< 0.40	0.40	ug/L							
Gasoline Range Organics (GRO)	<40	40	ug/L							
Methyl-tert-Butyl Ether (MTBE)	< 0.40	0.40	ug/L							
Toluene	< 0.30	0.30	ug/L							
o-Xylene	< 0.30	0.30	ug/L							
m,p-Xylenes	<0.40	0.40	ug/L							
Surrogate: 4-Bromofluorobenzene	53.4		ug/L	50		107	70-140			
Surrogate: Dibromofluoromethane			ug/L	50		123	70-140			
Surrogate: Toluene-d8	52.2		ug/L	50		104	70-140			
LCS (B8A1516-BS1)			ŭ	Prepare	ed: 01/15/	/18 Ana	alyzed: 01	1/16/18		
tert-Amyl Methyl Ether (TAME)	19.3	0.30	ug/L	20		96.6	70-130			
Benzene	20.1	0.20	ug/L	20		101	75-125			
tert-Butyl alcohol (TBA)	91.3	7.0	ug/L	100		91.3	70-130			
Diisopropyl ether (DIPE)	19.3	0.50	ug/L	20		96.7	70-130			
Ethylbenzene	22.4	0.20	ug/L	20		112	75-125			
Ethyl-tert-Butyl Ether (ETBE)	20.1	0.40	ug/L	20		100	70-130			
Gasoline Range Organics (GRO)	441	40	ug/L	500		88.2	70-130			
Methyl-tert-Butyl Ether (MTBE)	37.7	0.40	ug/L	40		94.2	70-135			
Toluene	21.6	0.30	ug/L	20		108	75-125			
o-Xylene	21.7	0.30	ug/L	20		108	75-125			
m,p-Xylenes	44.9	0.40	ug/L	40		112	70-130	_		
Surrogate: 4-Bromofluorobenzene	51.9		ug/L	50		104	70-140			
Surrogate: Dibromofluoromethane	50.9		ug/L	50		102	70-140			
Surrogate: Toluene-d8	52.1		ug/L	50		104	70-140			
Matrix Spike (B8A1516-MS1)	S	ource: 8A1	•		ed & Anal					





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Monthly

AA Project No: A5332437

Date Received: 01/11/18

Date Reported: 01/26/18

Analyte	Result	Reporting Limit	Units		Source Result %REC	%REC Limits	RPD	RPD Limit	Notes
PHG/BTEX/Oxygenates by GC/MS	S - Quali	ity Control							
Batch B8A1516 - EPA 5030B		-							
Matrix Spike (B8A1516-MS1) Cor	ntinued	Source: 8A1	1016-11	Prepare	ed & Analyzed: 0	1/15/18			
tert-Amyl Methyl Ether (TAME)	25.4	0.30	ug/L	20	127	70-130			
Benzene	21.4	0.20	ug/L	20	107	70-130			
tert-Butyl alcohol (TBA)	86.8	7.0	ug/L	100	86.8	70-130			
Diisopropyl ether (DIPE)	21.2	0.50	ug/L	20	106	70-130			
Ethylbenzene	22.0	0.20	ug/L	20	110	70-130			
Ethyl-tert-Butyl Ether (ETBE)	24.4	0.40	ug/L	20	122	70-130			
Methyl-tert-Butyl Ether (MTBE)	40.3	0.40	ug/L	40	101	70-130			
Toluene	21.8	0.30	ug/L	20	109	70-130			
o-Xylene	20.9	0.30	ug/L	20	104	70-130			
m,p-Xylenes	43.8	0.40	ug/L	40	110	70-130			
Surrogate: 4-Bromofluorobenzene	50.6		ug/L	50	101	70-140			
Surrogate: Dibromofluoromethane	51.4		ug/L	50	103	70-140			
Surrogate: Toluene-d8	50.2		ug/L	50	100	70-140			
Matrix Spike Dup (B8A1516-MSD	1)	Source: 8A1	1016-11	Prepare	ed & Analyzed: 0	1/15/18			
tert-Amyl Methyl Ether (TAME)	23.5	0.30	ug/L	20	118	70-130	7.53	30	
Benzene	21.2	0.20	ug/L	20	106	70-130	1.18	30	
tert-Butyl alcohol (TBA)	83.1	7.0	ug/L	100	83.1	70-130	4.32	30	
Diisopropyl ether (DIPE)	21.4	0.50	ug/L	20	107	70-130	0.657	30	
Ethylbenzene	21.9	0.20	ug/L	20	109	70-130	0.547	30	
Ethyl-tert-Butyl Ether (ETBE)	22.9	0.40	ug/L	20	114	70-130	6.38	30	
Methyl-tert-Butyl Ether (MTBE)	38.8	0.40	ug/L	40	97.1	70-130	3.64	30	
Toluene	21.8	0.30	ug/L	20	109	70-130	0.138	30	
o-Xylene	21.1	0.30	ug/L	20	106	70-130	1.14	30	
m,p-Xylenes	43.4	0.40	ug/L	40	109	70-130	0.894	30	
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50	100	70-140			
Surrogate: Dibromofluoromethane	52.0		ug/L	50	104	70-140			
Surrogate: Toluene-d8	50.8		ug/L	50	102	70-140			
Diesel Range Organics by GC/FID Batch B8A1512 - EPA 3510C	- Quality	y Control							

W

Blank (B8A1512-BLK1)

Viorel Vasile Operations Manager Prepared & Analyzed: 01/15/18



Client:The Source Group, Inc. (SH)AA Project No: A5332437Project No:04-NDLA-013Date Received: 01/11/18Project Name:DFSP Norwalk GWETS NPDES MonthlyDate Reported: 01/26/18

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result %	REC	%REC Limits	RPD	RPD Limit	Notes
Diesel Range Organics by GC/FID	- Quality	Control								
Batch B8A1512 - EPA 3510C										
Blank (B8A1512-BLK1) Continue	ed			Prepare	d & Analyz	ed: 0	1/15/18			
Diesel Range Organics as Diesel	<60	60	ug/L							
Surrogate: o-Terphenyl	36.4		ug/L	40	9	91.0	50-150			
LCS (B8A1512-BS1)				Prepare	d & Analyz	ed: 0	1/15/18			
Diesel Range Organics as Diesel	715	60	ug/L	800	8	39.4	75-125		30	
Surrogate: o-Terphenyl	43.7		ug/L	40		109	50-150			
LCS Dup (B8A1512-BSD1)				Prepare	d & Analyz	ed: 0	1/15/18			
Diesel Range Organics as Diesel	839	60	ug/L	800	•	105	75-125	16.0	30	
Surrogate: o-Terphenyl	46.0		ug/L	40		115	50-150			
<b>Total Metals by ICP Atomic Emiss</b>	ion Spec	troscopy -	Quality (	Control						
Batch B8A1637 - EPA 200.7										
Blank (B8A1637-BLK1)				Prepare	ed: 01/16/18	3 Ana	ılyzed: 01	/17/18		
Arsenic	<0.0060	0.0060	mg/L							
LCS (B8A1637-BS1)				•	ed: 01/16/18			/17/18		
Arsenic	1.12	0.0060	mg/L	1.0			80-120		20	
LCS Dup (B8A1637-BSD1)					ed: 01/16/18					
Arsenic	1.14	0.0060	mg/L	1.0				1.60	20	
Matrix Spike (B8A1637-MS1)		Source: 8A1		•			ılyzed: 01	/17/18		
Arsenic	1.02		mg/L	1.0			75-125		20	
Matrix Spike Dup (B8A1637-MSD		Source: 8A1	1023-04	Prepare			ılyzed: 01	/17/18		
Arsenic	1.11	0.0060	mg/L	1.0	0.0197	109	75-125	7.79	20	





Client: The Source Group, Inc. (SH)

**Project No:** 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Monthly

AA Project No: A5332437 Date Received: 01/11/18 Date Reported: 01/26/18

**Special Notes** 





## AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311 Tel: 818-998-5547 FAX: 818-998-7258

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ANALYTICS		Tel: 818	Tel: 818-998-5547	7 FAX: 818-998-7258	8-998-7	258							Page	/ of /
Client: APEX/The Source Group, Inc.	ce Group, Inc.	Project Na	Name / No.:	DFSP - Norwalk / 091-NDLA/ Monthly NPDES	orwalk	/ 091-1	NDLA	Monthly	NPDES	Samp	Sampler's Name:		Glenn A	Androska
Project Manager: Neil Irish	Ų.	Site	Site Address:	15306 Norwalk Blvd	rwalk	glvd			Sa	mpler's	Sampler's Signature:		_	androle
Phone: 562-597-1055			City:	Norwalk							P.O. No.		1 1	
Fax: 569-597-1070		St	State & Zip:	CA 90650	0						Quote No.:	•:	·	
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Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.



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

January 22, 2018

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

Re: DFSP Norwalk / 04-NDLA-013

A5332436 / 8A11022

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 01/11/18 16:14 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Viorel Vasile

**Operations Manager** 



Client:The Source Group, Inc. (SH)AA Project No: A5332436Project No:04-NDLA-013Date Received: 01/11/18Project Name:DFSP NorwalkDate Reported: 01/22/18

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
Copper Dissolved EPA 200.7					
Effluent	8A11022-01	Water	5	01/11/18 11:18	01/11/18 16:14
Copper Total EPA 200.7					
Effluent	8A11022-01	Water	5	01/11/18 11:18	01/11/18 16:14





Client:The Source Group, Inc. (SH)AA Project No: A5332436Project No:04-NDLA-013Date Received: 01/11/18Project Name:DFSP NorwalkDate Reported: 01/22/18

Method: Dissolved Metals by ICP Atomic Emission Spectroscopy

wethou.	Dissolved Metals	by ioi Atomic	Emission opecitoscopy				
AA I.D. No.	Client I.D. No.	Sampled	Prepared Analyzed Dilu	tion Result	Units	MDL	MRL
Copper Disso	olved EPA 200.7 (EP	A 200.7)					
8A11022-01	Effluent	01/11/18	01/12/18 01/15/18 1	< 0.0070	ma/L	0.007	0.007





Client:The Source Group, Inc. (SH)AA Project No: A5332436Project No:04-NDLA-013Date Received: 01/11/18Project Name:DFSP NorwalkDate Reported: 01/22/18

Method: Total Metals by ICP Atomic Emission Spectroscopy

wethou:	Total Metals by IC	P Atomic Emis	ssion Spectroscopy					
AA I.D. No.	Client I.D. No.	Sampled	Prepared Analyzed D	Dilution	Result	Units	MDL	MRL
Copper Total	EPA 200.7 (EPA 200	.7)						
8A11022-01	Effluent	01/11/18	01/15/18 01/17/18	1	<0.0070	ma/l	0.007	0.007





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013
Project Name: DFSP Norwalk

AA Project No: A5332436

Date Received: 01/11/18

Date Reported: 01/22/18

Analyte	Result	Reporting Limit	Units		Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Dissolved Metals by ICP Atomic I	Emission		ppy - Qua	ality Cor	ntrol					
Batch B8A1515 - EPA 200.7		-		-						
Blank (B8A1515-BLK1)				Prepare	ed: 01/12/	/18 An	alyzed: 0	1/15/18		
Copper	<0.0070	0.0070	mg/L							
LCS (B8A1515-BS1)				Prepare	ed: 01/12/	/18 An	alyzed: 01	1/15/18		
Copper	1.07	0.0070	mg/L	1.0		107	80-120		20	
LCS Dup (B8A1515-BSD1)				Prepare	ed: 01/12/	/18 Ana	alyzed: 01	1/15/18		
Copper	1.05	0.0070	mg/L	1.0		105	80-120	2.26	20	
Matrix Spike (B8A1515-MS1)	5	Source: 8A1	11022-01	Prepare	ed: 01/12/	/18 Ana	alyzed: 01	1/15/18		
Copper	1.08	0.0070	mg/L	1.0	<0.0070	108	75-125		20	
Matrix Spike Dup (B8A1515-MS	D1) S	Source: 8A1	11022-01	Prepare	ed: 01/12/	/18 Ana	alyzed: 01	1/15/18		
Copper	1.10	0.0070	mg/L	1.0	< 0.0070	110	75-125	1.74	20	
<b>Total Metals by ICP Atomic Emiss</b>	sion Spec	troscopy -	Quality (	Control						
Batch B8A1517 - EPA 200.7										
Blank (B8A1517-BLK1)				Prepare	ed: 01/15/	/18 Ana	alyzed: 0	1/17/18		
Copper	<0.0070	0.0070	mg/L							
LCS (B8A1517-BS1)				Prepare	ed: 01/15/	/18 An	alyzed: 01	1/17/18		
Copper	1.10	0.0070	mg/L	1.0		110	80-120		20	
LCS Dup (B8A1517-BSD1)				Prepare	ed: 01/15/	/18 An	alyzed: 01	1/17/18		
Copper	1.10	0.0070	mg/L	1.0		110	80-120	0.545	20	
Duplicate (B8A1517-DUP1)	\$	Source: 8A1	11022-01	Prepare	ed: 01/15/	/18 Ana	alyzed: 01	1/17/18		
Copper	<0.0070	0.0070	mg/L		<0.0070				30	





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013
Project Name: DFSP Norwalk

AA Project No: A5332436 Date Received: 01/11/18 Date Reported: 01/22/18

## **Special Notes**



## AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

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12457

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.

Separation of the second secon



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

Fax: (818) 998-7258

January 22, 2018

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

Re: DFSP Norwalk GWETS NPDES Annually / 04-NDLA-013

A5332443 / 8A15008

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 01/15/18 15:30 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Viorel Vasile

Operations Manager

## LABORATORY REPORT

Date:

January 20, 2018

Client:

American Analytics 9765 Eton Avenue Chatsworth, CA 91311

Attn: Viorel Vasile



"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107 Ventura, CA 93003

(805) 650- 0546 FAX (805) 650-0756

CA ELAP Cert. No.: 1775

**Laboratory No.:** 

A-18011604-001

Project No.:

A5332443

Sample ID.:

8A15008-01

**Sample Control:** 

The sample was received by ATL chilled and with the chain of custody record

attached.

Date Sampled:

01/15/18

Date Received:

01/16/18

Temp. Received:

5.9°C

Chlorine (TRC):

0.0 mg/l

Date Tested:

01/16/18 to 01/20/18

Sample Analysis:

The following analyses were performed on your sample:

Fathead Minnow 96hr Percent Survival Bioassay (EPA-821-R-02-012 Method 2000.0);

Attached are the test data generated from the analysis of your sample. All testing was conducted under the direct supervision of Joseph A. LeMay. Daily test readings were

taken by Joseph A. LeMay (initials: JAL) and Jacob LeMay (initials: J).

**Result Summary:** 

Sample ID.

Results

8A15008-01

95% Survival (TUa = 0.41)

**Quality Control:** 

Reviewed and approved by:

Joseph A. LeMay Laboratory Director

## FATHEAD MINNOW PERCENT SURVIVAL TEST EPA Method 2000.0



Lab No.: A-18011604-001

Client/ID: American Analytics 8A15008-01

Start Date: 01/16/2018

## **TEST SUMMARY**

Species: Pimephales promelas.

Age: 14 (1-14) days. Regulations: NPDES.

Test solution volume: 250 ml. Feeding: prior to renewal at 48 hrs.

Number of replicates: 4.

Control water: Moderately hard reconstituted water.

Photoperiod: 16/8 hrs light/dark.

Source: In-laboratory Culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012. Endpoints: Percent Survival at 96 hrs.

Test chamber: 600 ml beakers. Temperature: 20 +/- 1°C.

Number of fish per chamber: 10.

QA/QC No.: RT-180109

## **TEST DATA**

		0.0	DO.			# D	ead		Analyst & Time
		°C	DO	pН	Α	В	С	D	of Readings
INITTIAL	Control	که. ۲	8.1	8.0	0	0	0	0	2 1430
INITIAL	100%	20.1	7.5	7,2	0	0	0	$\circ$	1-16-18
24.11.	Control	20.0	8.0	7.8	0	0	0	0	2 1400
24 Hr	100%	ζο. ο	7-6	7.5	0	0	0	0	1-17-18
48 Hr	Control	20.1	8-1	7.6	0	6	0	0	2 146
40 ПГ	100%	14.4	7. 7	7.2	0	0	0	6	1-18-18
D 1	Control	20.1	8.5	7.9	O	0	0	0	2 14w
Renewal	100%	20.0	8,6	7. 4	0	0	Q	0	1-18-18
72.11	Control	₹0. 0	810	8.0	O	0	0	0	2 1400
72 Hr	100%	20.0	8.1	7-6	O	0	0	0	1-19-18
06 11.	Control	19.9	5. (	80	O	0	0	0	m
96 Hr	100%	19.4	8. y	7. 7	L	0	1	0	1-20-18 1430

## Comments:

Sample as received: Chlorine: mg/l; Temp: C; DO: Y mg/l; pH: 7.2; Alkalinity: Mg/l; Hardness: Mg/l; Conductivity: 1055 umho; NH<sub>3</sub>-N: Mg/l. Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? No.

Control: Alkalinity: 60 mg/l; Hardness: 90 mg/l.; Conductivity: 30 umho.

Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes / Wo.

Original sample used for renewal kept at 0-6°C with minimal headspace.

Dissolved Oxygen (DO) readings in mg/l O<sub>2</sub>.

## RESULTS

# AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

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Tel: 818-998-5547 FAX: 818-998-7258

A.A. COC No.: 3	70050480	Page / of /
	•	

Sampler's Name:	Sampler's Signature:	P.O. No.: 30110	Quote No.:	ANALYSIS REQUESTED (Test Name)		Special		96ke / Sunday	James Mismo	ERA 821-R-07-012		Thenkyo					e lime	Time Received by	Time Bec	•••••
8005) 8 K 3 S 3 4 4 3 / 8 R 1 500 8	Site Address:	City:	State & Zip:		Doil	Days (Standard TAT)	Time Sample of Of Please enter the TAT Turnaround Codes ** below	1200 Wester 1 x										Reinquished by Date	Relinquished by Date	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>
Client: AMERICAN ANALTNG Project Name / No.:		Phone:	Fax:	TAT Turnaround Codes **	(1) = Same Day Rush  (2) = 24 Hour Rush  (5) = 5 Day Rush	48 Hour Rush X =	Client I.D. A.A. I.D. Date	8K15008-01								For I aboratory   Isa		2,6.5		A.A. Project No.:

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.



## REFERENCE TOXICANT DATA

## FATHEAD MINNOW ACUTE Reference Toxicant - SDS



## QA/QC Batch No.: RT-180109

## **TEST SUMMARY**

Species: Pimephales promelas.

Age: <u>¶</u> days old. Regulations: NPDES.

Test chamber volume: 250 ml. Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C. Number of replicates: 2. Dilution water: MHSF. Source: In-lab culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012.

Endpoints: LC50 at 96 hrs. Test chamber: 600 ml beakers.

Aeration: None.

Number of organisms per chamber: 10.

Photoperiod: 16/8 hrs light/dark.

## **TEST DATA**

		INITIAL	,	24 Hr 48 Hr									
Date/Time:	1-9-	18	1500	1-10	7-18		1	430	1-11	-18		14	115
Analyst:	•	2				2		2					
	0.0	DO.		»C	D.O.		# Dead		°C	DO	рН	# D	ead
	°C	DO	pН	°C	DO	pН	Α	В		00	pri	Α	В
Control	20.1	8.5	8./	17.9	8.3	7. 7	0	6	19.9	8.4	7.9	0	O
1.0 mg/l	20-1	g. 4	8./	19.8	8.1	7.7	0	0	17.8	8.3	7-9	U	0
2.0 mg/l	20.2	8.5	8,1	128	8.1	7-7	0	O	14.8	81/	7-8	$\mathcal{O}$	0
4.0 mg/l	20.1	8.4	8.1	19.7	8.2	7.7	0	C	19.8	8.2	7-9	1	O
8.0 mg/l	20.1	8.5	8.1	19.7	8.1	7.7	10	(0	_		\	1	^
16.0 mg/l	20.1	8.4	8.1	19.7	7. 9	7. 7	10	10	_	_	-	-	4

	R	ENEWA	L.		72 Hr					96 Hr					
Date/Time:	1-11	-18	1415	1-13	1-12-18 14W					-18		15m			
Analyst:		7		2					2						
	96	DO	11	°C	DO	11	# Dead		"C	DO	pН	# Dead			
	°C	DO	pН		DO	рН	Α	В		DO	рн 	A	В		
Control	19.9	8,6	8.0	20-0	8.5	7-8	0	0	20.1	7.4	8-0	U	U		
1.0 mg/l	11-9	8,1	810	20.0	8.5	28	6	0	20-0	7.4	8.0	0	0		
2.0 mg/l	19.8	8,7	8.0	ે.₀	8.1	7-8	O	0	20.0	8.0	810	$\mathcal{C}$	S		
4.0 mg/l	14.9	8,7	8.0	19.8	9.1	7-8	O	0	20-0	8.0	8.1	0	0		
8.0 mg/l	-	1	,	,	~	-	1	,	_			_			
16.0 mg/l	<u>ب</u>	-	_	-	-	_	_	,	_	-	_	1	_		

Comments: Control: Alkalinity: 57 mg/l; Hardness: 40 mg/l; Conductivity: 30/ umho.

SDS: Alkalinity: 51 mg/l; Hardness: 89 mg/l; Conductivity: 312 umho.

Dissolved Oxygen (DO) readings in mg/l O<sub>2</sub>.

Concentration-response relationship acceptable? (see attached computer analysis):

(response curve normal)

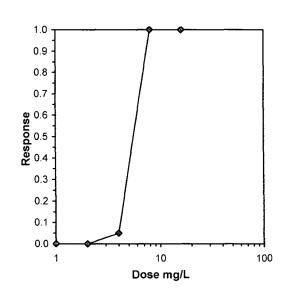
No (dose interrupted indicated or non-normal)

	_			Acute Fish Test-96	Hr Survival	
Start Date:	1/9/2018	5:00	Test ID:	RT180109f	Sample ID:	REF-Ref Toxicant
End Date:	1/13/2018	15:00	Lab ID:	<b>CAATL-Aquatic Testing Labs</b>	Sample Type:	SDS-Sodium dodecyl sulfate
Sample Date:	1/9/2018		Protocol:	EPAAW02-EPA/821/R-02-01	Test Species:	PP-Pimephales promelas
Comments:						
Conc-mg/L	1	2				
D-Control	1.0000	1.0000				
1	1.0000	1.0000				
2	1.0000	1.0000				
4	0.9000	1.0000				
8	0.0000	0.0000				
16	0.0000	0.0000				

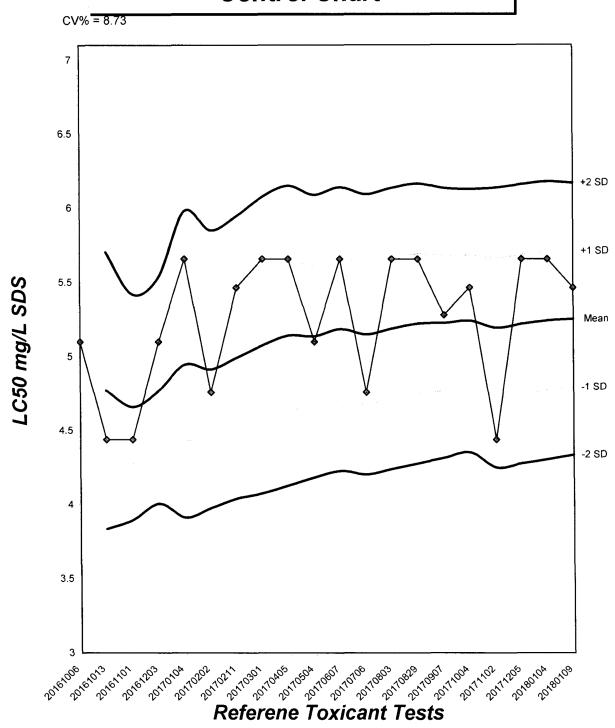
			Tra	ansform:	Arcsin Sc	uare Roof	t		Number	Total
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	<del>-</del>	Resp	Number
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2		0	20
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2		0	20
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2		0	20
4	0.9500	0.9500	1.3305	1.2490	1.4120	8.661	2		1	20
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2		20	20
16	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2		20	20

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				
Equality of variance cannot be confirmed				

Equality of varie	arioo oariir	00 00 00111	TITIOU	
				Trimmed Spearman-Karber
Trim Level	EC50	95%	CL	
0.0%	5.4642	5.1072	5.8461	
5.0%	5.5546	5.3505	5.7664	
10.0%	5.5546	5.3505	5.7664	1.0 —
20.0%	5.5546	5.3505	5.7664	1
Auto-0.0%	5 4642	5 1072	5 8461	0.9 -



## Fathead Minnow Acute Laboratory Control Chart



## **TEST ORGANISM LOG**



## FATHEAD MINNOW - LARVAL (Pimephales promelas)

QA/QC BATCH NO.: RT-180109
SOURCE: In-Lab Culture
DATE HATCHED:
APPROXIMATE QUANTITY: 400
GENERAL APPEARANCE:
# MORTALITIES 48 HOURS PRIOR TO TO USE IN TESTING:
DATE USED IN LAB: 1/9/18
AVERAGE FISH WEIGHT: gm
LOADING LIMITS: 0.65 gm/liter @ 20°C, 0.40 gm/liter @ 25°C  Approximately 1000 fish per 10 liters limit if held overnight for acclimation without filtration @ 20°C for fish with a mean weight of 0.006 gm.  Approximately 650 fish per 10 liters limit if held overnight for acclimation without filtration @ 25°C for fish with a mean weight of 0.006 gm.
200 ml test solution volume = 0.013 gm mean fish weight limit @ 20°C; 0.008 @ 25°C 250 ml test solution volume = 0.016 gm mean fish weight limit @ 20°C; 0.010 @ 25°C
ACCLIMATION WATER QUALITY:
Temp.: <b>20.1</b> °C pH: <b>8.1</b> Ammonia: — mg/l NH <sub>3</sub> -N
DO: <u>8-5</u> mg/l Alkalinity: <u>57 mg/l</u> Hardness: <u>40</u> mg/l
READINGS RECORDED BY: DATE: DATE:

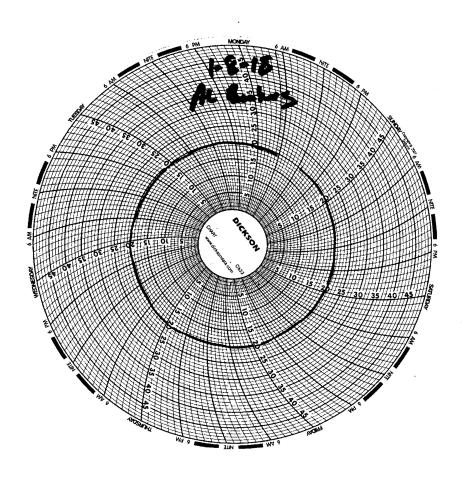


# Test Temperature Chart

Test No: RT-180109

Date Tested: 01/09/18 to 01/13/18

Acceptable Range: 20 +/- 1°C



#### AMERICAN ANALYTICS

# AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311 Tel: 818-998-5547 FAX: 818-998-7258

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Report J-Flags Instructions Indestry Glenn Androsca 40 CFR 136 \*\* below Copper Sampler's Name: Sampler's Signature: ANALYSIS REQUESTED (Test Name) Quote No.: P.O. No. Residual Shlorine, sapying Please enter the TAT Turnaround Codes Project Name / No.: DFSP - Norwalk / 091-NDLA / Annual NPDES ABT/BBTM/gH9T 808S8 15306 Norwalk Bivd PHd 8016N Cont ું હ CA 90650 Sample Matrix = 10 Working Days (Standard TAT) Norwalk Water Site Address: <u>خ</u> ق State & Zip: Time 1200 (4) = 72 Hour Rush 5 = 5 Day Rush 1-15-13 Date TAT Turnaround Codes \*\* ō SCS XX (1) = Same Day Rush(2) = 24 Hour RushThe Source Group, Inc. 48 Hour Rush Project Manager: Neil Irish 562-597-1055 569-597-1070 \_\_\_\_ (60) Client I.D. Effluent Phone: Clent: Fax:

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.

Received by

Date

Relinquished by

Received by

Received by

Time \$

1-15-17

Relinquished by Oxygen

Relinguished by

AS332443/8415008



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

Fax: (818) 998-7258

March 19, 2018

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

Re: DFSP Norwalk GWETS NPDES Quarterly / 04-NDLA-013 A5332481 / 8B26015

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 02/26/18 14:35 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Viorel Vasile

**Operations Manager** 



Client:The Source Group, Inc. (SH)AA Project No: A5332481Project No:04-NDLA-013Date Received: 02/26/18Project Name:DFSP Norwalk GWETS NPDES QuarterlyDate Reported: 03/19/18

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8260B TPHGASOLINEBTEXOXY					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
Effluent-Dup	8B26015-02	Water	5	02/26/18 09:26	02/26/18 14:35
Arsenic Total EPA 200.7					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
BOD SM5210B					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
Copper Dissolved EPA 200.7					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
Copper Total EPA 200.7					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
Diesel Range Organics 8015M					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
Effluent-Dup	8B26015-02	Water	5	02/26/18 09:26	02/26/18 14:35
HEM Oil and Grease 1664					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35

A



Client:The Source Group, Inc. (SH)AA Project No: A5332481Project No:04-NDLA-013Date Received: 02/26/18Project Name:DFSP Norwalk GWETS NPDES QuarterlyDate Reported: 03/19/18

		,		2010 11000	
Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
MBAS SM5540C					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
<u>Phenols 420.1</u>					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
SS SM2540F					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
Sulfide SM4500-S=D					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
TDS SM2540C					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
TSS SM2540D					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35
Turbidity 180.1					
Effluent	8B26015-01	Water	5	02/26/18 09:25	02/26/18 14:35





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Quarterly

AA Project No: A5332481

Date Received: 02/26/18

Date Reported: 03/19/18

Method: General Chemistry Analyses

Method:	General Chemistry	/ Analyses							
AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MDL	MRL
BOD SM5210E	3 (SM5210B) *								
8B26015-01	Effluent	02/26/18	02/28/18	03/05/18	1	<5.0	mg/L	5	5
HEM Oil and O	Grease 1664 (EPA 16	<u> </u>							
8B26015-01	Effluent	02/26/18	03/07/18	03/07/18	1	<5.0	mg/L	5	10
MBAS SM5540	OC (SM5540C) *								
8B26015-01	Effluent	02/26/18	02/27/18	02/27/18	1	<0.050	mg/L	0.05	0.05
Phenols 420.1	(EPA 420.1) *								
8B26015-01	Effluent	02/26/18	02/28/18	02/28/18	1	<0.15	mg/L	0.15	0.3
SS SM2540F (	SM2540F)								
8B26015-01	Effluent	02/26/18	02/26/18	02/26/18	1	<0.100	mL/L	0.1	0.1
Sulfide SM450	0-S=D (SM4500-S=I	<u>)</u>							
8B26015-01	Effluent	02/26/18	03/02/18	03/02/18	1	<0.027	mg/L	0.027	0.05
TDS SM2540C	(SM2540C)								
8B26015-01	Effluent	02/26/18	03/02/18	03/02/18	1	960	mg/L	6.2	10
TSS SM2540D	(SM2540D)								
8B26015-01	Effluent	02/26/18	02/28/18	02/28/18	1	<5.0	mg/L	5	10
Turbidity 180.	1 (EPA 180.1)								
8B26015-01	Effluent	02/26/18	02/26/18	02/26/18	1	4.7	NTU	0.168	1





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Quarterly

Method: TPHG/BTEX/Oxygenates by GC/MS

AA Project No: A5332481

Date Received: 02/26/18

Date Reported: 03/19/18

Units: ug/L

**Date Sampled:** 02/26/18 02/26/18 **Date Prepared:** 03/06/18 03/06/18 **Date Analyzed:** 03/06/18 03/06/18 AA ID No: 8B26015-01 8B26015-02 **Client ID No:** Effluent Effluent-Dup Water Matrix: Water **Dilution Factor:** 1 1 MDL MRL 8260B TPHGASOLINEBTEXOXY (EPA 8260B) tert-Amyl Methyl Ether (TAME) < 0.30 0.30 2.0 < 0.30 Benzene < 0.20 < 0.20 0.20 0.50 tert-Butyl alcohol (TBA) < 7.0 < 7.0 7.0 10 Diisopropyl ether (DIPE) < 0.50 < 0.50 0.50 2.0 Ethylbenzene < 0.20 0.20 0.50 < 0.20 Ethyl-tert-Butyl Ether (ETBE) < 0.40 < 0.40 0.40 2.0 Gasoline Range Organics <40 40 100 <40 (GRO) Methyl-tert-Butyl Ether (MTBE) < 0.40 < 0.40 0.40 2.0 Toluene < 0.30 0.30 0.50 < 0.30 o-Xylene < 0.30 < 0.30 0.30 0.50 m,p-Xylenes < 0.40 < 0.40 0.40 1.0

<u>Surrogates</u>			%REC Limits
4-Bromofluorobenzene	110%	108%	70-140
Dibromofluoromethane	108%	111%	70-140
Toluene-d8	104%	103%	70-140

M



The Source Group, Inc. (SH) Client: AA Project No: A5332481 **Project No:** 04-NDLA-013 Date Received: 02/26/18 **Project Name: DFSP Norwalk GWETS NPDES Quarterly** Date Reported: 03/19/18 Method: Diesel Range Organics by GC/FID

Units: ug/L

**Date Sampled:** 02/26/18 02/26/18 **Date Prepared:** 03/02/18 03/02/18 **Date Analyzed:** 03/02/18 03/02/18 AA ID No: 8B26015-01 8B26015-02 **Client ID No:** Effluent Effluent-Dup Water Water Matrix:

**Dilution Factor:** 1 1 MRL

Diesel Range Organics 8015M (EPA 8015M)

<60 100 Diesel Range Organics as <60

Diesel

**Surrogates** %REC Limits

71% o-Terphenyl 61% 50-150



Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Date Received: 02/26/18

Project No: Description of the Source of

Project Name: DFSP Norwalk GWETS NPDES Quarterly Date Reported: 03/19/18

**Method:** Dissolved Metals by ICP Atomic Emission Spectroscopy

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed [	Dilution	Result	Units	MDL	MRL
Copper Dissol	ved EPA 200.7 (EPA	A 200.7)							
8B26015-01	Effluent	02/26/18	03/02/18	03/02/18	1	<0.0070	mg/L	0.007	0.007





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Quarterly

AA Project No: A5332481

Date Received: 02/26/18

Date Reported: 03/19/18

Method: Total Metals by ICP Atomic Emission Spectroscopy

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed [	Dilution	Result	Units	MDL	MRL
Arsenic Total	EPA 200.7 (EPA 200.7)	<u>.</u>							
8B26015-01	Effluent	02/26/18	03/02/18	03/02/18	1	<0.0060	mg/L	0.006	0.007
Copper Total E	EPA 200.7 (EPA 200.7)	_							
8B26015-01	Effluent	02/26/18	03/02/18	03/02/18	1	<0.0070	mg/L	0.007	0.007





Client:The Source Group, Inc. (SH)AA Project No: A5332481Project No:04-NDLA-013Date Received: 02/26/18Project Name:DFSP Norwalk GWETS NPDES QuarterlyDate Reported: 03/19/18

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
General Chemistry Analyses - Qua	ality Cont	trol								
Batch B8B2734 - NO PREP										
Blank (B8B2734-BLK1)				Prepare	ed & Ana	lyzed: 0	2/26/18			
Total Settleable Solids	<0.100	0.100	mL/L							
Batch B8B2735 - NO PREP										
Blank (B8B2735-BLK1)				Prepare	ed & Ana	lyzed: 0	2/26/18			
Turbidity	<0.17	0.17	NTU							
Duplicate (B8B2735-DUP1)		Source: 8B2		Prepare			alyzed: 03			
Turbidity	4.90	0.17	NTU		4.70			4.17	15	
Batch B8C0110 - NO PREP										
Blank (B8C0110-BLK1)				Prepare	d & Ana	lyzed: 0	2/28/18			
Total Suspended Solids	<5.0	5.0	mg/L							
LCS (B8C0110-BS1)				•	ed & Ana	•				
Total Suspended Solids	45.0	5.0	mg/L	50			80-120			
LCS Dup (B8C0110-BSD1)				•	d & Ana	•				
Total Suspended Solids	45.0	5.0	mg/L	50		90.0	80-120	0.00	20	
Duplicate (B8C0110-DUP1)		Source: 8B2	21010-01	Prepare		•	2/28/18			
Total Suspended Solids	468	50	mg/L		448			4.37	20	
Batch B8C0532 - NO PREP										
Blank (B8C0532-BLK1)				Prepare	d & Ana	lyzed: 0	3/02/18			
Total Dissolved Solids	<6.2	6.2	mg/L							
LCS (B8C0532-BS1)				Prepare	ed & Ana					
Total Dissolved Solids	550	6.2	mg/L	500		110	80-120			
LCS Dup (B8C0532-BSD1)				Prepare	ed & Ana	•	3/02/18			
Total Dissolved Solids	470	6.2	mg/L	500		94.0	80-120	15.7	25	
Duplicate (B8C0532-DUP1)	S	Source: 8B2	8031-01	Prepare	ed & Ana	lyzed: 0	3/02/18			
Total Dissolved Solids	2430	62	mg/L		2370			2.50	20	
Batch B8C0734 - NO PREP										
Blank (B8C0734-BLK1)				Prepare	ed & Ana	lyzed: 0	3/07/18			
HEM (Oil and Grease)	<5.0	5.0	mg/L							
LCS (B8C0734-BS1)				Prepare	d & Ana	lyzed: 0	3/07/18			
HEM (Oil and Grease)	36.5	5.0	mg/L	40		91.2	75-125			

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Client:The Source Group, Inc. (SH)AA Project No: A5332481Project No:04-NDLA-013Date Received: 02/26/18Project Name:DFSP Norwalk GWETS NPDES QuarterlyDate Reported: 03/19/18

		Reporting		Snike	Source		%REC		RPD	
Analyte	Result	Limit	Units		Result			RPD	Limit	Notes
General Chemistry Analyses - Qua	ality Con	trol	_			_			_	
Batch B8C0734 - NO PREP										
LCS Dup (B8C0734-BSD1)				Prepare	ed & Anal	yzed: 0	3/07/18			
HEM (Oil and Grease)	35.2	5.0	mg/L	40		88.0	75-125	3.63	30	
Batch B8C0743 - NO PREP										
Blank (B8C0743-BLK1)				Prepare	ed & Anal	yzed: 0	3/02/18			
Sulfide	<0.027	0.027	mg/L							
LCS (B8C0743-BS1)				Prepare	ed & Anal	yzed: 0	3/02/18			
Sulfide	0.504	0.027	mg/L	0.50		101	80-120		25	
LCS Dup (B8C0743-BSD1)				Prepare	ed & Anal	yzed: 0	3/02/18			
Sulfide	0.509	0.027	mg/L	0.50		102	80-120	0.987	25	
Duplicate (B8C0743-DUP1)	5	Source: 8B2	26011-01	Prepare	ed & Anal	yzed: 0	3/02/18			
Sulfide	<0.027	0.027	mg/L						25	
Matrix Spike (B8C0743-MS1)	5	Source: 8C0	01010-01	Prepare	ed & Anal	yzed: 0	3/02/18			
Sulfide	0.527	0.027	mg/L	0.50		105	75-125		25	
Matrix Spike Dup (B8C0743-MSD	)1) 5	Source: 8C0	01010-01	Prepare	ed & Anal	yzed: 0	3/02/18			
Sulfide	0.483	0.027	mg/L	0.50		96.6	75-125	8.71	25	
Batch B8C1919 - *** DEFAULT PR	EP ***									
Blank (B8C1919-BLK1)				Prepare	ed: 02/28/	/18 Ana	alyzed: 0	3/05/18		*
Biochemical Oxygen Demand	<5.0	5.0	mg/L							
LCS (B8C1919-BS1)				Prepare	ed: 02/28/	/18 Ana	alyzed: 0	3/05/18		*
Biochemical Oxygen Demand	172	5.0	mg/L	200		86.8	80-120		15	
LCS Dup (B8C1919-BSD1)				Prepare	ed: 02/28/	/18 Ana	alyzed: 0	3/05/18		*
Biochemical Oxygen Demand	159	5.0	mg/L	200		80.3	80-120	7.85	15	
Batch B8C1920 - NO PREP										
Blank (B8C1920-BLK1)				Prepare	ed & Anal	yzed: 0	2/27/18			*
Methylene Blue Active Substances	< 0.050	0.050	mg/L							
LCS (B8C1920-BS1)				Prepare	ed & Anal	yzed: 0	2/27/18			*
Methylene Blue Active Substances	0.415	0.050	mg/L	0.50		83.0	75-125		15	
LCS Dup (B8C1920-BSD1)			•	Prepare	ed & Anal	yzed: 0	2/27/18			*
Methylene Blue Active Substances	0.428	0.050	mg/L	0.50		85.6	75-125	3.08	15	
Batch B8C1922 - NO PREP			-							



**RPD** 



#### **LABORATORY ANALYSIS RESULTS**

Client:The Source Group, Inc. (SH)AA Project No: A5332481Project No:04-NDLA-013Date Received: 02/26/18Project Name:DFSP Norwalk GWETS NPDES QuarterlyDate Reported: 03/19/18

Reporting

Spike Source

%REC

		Reporting			Source		%KEC		KPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
General Chemistry Analyses - Qua	ality Cont	rol								
Batch B8C1922 - NO PREP										
Blank (B8C1922-BLK1)				Prepare	ed & Anal	yzed: 0	)2/28/18			k
Phenolics	<0.15	0.15	mg/L			-				
LCS (B8C1922-BS1)			Ü	Prepare	ed & Anal	yzed: 0	)2/28/18			+
Phenolics	0.426	0.15	mg/L	0.50	•		80-120		15	
LCS Dup (B8C1922-BSD1)			J	Prepare	ed & Analy	yzed: 0	)2/28/18			4
Phenolics	0.415	0.15	mg/L	0.50		•	80-120	2.62	15	
Matrix Spike (B8C1922-MS1)	S	Source: 8B2	_		ed & Anal					*
Phenolics	0.436	0.15	mg/L	0.50		•	80-120		15	
Matrix Spike Dup (B8C1922-MSD		Source: 8B2	•						-	*
Phenolics	0.442	0.15	mg/L	0.50			80-120	1.37	15	
PHG/BTEX/Oxygenates by GC/M	S - Qualit	v Control	5							
Batch B8C0616 - EPA 5030B		.,								
Blank (B8C0616-BLK1)				Prepare	ed & Analy	yzed: 0	03/06/18			
tert-Amyl Methyl Ether (TAME)	<0.30	0.30	ug/L		•	-				
Benzene	< 0.20	0.20	ug/L							
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L							
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L							
Ethylbenzene	<0.20	0.20	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	< 0.40	0.40	ug/L							
Gasoline Range Organics (GRO)	<40	40	ug/L							
Methyl-tert-Butyl Ether (MTBE)	< 0.40	0.40	ug/L							
Toluene	< 0.30	0.30	ug/L							
o-Xylene	< 0.30	0.30	ug/L							
m,p-Xylenes	< 0.40	0.40	ug/L							
Surrogate: 4-Bromofluorobenzene	53.1		ug/L	50		106	70-140			
Surrogate: Dibromofluoromethane	62.7		ug/L	50		125	70-140			
Surrogate: Toluene-d8	48.9		ug/L	50		97.9	70-140			
LCS (B8C0616-BS1)			J	Prepare	ed & Anal	yzed: 0	3/06/18			
tert-Amyl Methyl Ether (TAME)	22.2	0.30	ug/L	20		111	70-130			
Benzene	18.5	0.20	ug/L	20		92.3	75-125			
tert-Butyl alcohol (TBA)	116	7.0	ug/L	100		116	70-130			





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Quarterly

AA Project No: A5332481

Date Received: 02/26/18

Date Reported: 03/19/18

Analyte	Result	Reporting Limit	Units		Source Result %REC	%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS	3 - Quali	ty Control							
Batch B8C0616 - EPA 5030B		•							
LCS (B8C0616-BS1) Continued				Prepare	ed & Analyzed: 0	3/06/18			
Diisopropyl ether (DIPE)	20.1	0.50	ug/L	20	100	70-130			
Ethylbenzene	19.4	0.20	ug/L	20	97.0	75-125			
Ethyl-tert-Butyl Ether (ETBE)	21.4	0.40	ug/L	20	107	70-130			
Gasoline Range Organics (GRO)	519	40	ug/L	500	104	70-130			
Methyl-tert-Butyl Ether (MTBE)	35.0	0.40	ug/L	40	87.5	70-135			
Toluene	18.6	0.30	ug/L	20	93.2	75-125			
o-Xylene	18.6	0.30	ug/L	20	93.0	75-125			
m,p-Xylenes	36.7	0.40	ug/L	40	91.7	70-130			
Surrogate: 4-Bromofluorobenzene	52.4		ug/L	50	105	70-140			
Surrogate: Dibromofluoromethane	50.4		ug/L	50	101	70-140			
Surrogate: Toluene-d8	50.3		ug/L	50	101	70-140			
Matrix Spike (B8C0616-MS1)	•	Source: 8B2	_	Prepare	ed & Analyzed: 0	3/06/18			
tert-Amyl Methyl Ether (TAME)	26.0	0.30	ug/L	20	130	70-130			
Benzene	19.5	0.20	ug/L	20	97.4	70-130			
tert-Butyl alcohol (TBA)	132	7.0	ug/L	100	132	70-130			QM-07
Diisopropyl ether (DIPE)	21.7	0.50	ug/L	20	108	70-130			
Ethylbenzene	18.2	0.20	ug/L	20	90.8	70-130			
Ethyl-tert-Butyl Ether (ETBE)	24.3	0.40	ug/L	20	122	70-130			
Methyl-tert-Butyl Ether (MTBE)	49.8	0.40	ug/L	40	124	70-130			
Toluene	17.3	0.30	ug/L	20	86.4	70-130			
o-Xylene	17.3	0.30	ug/L	20	86.4	70-130			
m,p-Xylenes	33.9	0.40	ug/L	40	84.7	70-130			
Surrogate: 4-Bromofluorobenzene	53.0		ug/L	50	106	70-140			
Surrogate: Dibromofluoromethane	49.6		ug/L	50	99.3	70-140			
Surrogate: Toluene-d8	46.7		ug/L	50	93.3	70-140			
Matrix Spike Dup (B8C0616-MSD	1) \$	Source: 8B2		Prepare	ed & Analyzed: 0	3/06/18			
tert-Amyl Methyl Ether (TAME)	25.1	0.30	ug/L	20	126	70-130	3.25	30	
Benzene	20.3	0.20	ug/L	20	102	70-130	4.17	30	
tert-Butyl alcohol (TBA)	128	7.0	ug/L	100	128	70-130	3.08	30	
Diisopropyl ether (DIPE)	22.4	0.50	ug/L	20	112	70-130	3.40	30	





Client:The Source Group, Inc. (SH)AA Project No: A5332481Project No:04-NDLA-013Date Received: 02/26/18Project Name:DFSP Norwalk GWETS NPDES QuarterlyDate Reported: 03/19/18

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result %R	%REC EC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS	S - Quali	ty Control							
Batch B8C0616 - EPA 5030B									
Matrix Spike Dup (B8C0616-MSD	1) 5	Source: 8B2	26011-01	Prepare	ed & Analyzed	1: 03/06/18			
Continued									
Ethylbenzene	19.0	0.20	ug/L	20	94		4.36	30	
Ethyl-tert-Butyl Ether (ETBE)	23.6	0.40	ug/L	20	11		2.71	30	
Methyl-tert-Butyl Ether (MTBE)	40.8	0.40	ug/L	40	10		19.9	30	
Toluene	18.0	0.30	ug/L	20	90		4.08	30	
o-Xylene	17.8	0.30	ug/L	20	89		3.19	30	
m,p-Xylenes	35.2	0.40	ug/L	40	88	0 70-130	3.91	30	
Surrogate: 4-Bromofluorobenzene	52.6		ug/L	50	10	5 70-140			
Surrogate: Dibromofluoromethane	51.7		ug/L	50	10	3 70-140			
Surrogate: Toluene-d8	47.3		ug/L	50	94	6 70-140			
Diesel Range Organics by GC/FID	- Quality	/ Control							
Batch B8C0202 - EPA 3510C	-								
Blank (B8C0202-BLK1)				Prepare	ed & Analyzed	: 03/02/18			
Diesel Range Organics as Diesel	<60	60	ug/L						
Surrogate: o-Terphenyl	35.9		ug/L	40	89	6 50-150			
LCS (B8C0202-BS1)				Prepare	ed & Analyzed	1: 03/02/18			
Diesel Range Organics as Diesel	718	60	ug/L	800	89	7 75-125		30	
Surrogate: o-Terphenyl	36.5		ug/L	40	91	4 50-150			
LCS Dup (B8C0202-BSD1)				Prepare	ed & Analyzed	1: 03/02/18			
Diesel Range Organics as Diesel	841	60	ug/L	800	10	5 75-125	15.8	30	
Surrogate: o-Terphenyl	41.8		ug/L	40	10	5 50-150			
Matrix Spike (B8C0202-MS1)	5	Source: 8B2	26011-01	Prepare	ed & Analyzed	1: 03/02/18			
Diesel Range Organics as Diesel	833	60	ug/L	800	266 70	9 70-130		30	
Surrogate: o-Terphenyl	35.2		ug/L	40	87	9 50-150			
Matrix Spike Dup (B8C0202-MSD	1) 5	Source: 8B2	26011-01	Prepare	ed & Analyzed	1: 03/02/18			
Diesel Range Organics as Diesel	868	60	ug/L	800	266 75	3 70-130	4.14	30	
Surrogate: o-Terphenyl	39.7		ug/L	40	99	4 50-150		-	

A

Dissolved Metals by ICP Atomic Emission Spectroscopy - Quality Control



Client:The Source Group, Inc. (SH)AA Project No: A5332481Project No:04-NDLA-013Date Received: 02/26/18Project Name:DFSP Norwalk GWETS NPDES QuarterlyDate Reported: 03/19/18

Analyte	Result	Reporting Limit	Units		Source Result %	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Dissolved Metals by ICP Atomic</b>	Emission	Spectrosco	py - Qua	ality Cor	ntrol					
Batch B8C0206 - EPA 200.7										
Blank (B8C0206-BLK1)				Prepare	ed & Analy:	zed: 0	3/02/18			
Copper	<0.0070	0.0070	mg/L							
LCS (B8C0206-BS1)				Prepare	ed & Analy:	zed: 0	3/02/18			
Copper	0.981	0.0070	mg/L	1.0		98.1	80-120		20	
LCS Dup (B8C0206-BSD1)				Prepare	ed & Analy:	zed: 0	3/02/18			
Copper	0.995	0.0070	mg/L	1.0		99.5	80-120	1.40	20	
Duplicate (B8C0206-DUP1)	9	Source: 8B2	26015-01	Prepare	ed & Analy:	zed: 0	3/02/18			
Copper	<0.0070	0.0070	mg/L		<0.0070				30	
Matrix Spike (B8C0206-MS1)		Source: 8B2	26016-06	Prepare	ed & Analy:	zed: 0	3/02/18			
Copper	1.12	0.0070	mg/L	1.0		112	75-125		20	
Matrix Spike Dup (B8C0206-MS	SD1) S	Source: 8B2	26016-06	Prepare	ed & Analy:	zed: 0	3/02/18			
Copper	1.10	0.0070	mg/L	1.0		110	75-125	0.901	20	
Total Metals by ICP Atomic Emis Batch B8C0207 - EPA 200.7 Blank (B8C0207-BLK1)	•		-		ed & Analy:	zed: 0	3/02/18			
Arsenic	<0.0060	0.0060	mg/L							
Copper	<0.0070	0.0070	mg/L							
LCS (B8C0207-BS1)				•	ed & Analy					
Arsenic	1.03	0.0060	mg/L	1.0		103	80-120		20	
Copper	0.981	0.0070	mg/L	1.0		98.1	80-120		20	
LCS Dup (B8C0207-BSD1)					ed & Analy					
Arsenic	1.04	0.0060	mg/L	1.0		104	80-120	1.07	20	
Copper	0.995	0.0070	mg/L	1.0			80-120	1.40	20	
Duplicate (B8C0207-DUP1)		Source: 8B2		Prepare		zed: 0	3/02/18			
Arsenic	<0.0060	0.0060	mg/L		<0.0070				30	
Copper	<0.0070	0.0070	mg/L	· Drane-	<0.0070	- a d. A	0./00/40		30	
Matrix Spike (B8C0207-MS1)	1.00	Source: 8B2 0.0060		-	eu & Analy				20	
Arsenic Copper	1.00 1.11	0.0060	mg/L mg/L	1.0 1.0		100 111	75-125 75-125		20 20	
• •			•	_	ad O Analu				∠∪	
Matrix Spike Dup (B8C0207-MS	וועכ) כ	Source: 8B2	20010-00	Prepare	tu & Analyz	zeu. U	13/02/18			





Client:The Source Group, Inc. (SH)AA Project No: A5332481Project No:04-NDLA-013Date Received: 02/26/18Project Name:DFSP Norwalk GWETS NPDES QuarterlyDate Reported: 03/19/18

	Reporting	Spike Source	%REC	RPD
Analyte	Result Limit Units	s Level Result %F	REC Limits RPD	Limit Note

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

Batch B8C0207 - EPA 200.7

Matrix Spike Dup (B8C0207-MSD1) Source: 8B26016-06 Prepared & Analyzed: 03/02/18

Continued

Johnnaca						
Arsenic	<b>1.01</b> 0.0	060 mg/L	1.0	101	75-125 0.596	20
Copper	<b>1.12</b> 0.0	070 mg/L	1.0	112	75-125 0.897	20





Client: The Source Group, Inc. (SH)

AA Project No: A5332481 **Project No:** 04-NDLA-013 Date Received: 02/26/18 Project Name: DFSP Norwalk GWETS NPDES Quarterly Date Reported: 03/19/18

Special Notes

[1] = \* Subcontracted to a DOHS State-Certified Laboratory

[2] = QM-07: The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was

accepted based on acceptable LCS recovery.

#### LABORATORY REPORT

Date:

February 28, 2018

**Client:** 

**American Analytics** 9765 Eton Avenue

Chatsworth, CA 91311

Attn: Viorel Vasile

Aquatic **Testing** Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107 Ventura, CA 93003

(805) 650-0546 FAX (805) 650-0756

CA ELAP Cert. No.: 1775

Laboratory No.:

A-18022704-001

**Project No.:** 

A5332481

**Sample ID.:** 

8B26015-01

**Sample Control:** 

The sample was received by ATL chilled and with the chain of custody record

attached.

Date Sampled:

02/26/18

Date Received: Temp. Received: 02/27/18 1.9°C

Chlorine (TRC):

0.0 mg/l

Date Tested:

02/27/18 to 02/28/18

**Sample Analysis:** 

The following analyses were performed on your sample:

Fathead Minnow Percent Survival Bioassay (EPA-821-R-02-012 Method 2000.0);

Attached are the test data generated from the analysis of your sample. All testing was conducted under the direct supervision of Joseph A. LeMay. Daily test readings were taken by Joseph A. LeMay (initials: JAL) and Jacob LeMay (initials: J). Testing ended

after 24 hours per client request.

**Result Summary:** 

Sample ID.

Results

8B26015-01

37.5% Survival (TUa > 1.0) at 24 hr.

**Quality Control:** 

Reviewed and approved by:

Laboratory Director

#### FATHEAD MINNOW PERCENT SURVIVAL TEST EPA Method 2000.0



Lab No.: A-18022704-001

Client/ID: American Analytics 8B26015-01

**Start Date: 02/27/2018** 

#### **TEST SUMMARY**

Species: *Pimephales promelas*. Age: 11 (1-14) days. Regulations: NPDES.

Test solution volume: 250 ml. Feeding: prior to renewal at 48 hrs.

Number of replicates: 4.

Control water: Moderately hard reconstituted water.

Dissolved Oxygen (DO) readings in mg/l O<sub>2</sub>.

Photoperiod: 16/8 hrs light/dark.

Source: In-laboratory Culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012. Endpoints: Percent Survival at 96 hrs.

Test chamber: 600 ml beakers. Temperature: 20 +/- 1°C.

Number of fish per chamber: 10.

QA/QC No.: RT-180208.

#### **TEST DATA**

			1201	DAIA					
		0.0	DO	11		# D	ead		Analyst & Time
		°C	DO	pН	Α	В	С	D	of Readings
DUTIAL	Control	20.0	8.6	7.8	0	O	0	0	7 2-27-18
INITIAL	100%	20.1	8.2	7.1	0	0	0	O	1200
24.11	Control	19.6	8.5	7.9	0	0	0	O	1 2-28-18
24 Hr	100%	19.4	7. 9	8. 3	8	5	3	9	(Lov
40 11	Control								
48 Hr	100%								
D. I	Control								
Renewal	100%								
72 Hr	Control								
	100%								
06.11	Control								
96 Hr	100%								

Cc	m	m	ar	te	
1.0	) [ [ ]	ш	eı	LLS	1

Sample as received: Chlorine: mg/l; Temp: 1.9 °C; DO: 5.0 mg/l; pH: 7./; Alkalinity: 53 7 mg/l; Hardness: 75 2 mg/l; Conductivity: 2123 umho; NH<sub>3</sub>-N: 2.3 mg/l. Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No. Control: Alkalinity: 6 / mg/l; Hardness: 9/ mg/l.; Conductivity: 30/ umho. Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes / No. Original sample used for renewal kept at 0-6°C with minimal headspace.

#### RESULTS

Percent Survival In: Control: 100 % 100% Sample: 37.5 % at 24 hr

ASOCATE TO AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

Tel: 818-998-5547 FAX: 818-998-7258

A.A. COC No.:

70050770

		30118				Special (negation)		46hr % Sucultad	Fathead Muco	710-70-21-128-403	·	Thank 72						Received by	1240	Received by	Received by	
Sampler's Name:	Sampler's Signature:	P.O. No.:	Quote No.:	ANALYSIS REQUESTED (Test Name)		<u></u>	und Codes ** belo											Time	202	Time 10:5	-	
2107138				ANALYSIS REQUI		<u></u>	Please enter the TAT Turnaround Codes ** below											Date	81-12-2	Date A-2-15	Date	
				4	) J-C	( ) <del> </del>	M	イ									100	fred by		shed by	shed by	
AS52481						andard TAT)	Sample No.	Wester 1										Relinguished by	2%	Relinquished by	Relinquished by	
me / No.	Site Address:	City:	State & Zip:		ę,	Days (Sta	Time	33.50														
F Project Na	Site		St	**	(4) = 72  Hour Rush $(5) = 5  Dav Rush$	10 Working Days (Standard TAT)	Date	416/12	_													
AN ALTHE Project Name / No.:				TAT Turnaround Codes **			A.A. I.D.											For Laboratory Use				
Client: AMERZICAS	Project Manager: 人ついら		<b>Fa</b> x:		(1) = Same Day Rush (2) = 24 Hour Rush	11	Client I.D.	10-5129788										For L				A.A. Project No.:

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.



# REFERENCE TOXICANT DATA

# FATHEAD MINNOW ACUTE Reference Toxicant - SDS



#### QA/QC Batch No.: RT-180208

#### **TEST SUMMARY**

Species: Pimephales promelas.

Age: 14 days old. Regulations: NPDES.

Test chamber volume: 250 ml. Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C. Number of replicates: 2. Dilution water: MHSF. Source: In-lab culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012.

Endpoints: LC50 at 96 hrs. Test chamber: 600 ml beakers.

Aeration: None.

Number of organisms per chamber: 10.

Photoperiod: 16/8 hrs light/dark.

#### **TEST DATA**

		INITIAI	_		24 Hr						48 Hr		
Date/Time:	2-8-	-18	1330	2-9-18 1200			7-10-18 /330				ي (		
Analyst:		2		7									
	°C	DO	рН	°C	DO	рН	# Dead		°C	DO	pН	# D	ead
			ļ	L`		),,,	A	В			pri	Α	В
Control	20.1	8. 8	7.8	20.1	8.5	7. 7	0	O	20.0	8.6	7.6	0	0
1.0 mg/l	که. ۱	8.6	7.7	20, (	8.4	7. 7	0	0	lno	8.0	26	0	0
2.0 mg/l	20.1	8.5	28	2000	8.5	7. 8	O	O	20.0	7.9	26	0	0
4.0 mg/l	کیہ ن	8.6	7.8	70.0	8.4	7. 7	U	0	20.0	7.8	7.7	J	0
8.0 mg/l	٥.0	8.6	7.8	200	8. 2	7.8	10	9	Zao	7-9	7-8	_	1
16.0 mg/l	20.1	7.5	7.7	20.0	7.2	7.7	10	lo		_	_	_	-

	F	RENEWA	۸L		72 Hr					96 Hr					
Date/Time:	1-10	-1g	1330	2-1	11-18			300	2-	12-1	8	1330	2		
Analyst:		2		v			got								
	"C	DO	Па	°C	DO	рН	# D	ead	°C	DO	pН	# D	Dead		
		ВО	pri			pri	А	В			pri	А	В		
Control	1.05	8.5	7. 7	20.0	8.2	7.8	0	Ö	ru	2-2	29	C	0		
1.0 mg/l	20,1	8.6	7.6	20.0	8, 1	7.7	0	0	200	28	80	0	0		
2.0 mg/l	ا .مح	8.5	2.6	که مع	912	7.7	0	O	rav	28	8-1	0	0		
4.0 mg/l	20,1	8.4	7-8	12-9	910	7.8	0	0	19.9	7.9	8.1	S	0		
8.0 mg/l	_	_	_	_`		_	11	_	_	-	1	1	_		
16.0 mg/l	_		_	_	_	_	_	_		_	-	_	_		

Comments: Control: Alkalinity: <u>56</u> mg/l; Hardness: <u>89</u> mg/l; Conductivity: <u>>>/</u> umho.

SDS: Alkalinity: 7 mg/l; Hardness: **eg** mg/l; Conductivity: **307** umho.

Dissolved Oxygen (DO) readings in mg/l O<sub>2</sub>.

Concentration-response relationship acceptable? (see attached computer analysis):

(response curve normal)

No (dose interrupted indicated or non-normal)

Acute Fish Test-96 Hr Survival									
Start Date:	2/8/2016	13:30	Test ID:	RT180208f	Sample ID:	REF-Ref Toxicant			
End Date:	2/12/2018	13:30	Lab ID:	<b>CAATL-Aquatic Testing Labs</b>	Sample Type:	SDS-Sodium dodecyl sulfate			
Sample Date:	2/8/2018		Protocol:	EPAAW02-EPA/821/R-02-01	Test Species:	PP-Pimephales promelas			
Comments:									
Conc-mg/L	1	2							
D-Control	1.0000	1.0000							
1	1.0000	1.0000							
2	1.0000	1.0000							
4	1.0000	1.0000							
8	0.0000	0.0000							
16	0.0000	0.0000							

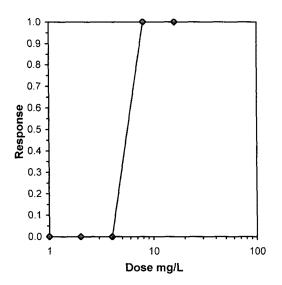
	Transform: Arcsin Square Root							Number	Total
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Resp	Number
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
4	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20
16	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				
Equality of variance cannot be confirmed				
	Graphical Method			

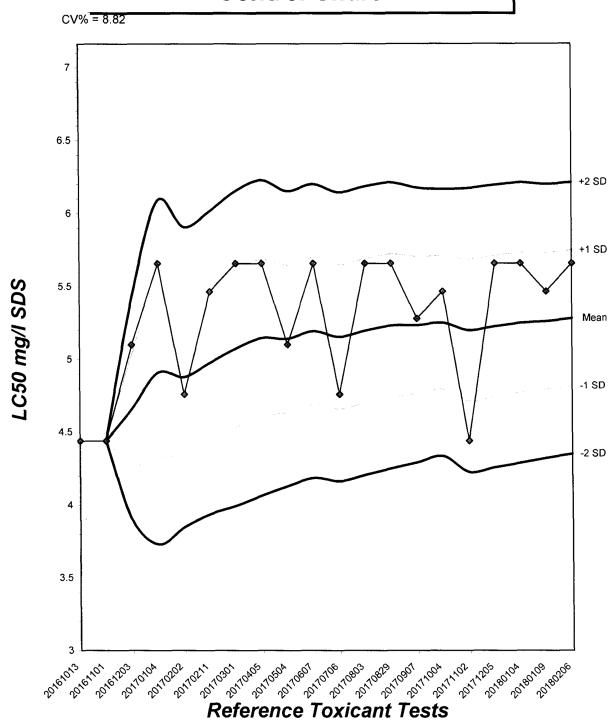
 Trim Level
 EC50

 0.0%
 5.6569

5.6569



# Fathead Minnow Acute Laboratory Control Chart



#### **TEST ORGANISM LOG**



# FATHEAD MINNOW - LARVAL (Pimephales promelas)

QA/QC BATCH NO.: RT-180208
SOURCE: In-Lab Culture
DATE HATCHED: 1- 2 5-1 8
APPROXIMATE QUANTITY:
GENERAL APPEARANCE:
# MORTALITIES 48 HOURS PRIOR TO TO USE IN TESTING:
DATE USED IN LAB: 2/8/18
AVERAGE FISH WEIGHT: gm
LOADING LIMITS: 0.65 gm/liter @ 20°C, 0.40 gm/liter @ 25°C  Approximately 1000 fish per 10 liters limit if held overnight for acclimation without filtration @ 20°C for fish with a mean weight of 0.006 gm.
Approximately 650 fish per 10 liters limit if held overnight for acclimation without filtration @ 25°C for fish with a mean weight of 0.006 gm.
200 ml test solution volume = 0.013 gm mean fish weight limit @ 20°C; 0.008 @ 25°C 250 ml test solution volume = 0.016 gm mean fish weight limit @ 20°C; 0.010 @ 25°C
ACCLIMATION WATER QUALITY:
Temp.: <u>101</u> °C pH: <u>7-8</u> Ammonia: <u>6</u> mg/l NH <sub>3</sub> -N
DO: 8 .6 mg/l Alkalinity: f .6 mg/l Hardness: 8 .6 mg/l
READINGS RECORDED BY: DATE: 2-4-18

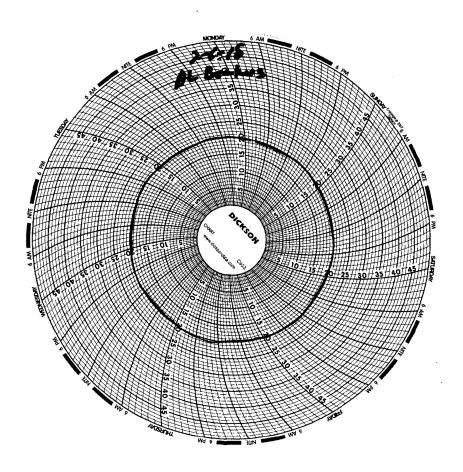


## Test Temperature Chart

Test No: RT-180208

Date Tested: 02/08/18 to 02/12/18

Acceptable Range: 20 +/- 1°C





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#### Ordered By

American Analytics 9765 Eton Avenue Chatsworth, CA 91311-4306

Telephone: (818)998-5547 Attention: Viorel Vasile Number of Pages 7

Date Received 02/27/2018
Date Reported 03/06/2018

Job Number	Order Date	Client
91519	02/27/2018	AA

**Project ID:** A5332481/8B26015

Project Name: PO# 30117

Enclosed please find results of analyses of 1 water sample which was analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ C. Raymana

Cyrus Razmara, Ph.D. Laboratory Director

Wood of the second of the seco

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

**9765 ETON AVE., CHATSWORTH, CA 91311** Tel: 818-998-5547 FAX: 818-998-7258

61516

A.A. COC No.:

A. COC 180.:

me:	ure;	7)10E :: 30117	No.:	me)	Special	Instructions	below	BY SM SZIOB	J O PS S MS	1,012,400		Last Ostrol	Jen New T					2 Received by	1 Jack	I'm Received by	Received by	5
Sampler's Name:	Sampler's Signature:	P.O. No.:	Quote No.:	STED (Test Na		_	*											Time	X	Time 3	Time	*****
И	Sam			ANALYSIS REQUESTED (Test Name)	Sherole		Please enter the TAT Turnaround Codes											Date	X1-12-2	oully/18	Date	
481/8B2601	j				2A	25 BM	Cont/ Please enter	2 X X X									7/1	Relinguished by		Refinquished by	Relinquished by	1
A5337481					F < F			Water										Reling		Refinqu	Relinqu	
Name / No.:	Site Address:	City:	State & Zip:		de de la companya de	on on one	Ime	2260														
	Site		St	*	72 Hour Rush 5 Day Rush 40 Wording Days (charless TAT)		Date	2/26/18														
N ANDLESTICS	o Vastle			TAT Turnaround Codes **	48 (c) ×		A.A. I.D.	91519.01										For Laboratory Use				
Client: AMERICAN AND LATICS Project	Project Manager: \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Phone:	<b>Fax:</b>		(1) = Same Day Rush (2) = 24 Hour Rush (3) = 48 Hour Bush		Crent I.D.	8826015-01	4 (45)									For La				A.A. Project No.:

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.



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COOLER RECEIPT FORM

	C. T.			
Client Name: Americae Ana	y la	= 3	4	
Project Name:	2 27	1 0 . 5 . 3		
AETL Job Number: 91,517, 915/8	2	9/3/9	0 -	
AETL Job Number: 9/5/7, 9/5/8 Date Received: $32/23/17$ Received:	ived b	y: Jean	Claude	
Carrier: AETL Courier Client	$\square$ GS	SO	x UPS	
□Others:		-		
i i		8		
Samples were received in: Cooler ( )	Other	(Specify):	9 4 9	
Inside temperature of chinning container No 1:	2-7.	No 2: , $No$	3:	
Type of sample containers:   VOA, Glass both	ttles, 🗆	Wide mouth jars	HDPE bottle	es,
[ Motal cleaves [ Others (Specify)]		0		
How are samples preserved: $\square$ None, $\square$ Ice,	Blue	Ice, $\square$ Dry Ice		
None, HNO <sub>3</sub> XN	VаОН,	ZnOAc, HC	$l$ , $Na_2S_2O_3$ , $N$	1eOH
> Other (Specify): H2.				
		The state of the s	The second secon	line service
1	Yes	No, explain below	Name, if chent wa	s notified.
1. Are the COCs Correct?	×			
2. Are the Sample labels legible?	×			
3. Do samples match the COC?	×			
4. Are the required analyses clear?	×			
5. Is there enough samples for required analysis?	X			
6. Are samples sealed with evidence tape?	MA			
7. Are sample containers in good condition?	X			
8. Are samples preserved?	X			
9. Are samples preserved properly for the	×		= .	
intended analysis?	NA			
10. Are the VOAs free of headspace?	- La			
11. Are the jars free of headspace?				
And the state of t	w cur of	es a se		
Explain all "No" answers for above questions:				
		-		-
	<u> </u>			



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Page: 1 A Ordered By

American Analytics 9765 Eton Avenue Chatsworth, CA 91311-4306

Telephone: (818)998-5547 Attention: Viorel Vasile Project ID: A5332481/8B26015

Date Received 02/27/2018

Date Reported 03/06/2018

Job Number	Order Date	Client
91519	02/27/2018	AA

## CERTIFICATE OF ANALYSIS CASE NARRATIVE

AETL received 1 samples with the following specification on 02/27/2018.

La	b ID	Sample ID	Sample D	ate Mai	rix		Quantity Of Containers
9151	9.01	8B26015-01	02/26/20	18 Aqu	ieous		2
	Method	^ Submethod		Req Date	Priority	TAT	Units
	420.1			03/06/2018	2	Normal	mg/L
	SM-5540	C		03/06/2018	2	Normal	mg/L
	SM52101	В		03/06/2018	2	Normal	mg/L

The samples were analyzed as specified on the enclosed chain of custody. No analytical non-conformances were encountered.

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ C. Raymona

Cyrus Razmara, Ph.D. Laboratory Director



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#### **ANALYTICAL RESULTS**

#### Ordered By

American Analytics 9765 Eton Avenue Chatsworth, CA 91311-4306

Telephone: (818)998-5547 Attn: Viorel Vasile Page: **2** 

Project ID: A5332481/8B26015

Project Name: PO# 30117

AETL Job Number Submitted Client
91519 02/27/2018 AA

Method: 420.1, Phenolics, Total Recoverable, Spectrophotometric, Manual QC Batch No: PH022818-1

Our Lab I.D.			Method Blank	91519.01		
Client Sample I.D.				8B26015-01		
Date Sampled				02/26/2018		
Date Prepared			02/28/2018	02/28/2018		
Preparation Method			420.1	420.1		
Date Analyzed			02/28/2018	02/28/2018		
Matrix			Aqueous	Aqueous		
Units			mg/L	mg/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Phenolic compounds as phenol	0.15	0.30	ND	ND		



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#### ANALYTICAL RESULTS

#### Ordered By

American Analytics 9765 Eton Avenue Chatsworth, CA 91311-4306

Telephone: (818)998-5547 Attn: Viorel Vasile Page: **3** 

Project ID: A5332481/8B26015

Project Name: PO# 30117

 AETL Job Number
 Submitted
 Client

 91519
 02/27/2018
 AA

#### Method: SM-5540C, Methylene Blue Active Substances (MBAS)

QC Batch No: MB022718-1

Our Lab I.D.			Method Blank	91519.01		
Client Sample I.D.				8B26015-01		
Date Sampled				02/26/2018		
Date Prepared			02/27/2018	02/27/2018		
Preparation Method			SM5540C	SM5540C		
Date Analyzed			02/27/2018	02/27/2018		
Matrix			Aqueous	Aqueous		
Units			mg/L	mg/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Surfactants (MBAS)	0.05	0.05	ND	ND		



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#### **ANALYTICAL RESULTS**

#### Ordered By

American Analytics 9765 Eton Avenue Chatsworth, CA 91311-4306

Telephone: (818)998-5547 Attn: Viorel Vasile Page: **4** 

Project ID: A5332481/8B26015

Project Name: PO# 30117 91519 02/27/2018

Method: SM5210B, Biochemical Oxygen Demand 5 days, @ 20C (Standard Methods)

QC Batch No: B0022818-1

AETL Job Number

Submitted

Client

AA

Our Lab I.D.			Method Blank	91519.01		
Client Sample I.D.				8B26015-01		
Date Sampled				02/26/2018		
Date Prepared			02/28/2018	02/28/2018		
Preparation Method			SM5210B	SM5210B		
Date Analyzed			03/05/2018	03/05/2018		
Matrix			Aqueous	Aqueous		
Units			mg/L	mg/L		
Dilution Factor			1	1		
Analytes	MDL	PQL	Results	Results		
Biochemical Oxygen Demand (BOD)	5.0	5.0	ND	ND		



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#### **QUALITY CONTROL RESULTS**

#### Ordered By

American Analytics 9765 Eton Avenue Chatsworth, CA 91311-4306

Telephone: (818)998-5547 Attn: Viorel Vasile Page: **5** 

Project ID: A5332481/8B26015

Project Name: PO# 30117

AETL Job Number Submitted Client
91519 02/27/2018 AA

Method: 420.1, Phenolics, Total Recoverable, Spectrophotometric, Manual

QC Batch No: PH022818-1; Dup or Spiked Sample: 91519.01; LCS: Clean Water; QC Prepared: 02/28/2018; QC Analyzed: 02/28/2018; Units: mg/L

	Sample	MS	MS	MS	MS DUP	MS DUP	MS DUP	RPD	MS/MSD	MS RPD
Analytes	Result	Concen	Recov	% REC	Concen	Recov	% REC	%	% Limit	% Limit
Phenol	0.00	0.500	0.436	87.2	0.500	0.442	88.4	1.4	80-120	<15

QC Batch No: PH022818-1; Dup or Spiked Sample: 91519.01; LCS: Clean Water; QC Prepared: 02/28/2018; QC Analyzed: 02/28/2018; Units: mg/L

	LCS	LCS	LCS	LCS DUP	LCS DUP	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD	
Analytes	Concen	Recov	% REC	Concen	Recov	% REC	% REC	% Limit	% Limit	
Phenol	0.500	0.426	85.2	0.500	0.415	83.0	2.6	80-120	<20	



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#### **QUALITY CONTROL RESULTS**

#### Ordered By

American Analytics 9765 Eton Avenue Chatsworth, CA 91311-4306

Telephone: (818)998-5547 Attn: Viorel Vasile Page: **6** 

Project ID: A5332481/8B26015

Project Name: PO# 30117

 AETL Job Number
 Submitted
 Client

 91519
 02/27/2018
 AA

Method: SM-5540C, Methylene Blue Active Substances (MBAS)

QC Batch No: MB022718-1; Dup or Spiked Sample: 91519.01; LCS: Clean Water; LCS Prepared: 02/27/2018; LCS Analyzed: 02/27/2018; Units: mg/L

	LCS	LCS	LCS	LCS DUP	LCS DUP	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD	
Analytes	Concen	Recov	% REC	Concen	Recov	% REC	% REC	% Limit	% Limit	
Surfactants (MBAS)	0.500	0.415	83.0	0.500	0.428	85.6	3.1	80-120	<15	



# American Environmental Testing Laboratory Inc.

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# **QUALITY CONTROL RESULTS**

# Ordered By

American Analytics 9765 Eton Avenue Chatsworth, CA 91311-4306

Telephone: (818)998-5547 Attn: Viorel Vasile Page: **7** 

Project ID: A5332481/8B26015

Project Name: PO# 30117

AETL Job Number Submitted Client
91519 02/27/2018 AA

Method: SM5210B, Biochemical Oxygen Demand 5 days, @ 20C (Standard Methods)

QC Batch No: BO022818-1; Dup or Spiked Sample: 91518.01; LCS: Clean Water; LCS Prepared: 02/28/2018; LCS Analyzed: 03/05/2018; Units: mg/L

	SM	SM DUP	RPD	SM RPD			
Analytes	Result	Result	%	% Limit			
Biochemical Oxygen Demand (BOD)	ND	ND	<1	<15			

QC Batch No: BO022818-1; Dup or Spiked Sample: 91518.01; LCS: Clean Water; LCS Prepared: 02/28/2018; LCS Analyzed: 03/05/2018; Units: mg/L

	LCS	LCS	LCS	LCS DUP	LCS DUP	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD	
Analytes	Concen	Recov	% REC	Concen	Recov	% REC	% REC	% Limit	% Limit	
Biochemical Oxygen Demand (BOD)	198	172	86.7	198	159	80.3	7.7	80-120	<15	



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# Data Qualifiers and Descriptors

# Data Qualifier:

#: Recovery is not within acceptable control limits.

In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has

been applied.

B: Analyte was present in the Method Blank.

D: Result is from a diluted analysis.

E: Result is beyond calibration limits and is estimated.

H: Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory

control.

J: Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method

Detection Limit (MDL) and the Practical Quantitation Limit (PQL).

M: Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery

was acceptable.

MCL: Maximum Contaminant Level

NS: No Standard Available

S6: Surrogate recovery is outside control limits due to matrix interference.

S8: The analysis of the sample required a dilution such that the surrogate concentration was diluted below the

method acceptance criteria.

X: Results represent LCS and LCSD data.

# Definition:

%Limi: Percent acceptable limits.

%REC: Percent recovery.

Con.L: Acceptable Control Limits

Conce: Added concentration to the sample.

LCS: Laboratory Control Sample

MDL: Method Detection Limit is a statistically derived number which is specific for each instrument, each method,

and each compound. It indicates a distinctively detectable quantity with 99% probability.



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# Data Qualifiers and Descriptors

MS: Matrix Spike

MS DU: Matrix Spike Duplicate

ND: Analyte was not detected in the sample at or above MDL.

PQL: Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can

be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical

instrumentation and practice.

Recovered concentration in the sample.

RPD: Relative Percent Difference

# AMERICAN • HERICAN ANALYTICS

# AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311

Tel: 818-998-5547 FAX: 818-998-7258

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roject Manager: Neil Irish		Site	Site Address:	15306 Norwalk Blvd	rwalk B	pyl				Samp	er's Si	Sampler's Signature:	Ì	M. M.	and	0.
hone: 562-597-1055			City:	Norwalk				-			"	P.O. No.:				
ax; 569-597-1070		B	State & Zip:	CA 90650							ð	Quote No.:	٠.			
	TAT Turnaround Codes **							ANAL	YSIS R	EQUES	TED (Te	ANALYSIS REQUESTED (Test Name)				
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Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.



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

April 03, 2018

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

Re: DFSP Norwalk GWETS NPDES Monthly / 04-NDLA-013

A5332499 / 8C20018

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 03/20/18 17:18 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Viorel Vasile

**Operations Manager** 



Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Monthly

AA Project No: A5332499

Date Received: 03/20/18

Date Reported: 04/03/18

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8260B TPHGASOLINEBTEXOXY					
Effluent	8C20018-01	Water	5	03/20/18 08:08	03/20/18 17:18
Arsenic Total EPA 200.7					
Effluent	8C20018-01	Water	5	03/20/18 08:08	03/20/18 17:18
Diesel Range Organics 8015M					
Effluent	8C20018-01	Water	5	03/20/18 08:08	03/20/18 17:18





Client:The Source Group, Inc. (SH)AA Project No: A5332499Project No:04-NDLA-013Date Received: 03/20/18Project Name:DFSP Norwalk GWETS NPDES MonthlyDate Reported: 04/03/18Method:TPHG/BTEX/Oxygenates by GC/MSUnits: ug/L

Date Sampled:03/20/18Date Prepared:03/27/18Date Analyzed:03/27/18AA ID No:8C20018-01Client ID No:EffluentMatrix:WaterDilution Factor:1

Dilution Factor:	1	MDL	MRL
8260B TPHGASOLINEBTEXOXY	(EPA 8260B)		
tert-Butyl alcohol (TBA) Gasoline Range Organics	<7.0 <40	7.0 40	10 100
(GRO) Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	2.0

<u>Surrogates</u>		%REC Limits
4-Bromofluorobenzene	138%	70-140
Dibromofluoromethane	114%	70-140
Toluene-d8	99%	70-140





The Source Group, Inc. (SH) Client: AA Project No: A5332499 **Project No:** 04-NDLA-013 Date Received: 03/20/18 **Project Name: DFSP Norwalk GWETS NPDES Monthly** Date Reported: 04/03/18 Method: Diesel Range Organics by GC/FID

Units: ug/L

**Date Sampled:** 03/20/18 **Date Prepared:** 03/26/18 Date Analyzed: 03/26/18 AA ID No: 8C20018-01 Client ID No: Effluent Water Matrix:

**Dilution Factor:** MDL 1 MRL

Diesel Range Organics 8015M (EPA 8015M)

60 100 Diesel Range Organics as <60

Diesel

**Surrogates %REC Limits** o-Terphenyl 56% 50-150





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DESP Norwalk GW/ETS NRDES Monthly

Date Received: 04/03/18

Project Name: DFSP Norwalk GWETS NPDES Monthly Date Reported: 04/03/18

**Method:** Total Metals by ICP Atomic Emission Spectroscopy

mounou.	Total Motalo by Tol	7 (COTTILO ETTILO	olon opoolio	ооору					
AA I.D. No.	Client I.D. No.	Sampled	Prepared A	Analyzed [	Dilution	Result	Units	MDL	MRL
Arsenic Total	EPA 200.7 (EPA 200	.7)							
8C20018-01	Effluent	03/20/18	03/27/18	03/27/18	1	<0.0060	mg/L	0.006	0.007





Client:The Source Group, Inc. (SH)AA Project No: A5332499Project No:04-NDLA-013Date Received: 03/20/18Project Name:DFSP Norwalk GWETS NPDES MonthlyDate Reported: 04/03/18

Analyte	F Result	Reporting Limit	Units		Source Result		%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS										
Batch B8C2727 - EPA 5030B	'-	-								
Blank (B8C2727-BLK1)				Prepare	ed & Anal	lyzed: 0	3/27/18			
tert-Amyl Methyl Ether (TAME)	<0.30	0.30	ug/L	<u>-</u>						
Benzene	<0.20	0.20	ug/L							
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L							
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L							
Ethylbenzene	<0.20	0.20	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	< 0.40	0.40	ug/L							
Gasoline Range Organics (GRO)	<40	40	ug/L							
Methyl-tert-Butyl Ether (MTBE)	< 0.40	0.40	ug/L							
Toluene	< 0.30	0.30	ug/L							
o-Xylene	< 0.30	0.30	ug/L							
m,p-Xylenes	<0.40	0.40	ug/L							
Surrogate: 4-Bromofluorobenzene	63.3		ug/L	50		127	70-140			
Surrogate: Dibromofluoromethane			ug/L	50		93.8	70-140			
Surrogate: Toluene-d8	55.7		ug/L	50		111	70-140			
LCS (B8C2727-BS1)			_	Prepare	ed & Anal	lyzed: 0	3/27/18			
tert-Amyl Methyl Ether (TAME)	16.7	0.30	ug/L	20		83.6	70-130			
Benzene	17.7	0.20	ug/L	20		88.4	75-125			
tert-Butyl alcohol (TBA)	88.7	7.0	ug/L	100		88.7	70-130			
Diisopropyl ether (DIPE)	19.8	0.50	ug/L	20		98.9	70-130			
Ethylbenzene	21.4	0.20	ug/L	20		107	75-125			
Ethyl-tert-Butyl Ether (ETBE)	19.1	0.40	ug/L	20		95.4	70-130			
Gasoline Range Organics (GRO)	488	40	ug/L	500		97.6	70-130			
Methyl-tert-Butyl Ether (MTBE)	33.9	0.40	ug/L	40		84.6	70-135			
Toluene	21.7	0.30	ug/L	20		109	75-125			
o-Xylene	20.6	0.30	ug/L	20		103	75-125			
m,p-Xylenes	46.4	0.40	ug/L	40		116	70-130			
Surrogate: 4-Bromofluorobenzene			ug/L	50		109	70-140			
Surrogate: Dibromofluoromethane			ug/L	50		93.4	70-140			
Surrogate: Toluene-d8	53.1		ug/L	50		106	70-140			
Matrix Spike (B8C2727-MS1)	S	ource: 8C1		Prepare	ed & Anal	lyzed: 0	3/27/18			





Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Monthly

AA Project No: A5332499

Date Received: 03/20/18

Date Reported: 04/03/18

Analyte	Result	Reporting Limit	Units		Source Result %REC	%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/M	S - Quali	tv Control							•
Batch B8C2727 - EPA 5030B	,	,							
Matrix Spike (B8C2727-MS1) Co	ntinued S	Source: 8C1	6004-01	Prepare	ed & Analyzed: 0	3/27/18			
tert-Amyl Methyl Ether (TAME)	21.0	0.30	ug/L	20	105	70-130			
Benzene	17.8	0.20	ug/L	20	88.8	70-130			
tert-Butyl alcohol (TBA)	102	7.0	ug/L	100	102	70-130			
Diisopropyl ether (DIPE)	22.1	0.50	ug/L	20	111	70-130			
Ethylbenzene	18.8	0.20	ug/L	20	93.8	70-130			
Ethyl-tert-Butyl Ether (ETBE)	22.9	0.40	ug/L	20	114	70-130			
Methyl-tert-Butyl Ether (MTBE)	43.8	0.40	ug/L	40	110	70-130			
Toluene	19.1	0.30	ug/L	20	95.7	70-130			
o-Xylene	19.7	0.30	ug/L	20	98.7	70-130			
m,p-Xylenes	42.2	0.40	ug/L	40	106	70-130			
Surrogate: 4-Bromofluorobenzene	54.3		ug/L	50	109	70-140			
Surrogate: Dibromofluoromethane	53.0		ug/L	50	106	70-140			
Surrogate: Toluene-d8	<i>50.4</i>		ug/L	50	101	70-140			
Matrix Spike Dup (B8C2727-MSD	)1) S	Source: 8C1	6004-01	Prepare	ed & Analyzed: 0	3/27/18			
tert-Amyl Methyl Ether (TAME)	20.3	0.30	ug/L	20	101	70-130	3.58	30	
Benzene	18.1	0.20	ug/L	20	90.4	70-130	1.79	30	
tert-Butyl alcohol (TBA)	93.5	7.0	ug/L	100	93.5	70-130	9.19	30	
Diisopropyl ether (DIPE)	22.3	0.50	ug/L	20	111	70-130	0.766	30	
Ethylbenzene	18.5	0.20	ug/L	20	92.7	70-130	1.23	30	
Ethyl-tert-Butyl Ether (ETBE)	22.1	0.40	ug/L	20	110	70-130	3.43	30	
Methyl-tert-Butyl Ether (MTBE)	41.6	0.40	ug/L	40	104	70-130	5.15	30	
Toluene	19.2	0.30	ug/L	20	95.8	70-130	0.157	30	
o-Xylene	19.0	0.30	ug/L	20	95.2	70-130	3.56	30	
m,p-Xylenes	40.5	0.40	ug/L	40	101	70-130	4.18	30	
Surrogate: 4-Bromofluorobenzene	53.9		ug/L	50	108	70-140			
Surrogate: Dibromofluoromethane	54.4		ug/L	50	109	70-140			
Surrogate: Toluene-d8	51.9		ug/L	50	104	70-140			
Diesel Range Organics by GC/FID	- Quality	Control							
Batch B8C2614 - EPA 3510C									



Blank (B8C2614-BLK1)

Viorel Vasile Operations Manager Prepared & Analyzed: 03/26/18



Client: The Source Group, Inc. (SH)

Project No: 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Monthly

AA Project No: A5332499

Date Received: 03/20/18

Date Reported: 04/03/18

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result %REC	%REC Limits	RPD	RPD Limit	Notes
Diesel Range Organics by GC/FID	- Quality	Control							
Batch B8C2614 - EPA 3510C									
Blank (B8C2614-BLK1) Continue	ed			Prepare	ed & Analyzed: 0	3/26/18			
Diesel Range Organics as Diesel	<60	60	ug/L						
Surrogate: o-Terphenyl	27.4		ug/L	40	68.4	50-150			
LCS (B8C2614-BS1)				Prepare	ed & Analyzed: 0	3/26/18			
Diesel Range Organics as Diesel	724	60	ug/L	800	90.5	75-125		30	
Surrogate: o-Terphenyl	40.0		ug/L	40	99.9	50-150			
LCS Dup (B8C2614-BSD1)				Prepare	ed & Analyzed: 0	3/26/18			
Diesel Range Organics as Diesel	641	60	ug/L	800	80.1	75-125	12.1	30	
Surrogate: o-Terphenyl	34.7		ug/L	40	86.7	50-150			
<b>Total Metals by ICP Atomic Emiss</b>	ion Spec	troscopy -	Quality (	Control					
Batch B8C2711 - EPA 3010A									
Blank (B8C2711-BLK1)				Prepare	ed & Analyzed: 0	3/27/18			
Arsenic	<0.0060	0.0060	mg/L						
LCS (B8C2711-BS1)				Prepare	ed & Analyzed: 0	3/27/18			
Arsenic	0.997	0.0060	mg/L	1.0	99.7	80-120		20	
LCS Dup (B8C2711-BSD1)				•	ed & Analyzed: 0				
Arsenic	1.00	0.0060	mg/L	1.0	100	80-120	0.220	20	





Client: The Source Group, Inc. (SH)

**Project No:** 04-NDLA-013

Project Name: DFSP Norwalk GWETS NPDES Monthly

AA Project No: A5332499 Date Received: 03/20/18 Date Reported: 04/03/18

**Special Notes** 



Project Manager: Neil Irish Phone: 562-597-1055 **Fax:** 569-597-1070

Client:

# AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

Page / of And roster Glenn Sampler's Name: Sampler's Signature: P.O. No.: Quote No.: Project Name / No.: DFSP - Norwalk / 091-NDLA/ Monthly NPDES 9765 ETON AVE., CHATSWORTH, CA 91311 Tel: 818-998-5547 FAX: 818-998-7258 15306 Norwalk Blvd State & Zip: CA 90650 Norwalk City: Site Address: APEX/The Source Group, Inc.

	TAT Turnaround Codes **	ŧ					8	ANALY	ANALYSIS REQUESTED (Test Name)	UESTE	(Test N	ame)		
(1) = Same Day Rush $(2) = 24  Hour Rush$		(4) = 72 Hour Rush $(5)$ = 5 Day Rush	£				7528 ABT		/				_	
(3) = 48 Hour Rush		X = 10 Working Days (Standard TAT)	Days (Star	dard TAT)		M2108		7.0050	_	_	_	_		Special
Client I.D.	* 1 LO	Date	Time	Sample	No.	DHqī	_	Arseni	_	_	_	_		
				Matrix	Cont	Pleas	Please enter the TAT Turnaround Codes ** below	the TA	I Turna	ound	odes **	below		
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Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.



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

Fax: (818) 998-7258

March 28, 2018

Neil Irish

The Source Group, Inc. (SH) 1962 Freeman Ave.

Signal Hill, CA 90755

Re: DFSP Norwalk / 04-NDLA-007

A5332496 / 8C20015

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 03/20/18 13:17 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Viorel Vasile

Operations Manager

# LABORATORY REPORT

Date:

March 26, 2018

**Client:** 

American Analytics 9765 Eton Avenue Chatsworth, CA 91311

Attn: Viorel Vasile

Aquatic **Testing** Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107 Ventura, CA 93003

(805) 650-0546 FAX (805) 650-0756

CA ELAP Cert. No.: 1775

Laboratory No.:

A-18032106-001

**Project No.:** 

A5332496

Sample ID.:

8C20015-01

**Sample Control:** 

The sample was received by ATL chilled and with the chain of custody record

attached.

Date Sampled:

03/20/18

Date Received:

03/21/18

Temp. Received:

5.7°C

Chlorine (TRC):

0.0 mg/l

Date Tested:

03/21/18 to 03/25/18

Sample Analysis:

The following analyses were performed on your sample:

Fathead Minnow 96hr Percent Survival Bioassay (EPA-821-R-02-012 Method 2000.0);

Attached are the test data generated from the analysis of your sample. All testing was conducted under the direct supervision of Joseph A. LeMay. Daily test readings were

taken by Joseph A. LeMay (initials: JAL) and Jacob LeMay (initials: J).

**Result Summary:** 

Sample ID.

Results

8C20015-01

100% Survival (TUa = 0.0)

**Quality Control:** 

Reviewed and approved by:

Laboratory Director

# FATHEAD MINNOW PERCENT SURVIVAL TEST EPA Method 2000.0



Lab No.: A-18032106-001

Client/ID: American Analytics 8C20015-01

Start Date: 03/21/2018

# **TEST SUMMARY**

Species: Pimephales promelas.

Age: 12 (1-14) days. Regulations: NPDES.

Test solution volume: 250 ml. Feeding: prior to renewal at 48 hrs.

Number of replicates: 4.

Control water: Moderately hard reconstituted water.

Photoperiod: 16/8 hrs light/dark.

Source: In-laboratory Culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012. Endpoints: Percent Survival at 96 hrs.

Test chamber: 600 ml beakers. Temperature: 20 +/- 1°C.

Number of fish per chamber: 10.

QA/QC No.: RT-180301.

## **TEST DATA**

		96	DO			# D	ead		Analyst & Time
		°C	DO	pН	Α	В	С	D	of Readings
DUTIAL	Control	20.4	8:7	8.0	0	0	0	0	2 3-21-18
INITIAL	100%	20.5	7. 7	7.6	O	0	٥	0	1400
24 Hr	Control	٤٥. ١	8.4	7.9	0	0	0	0	2 3-22-18
24 Hr	100%	¿o. 0	7.8	7.9	0	0	0	0	1400
40 11	Control	20.1	7. 9	9.1	0	0	0	0	2 >-2>-18
48 Hr	100%	2001	7. 9	8.0	ට ට	0	0	0	1400
D 1	Control	20.0	8.2	8.0	0	0	Ö	0	2
Renewal	100%	20.1	8.3	8. }	0	0	0	0	1400 3-13-18
72 Hr	Control	20-0	810	7.4	0	D	0	0	2 3-24-18
	100%	12.9	8.1	8.1	0	0	0	Ó	1330
07.11.	Control	20.0	8.1	7.9	0	0	0	0	7 3-25-18
96 Hr	100%	19.8	8.0	810	0	0	ව	J	1400

## Comments:

Sample as received: Chlorine:  $\bigcirc$  mg/l; Temp:  $\bigcirc$  °C; DO:  $\bigcirc$  7.2 ;

Alkalinity: 496 mg/l; Hardness: 747 mg/l; Conductivity: (204 umho; NH3-N: 1.6 mg/l.

Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No. Control: Alkalinity: 58 mg/l; Hardness: 12 mg/l.; Conductivity: 307 umho.

Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes /

Original sample used for renewal kept at 0-6°C with minimal headspace.

Dissolved Oxygen (DO) readings in mg/l O<sub>2</sub>.

## **RESULTS**

Percent Survival In:	Control:	100_	%	100% Sample: _	100	%

Agoutic Teather Lols
AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311 FAX: 818-998-7258 Tel: 818-998-5547

70050986 Page Vof A.A. COC No.:

		۲,					Special			Sout West	No_	Mesur Winds	Mesus Wisch	Mosurinal Col Minesell	South water	Mosurinal Posurinal I-R-02-012	Mesuminal Pasurwinal 1-R-02012	Mesurinal Mineral 1-R-02-012	Posurwich Col Milled (1-R-02-012)	Mosurinal Posurinal I-R-02-012	Posurwich Col Michael 1-R-02-012	Posur Word Posur Word 1-R-02-012	Posurwined Posurwined 1-R-02-012	Sourwise Mucol	Gle Boswing College Miller Mil	Posurwines 1-R-02-012 1-R-02-012 auch you	Tolk Posw. wood  RR21-R-02-012  Thank you  Received by  Received by  The by  T	Received by The Received by Th
ame:	ıture:	P.O. No.: 3012	No.:	lame)		_	<u></u>		Oleke Oleke	Hath	#\$#871			31											Rece	Kece Kece	Charles of the control of the contro	A Reco
Sampler's Name:	Sampler's Signature:	P.0	Quote No.:	STED (Test N		_	<u> </u>		and codes																Time	Time 72's	Time Time 136	Time Time 136
8C20015	San			ANALYSIS REQUESTED (Test Name)		<u></u>	<u> </u>		rease enter the TAT Turnaround Codes Delow																Date	Date 3-2/-√5	3-7/-/5 Date	3-2/-/5 Date 3-24-16
15322496/8CJ	•			4	PA	<u></u>	- gh	M	Cont Please enter														NA	10/1/2/	Leilling All San Control	All shows a series of the seri	Religional Resignation	Relinquished by
4							ndard TAT)	Sample Matrix																Oction	אפווויל	Neill Id	Religi	Relind
me / No.:	Site Address:	City:	State & Zip:		qs		Days (Sta	Time	8080																			
Project Na	Site		š	*	4 = 72 Hour Rush	5 Day Rush	10 Working Days (Standard TAT)	Date	3/20/18	-																		
KAN ALCITEROJECT Name / No.:	rol Vastle			TAT Turnaround Codes **		Rush (5) =	Rush X =	A.A. I.D.																For Laboratory Use				
Client: AMERACANS	Project Manager: 1070	i	ננ		1 = Same Day Rush	(2) = 24 Hour Rush	3 = 48 Hour Rush	Client I.D.	10-51002 08															Fort				
ö	<u>a</u>	Ph	Fax:																									

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.



# REFERENCE TOXICANT DATA

# **FATHEAD MINNOW ACUTE Reference Toxicant - SDS**



# QA/QC Batch No.: RT-180301

# **TEST SUMMARY**

Species: Pimephales promelas.

Age: **q** days old. Regulations: NPDES.

Test chamber volume: 250 ml. Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C. Number of replicates: 2. Dilution water: MHSF.

Source: In-lab culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012.

Endpoints: LC50 at 96 hrs. Test chamber: 600 ml beakers.

Aeration: None.

Number of organisms per chamber: \_\_\_\_\_\_\_.

Photoperiod: 16/8 hrs light/dark.

# **TEST DATA**

		INITIAL	,			24 Hr					48 Hr		
Date/Time:	3-1-	18	1500	3-	2-18		11	76	3-3-	18		1115	
Analyst:		2				7				1	2		
	00	DO.	"II	J.	DO	mII.	# D	Dead	°C	DO	pН	# D	ead
	°C	DO	pН		DO	рН	Α	В	C	DO	рп	Α	В
Control	۵.0	8,6	84	las	8.3	7.9	0	U	20-0	812	80	0	0
1.0 mg/l	19.9	8.5	8.1	124	8.7	7.4	0	0	क.।	8.2	8.0	0	0
2.0 mg/l	19-8	8.6	8.0	12.8	8,2	7.8	0	0	128	8.1	8.0	0	0
4.0 mg/l	12.9	8.6	8-1	17.8	29	28	0	6	19.8	8.2	810	0	0
8.0 mg/l	17.8	8.5	8./	12.8	7.9	7-9	10	10		ı	,	,	,
16.0 mg/l	19. 7	9.6	8-D	128	7.8	7. 9	10	16		_	٢	ζ.	Ç

	F	RENEWA	L			72 Hr			96 Hr					
Date/Time:	3-7	3-14	1115	3.	-4-18		11	w	7-5	-15	,	1200		
Analyst:		2				2				gn	-			
	°C	DO		°C	DO		# D	ead	°C	DO	nl.i	# 0	ead	
		ЪО	pН		DO	pH	A	В	<u> </u>	ЪО	pН	A	В	
Control	200/	8.4	810	19.8	8.3	8.0	0	0	19-6	8-3	8.0	0	0	
1.0 mg/l	20.0	8.6	810	17.6	g. 2	7.9	0	0	19-6	8.2	7-9	0	0	
2.0 mg/l	20.0	8:5	8.0	19.6	8.4	7.9	0	0	19.5	8.4	80	0	U	
4.0 mg/l	201	8.6	8.0	17.5	8.3	7.9	6	0	14.5	8.4	8.0	ጉ	0	
8.0 mg/l		_	_	_		•	1	1	1	_	_	1	`	
16.0 mg/l	_	_	_	-		1	_	_	_	_	-		1	

Control: Alkalinity: 59 mg/l; Hardness: 88 mg/l; Conductivity: 36 umho. SDS: Alkalinity: 60 mg/l; Hardness: 88 mg/l; Conductivity: 310 umho. Comments:

Dissolved Oxygen (DO) readings in mg/l O<sub>2</sub>.

Concentration-response relationship acceptable? (see attached computer analysis):

(response curve normal)

No (dose interrupted indicated or non-normal)

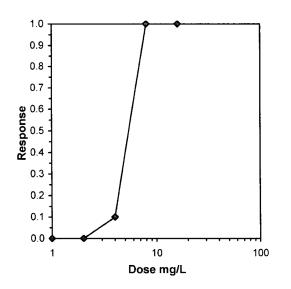
				Acute Fish Test-96	Hr Survival	
Start Date:	3/1/2018	12:00	Test ID:	RT180301f	Sample ID:	REF-Ref Toxicant
End Date:	3/5/2018	12:00	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	SDS-Sodium dodecyl sulfate
Sample Date:	3/1/2018		Protocol:	EPAAW02-EPA/821/R-02-01	Test Species:	PP-Pimephales promelas
Comments:						
Conc-mg/L	1	2				
D-Control	1.0000	1.0000	•			
1	1.0000	1.0000				
2	1.0000	1.0000				
4	0.8000	1.0000				
8	0.0000	0.0000				
16	0.0000	0.0000				

			Tra	ansform:	Arcsin Sc	uare Roof	t	Number T	otal
Conc-mg/L	Mean	N-Mean <sup>*</sup>	Mean	Min	Max	CV%	N	Resp Nu	mber
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20
4	0.9000	0.9000	1.2596	1.1071	1.4120	17.115	2	2	20
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20
16	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20

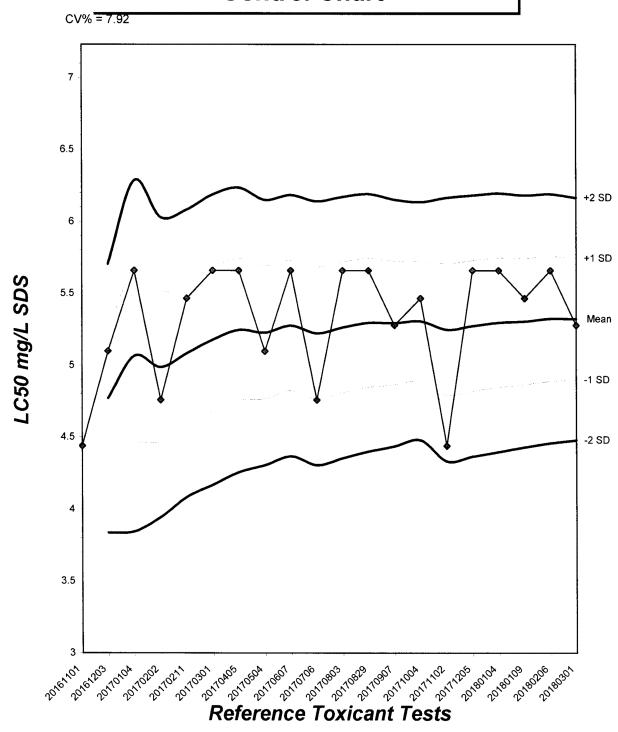
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				

Equality of variance cannot be confirmed

•					Trimmed Spearman-Karber
	Trim Level	EC50	95%	CL	
•	0.0%	5.2780	4.8093	5.7924	
	5.0%	5.3968	4.8053	6.0611	
	10.0%	5.4432	5.1395	5.7648	1.0 —
	20.0%	5.4432	5.1395	5.7648	4
	Auto-0.0%	5.2780	4.8093	5.7924	0.9



# Fathead Minnow Acute Laboratory Control Chart



# **TEST ORGANISM LOG**



for

# FATHEAD MINNOW - LARVAL (Pimephales promelas)

QA/QC BATCH NO.: RT-180301
SOURCE: In-Lab Culture
DATE HATCHED: 1.20- 18
APPROXIMATE QUANTITY: 400
GENERAL APPEARANCE:
# MORTALITIES 48 HOURS PRIOR TO TO USE IN TESTING:
DATE USED IN LAB: 3 / 1 / 18
AVERAGE FISH WEIGHT: gm
LOADING LIMITS: 0.65 gm/liter @ 20°C, 0.40 gm/liter @ 25°C
Approximately 1000 fish per 10 liters limit if held overnight for acclimation without filtration @ $20^{\circ}$ C for fish with a mean weight of 0.006 gm.
Approximately 650 fish per 10 liters limit if held overnight for acclimation without filtration @ $25^{\circ}$ C f fish with a mean weight of 0.006 gm.
200 ml test solution volume = 0.013 gm mean fish weight limit @ 20°C; 0.008 @ 25°C 250 ml test solution volume = 0.016 gm mean fish weight limit @ 20°C; 0.010 @ 25°C
ACCLIMATION WATER QUALITY:
Temp.: <u>\( \mathbf{to.o} \) \( \mathbf{o} \) PH: <u>\( \mathbf{s-1} \) Ammonia: (\mathbf{o} \) mg/l NH<sub>3</sub>-N</u></u>
DO:mg/l Alkalinity:mg/l Hardness: \frac{\mathbf{N}}{\mathbf{N}}mg/l
READINGS RECORDED BY: DATE: 3-2-18

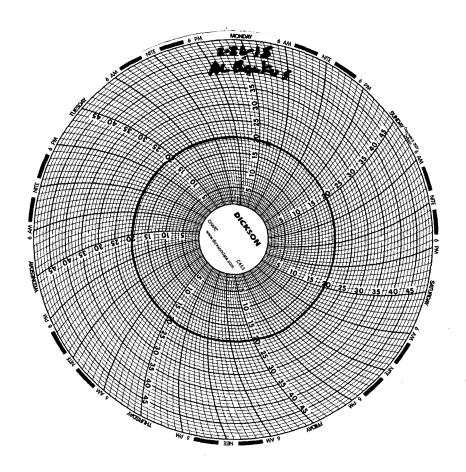


# Test Temperature Chart

Test No: RT-180301

Date Tested: 03/01/18 to 03/05/18

Acceptable Range: 20 +/- 1°C



# AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311

Tel: 818-998-5547 FAX: 818-998-7258

ANALYTICS		Tel: 818	Tel: 818-998-5547	•	FAX: 818-998-7258						Δ.	Page / of /
client: APEX/The Source Group, Inc.	se Group, Inc.	Project Nar	ame / No.:	DFSP - No	DFSP - Norwalk / 091-NDLA/ Monthly NPDES	-NDLA/ MA	onthly NPD		Sampler's Name:	İ	1 and S	Glenn Androsten
Project Manager: Neil Irish	ų	Site A	Site Address:	15306 No	15306 Norwalk Blvd			Samp	Sampler's Signature:		Minne	(B. D. a.l.
Phone: 562-597-1055			City:	Norwalk					P.0	P.O. No.:		
Fax: 569-597-1070		Sta	State & Zip:	CA 90650	)				Quote	Quote No.:	·	
	TAT Turnaround Codes **	ŧ				9	ANALYSIS	REQUES	ANALYSIS REQUESTED (Test Name)	tame)		
(1) = Same [	Same Day Rush	(4) = 72 Hour Rush	_			0028	)G[	Jec.		-	/	
(2) = 24 Hour Rush		5 = 5 Day Rush				A8T\	_		_	_	_	
(3) = 48 Hour Rush	×	= 10 Working Days (Standard TAT)	ays (Stan	idard TAT)	43100	A2108 BETM	ic 200,	Diss.	(man)	_	_	Special Instructions
Client I.D.	A.M. (B.)	Date	T me	Sample	No.	TPH9.		_		/ /	_	
				Matrix	1	ease enter	Please enter the TAT Turnaround Codes ** below	ırnarouı	nd Codes *	* below	_	
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Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-fequested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.

# APPENDIX B

Laboratory ELAP Certification







# **ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM**

# CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

American Analytics Inc.

**Stationary Laboratory** 

9765 Eton Avenue

Chatsworth, CA 91311

Scope of the certificate is limited to the "Fields of Testing" which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 1471

Expiration Date: 3/31/2018

Effective Date: 4/1/2017

Christine Sotelo, Chief

Environmental Laboratory Accreditation Program

ariotin Se

Sacramento, California subject to forfeiture or revocation







# State Water Resources Control Board

April 19, 2017

George Havalias American Analytics Inc. 9765 Eton Avenue Chatsworth, CA 91311

Dear George Havalias:

Certificate No. 1471

This notice advises that the laboratory named above has been certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seg.

The Fields of Testing for which this laboratory has been certified are indicated on the enclosed "Fields of Testing" list. The certificate shall remain in effect until March 31, 2018 unless it is revoked. This certificate is subject to an annual fee as determined by HSC 100860.1(a).

The application for renewal of this certificate must be received 90 days prior to the expiration date to remain in force according to HSC 100845(a). You must submit annual Proficiency Testing results before the due date of your annual fee to remain in compliance.

Any change in laboratory location or alteration to laboratory structure that could adversely affect quality of analysis in certified methods require notification prior to the change. Notification is also required for a transfer in ownership or appointment of new laboratory director within 30 days of the change (HSC, Section 100845(b) and (d)).

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories certified by the State of California.

Please contact our office at (916) 323-3431 or elapca@waterboards.ca.gov with questions.

Sincerely.

Christine Sotelo, Chief

**Environmental Laboratory Accreditation Program** 

Enclosure



# CALIFORNIA STATE ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM Accredited Fields of Testing



American Analytics Inc.

Stationary Laboratory 9765 Eton Avenue Chatsworth, CA 91311

Phone: (818) 998-5547

103.140 005

Beryllium

Certificate No. 1471 Expiration Date 3/31/2018

Field of T	esting	: 102 - Inorganic Chemistry of Drinking Water	
102.015	001	Hydrogen Ion (pH)	EPA 150.1
102.026	001	Calcium	EPA 200.7
102.026	002	Magnesium	EPA 200.7
102.026	003	Potassium	EPA 200.7
102.026	004	Silica	EPA 200.7
102.026	005	Sodium	EPA 200.7
102.026	006	Hardness (calculation)	EPA 200.7
102.030	001	Bromide	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate (as N)	EPA 300.0
102.030	007	Nitrite (as N)	EPA 300.0
102.030	800	Phosphate, Ortho (as P)	EPA 300.0
102.030	009	Sulfate	EPA 300.0
102.045	001	Perchlorate	EPA 314.0
102.100	001	Alkalinity	SM2320B-1997
102.121	001	Hardness	SM2340C-1997
102.130	001	Conductivity	SM2510B-1997
102.140	001	Residue, Filterable TDS	SM2540C-1997
102.175	002	Chlorine, Total Residual	SM4500-Cl G-2000
102.190	001	Cyanide, Total	SM4500-CN E
102.260	001	Total Organic Carbon TOC	SM5310B-2000
Field of T	Testing	: 103 - Toxic Chemical Elements of Drinking Wa	ater
103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	004	Beryllium	EPA 200.7
103.130	005	Cadmium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	002	Antimony	EPA 200.8
103.140		Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
-			

EPA 200.8

103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	800	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.310	001	Chromium (VI)	EPA 218.6
Field of	Testina	: 104 - Volatile Organic Chemistry of Drinking W	/ater
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	000	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	007	sec-Butylbenzene	EPA 524.2
104.040	000	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	010	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethene	EPA 524.2
104.040	026	cis-1,2-Dichloroethene	EPA 524.2
104.040		trans-1,2-Dichloroethene	EPA 524.2
104.040		Dichloromethane	EPA 524.2
104.040		1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropene	EPA 524.2
104.040	034	trans-1,3-Dichloropropene	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2
104.040		Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	043	1,1,1,2-Tetrachloroethane	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethene	EPA 524.2
104.040	046	Toluene	EPA 524.2
104.040	047	1,2,3-Trichlorobenzene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2

104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethene	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.045	004	Dibromochloromethane	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	003	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	004	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	006	tert-Butyl Alcohol (TBA)	EPA 524.2
Field of	Toeting	: 108 - Inorganic Chemistry of Wastewater	
			ED. 400.4
108.110		Turbidity	EPA 180.1
108.112		Boron	EPA 200.7
108.112		Calcium	EPA 200.7
108.112	003	Hardness (calculation)	EPA 200.7
108.112		Magnesium	EPA 200.7
108.112		Potassium	EPA 200.7
108.112		Silica, Dissolved	EPA 200.7
108.112	007	Sodium	EPA 200.7
108.120	001	Bromide	EPA 300.0
108.120	002	Chloride	EPA 300.0
108.120	003	Fluoride	EPA 300.0
108.120	800	Sulfate	EPA 300.0
108.120	012	Nitrate (as N)	EPA 300.0
108.120	013	Nitrate-Nitrite (as N)	EPA 300.0
108.120	014	Nitrite (as N)	EPA 300.0
108.120	015	Phosphate, Ortho (as P)	EPA 300.0
108.323	001	Chemical Oxygen Demand	EPA 410.4
108.381	001	Oil and Grease	EPA 1664A
108.390	001	Turbidity	SM2130B-2001
108.410	001	Alkalinity	SM2320B-1997
108.421	001	Hardness	SM2340C-1997
108.430	001	Conductivity	SM2510B-1997
108.440	001	Residue, Total	SM2540B-1997
108.441	001	Residue, Filterable TDS	SM2540C-1997
108.442		Residue, Non-filterable TSS	SM2540D-1997
108.443		Residue, Settleable	SM2540F-1997
108.465	001	Chlorine, Total Residual	SM4500-CI G-2000
108.470	001	Cyanide, Total	SM4500-CN B or C-1999
108.472		Cyanide, Total	SM4500-CN E-1999
108.473		Cyanide, amenable	SM4500-CN G-1999
108.490	001	Hydrogen Ion (pH)	SM4500-H+ B-2000
108.502		Ammonia (as N)	SM4500-NH3 B,E-1997
108.536		Oxygen, dissolved	SM4500-O G-2001
100.000	001	Oxygon, dissolved	ON-1000 O O 2001

108.584	001	Sulfide (as S)	SM4500-S= D-2000
108.592	001	Biochemical Oxygen Demand	SM5210B-2001
108.596	001	Organic Carbon-Total (TOC)	SM5310B-2000
108.660	001	Chemical Oxygen Demand	HACH8000
Field of	Testing	: 109 - Toxic Chemical Elements of Wastewater	
109.010	001	Aluminum	EPA 200.7
109.010	002	Antimony	EPA 200.7
109.010		Arsenic	EPA 200.7
109.010		Barium	EPA 200.7
109.010		Beryllium	EPA 200.7
109.010		Boron	EPA 200.7
109.010		Cadmium	EPA 200.7
109.010		Chromium	EPA 200.7
109.010		Cobalt	EPA 200.7
109.010		Copper	EPA 200.7
109.010		Iron	EPA 200.7
109.010		Lead	EPA 200.7
109.010		Manganese	EPA 200.7
109.010		Molybdenum	EPA 200.7
109.010		Nickel	EPA 200.7
109.010		Selenium	EPA 200.7
1 <u>09.010</u> 1 <u>09.010</u>		Silver Thallium	EPA 200.7
109.010		Tin	EPA 200.7 EPA 200.7
109.010		Titanium	EPA 200.7
109.010		Vanadium	EPA 200.7
109.010		Zinc	EPA 200.7
109.020		Antimony	EPA 200.8
109.020		Arsenic	EPA 200.8
109.020	004	Barium	EPA 200.8
109.020	005	Beryllium	EPA 200.8
109.020	006	Cadmium	EPA 200.8
109.020	007	Chromium	EPA 200.8
109.020	800	Cobalt	EPA 200.8
109.020	009	Copper	EPA 200.8
109.020	010	Lead	EPA 200.8
109.020	011	Manganese	EPA 200.8
109.020	012	Molybdenum	EPA 200.8
109.020	013	Nickel	EPA 200.8
109.020	014	Selenium	EPA 200.8
109.020	015	Silver	EPA 200.8
109.020	016	Thallium	EPA 200.8
109.020	017	Vanadium	EPA 200.8
109.020	018	Zinc	EPA 200.8
109.104		Chromium (VI)	EPA 218.6
109.190		Mercury	EPA 245.1
109.449	001	Iron	SM3500-Fe B-1997

Field of Testing: 110 - Volatile Organic Chemistry of Wastewater				
110.020		Purgeable Aromatics	EPA 602	
110.040		Purgeable Organic Compounds	EPA 624	
		: 111 - Semi-volatile Organic Chemistry of Was		
111.060				
	000	Polynuclear Aromatics	EPA 610  EPA 625	
1 <u>11.100</u> 111.103	000	Base/Neutral & Acid Organics  Nitrosamines	EPA 625	
111.170		Organochlorine Pesticides and PCBs	EPA 608	
		<u> </u>		
-		: 114 - Inorganic Chemistry of Hazardous Wast		
114.010		Antimony	EPA 6010B	
114.010	002	Arsenic	EPA 6010B	
114.010		Barium	EPA 6010B	
114.010		Beryllium	EPA 6010B	
114.010		Cadmium	EPA 6010B	
114.010	006	Chromium	EPA 6010B	
114.010		Cobalt	EPA 6010B	
114.010	800	Copper	EPA 6010B	
114.010	009	Lead	EPA 6010B	
114.010	010	Molybdenum	EPA 6010B	
114.010		Nickel	EPA 6010B	
114.010		Selenium	EPA 6010B	
114.010		Silver	EPA 6010B	
114.010	014	Thallium	EPA 6010B	
114.010		Vanadium	EPA 6010B	
114.010		Zinc	EPA 6010B	
114.020	001	Antimony	EPA 6020	
114.020	002	Arsenic	EPA 6020	
114.020	003	Barium	EPA 6020	
114.020	004	Beryllium	EPA 6020	
114.020	005	Cadmium	EPA 6020	
114.020	006	Chromium	EPA 6020	
114.020		Cobalt	EPA 6020	
114.020		Copper	EPA 6020	
114.020	009	Lead	EPA 6020	
114.020	010	Molybdenum	EPA 6020	
114.020		Nickel	EPA 6020	
114.020		Selenium	EPA 6020	
114.020	013	Silver	EPA 6020	
114.020	014	Thallium	EPA 6020	
-		Vanadium	EPA 6020	
1 <u>14.020</u> 1 <u>14.106</u>		Zinc	EPA 6020	
-	001	Chromium (VI)	EPA 7199	
114.141	001	Mercury  Correctivity and Determination	EPA 7471A	
114.241		Corrosivity - pH Determination	EPA 9045C	
		: 115 - Extraction Test of Hazardous Waste		
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311	

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115.021	001	TCLP Inorganics	EPA 1311	
115.022	001	TCLP Extractables	EPA 1311	
115.023	001	TCLP Volatiles	EPA 1311	
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II	
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312	
Field of Testing: 116 - Volatile Organic Chemistry of Hazardous Waste				
116.030	001	Gasoline-range Organics	EPA 8015B	
116.040	062	BTEX	EPA 8021B	
116.080	000	Volatile Organic Compounds	EPA 8260B	
116.100	001	Total Petroleum Hydrocarbons - Gasoline	LUFT GC/MS	
Field of Testing: 117 - Semi-volatile Organic Chemistry of Hazardous Waste				
117.010	001	Diesel-range Total Petroleum Hydrocarbons	EPA 8015B	
117.017	001	TRPH Screening	EPA 418.1	
117.110	000	Extractable Organics	EPA 8270C	
117.140	000	Polynuclear Aromatic Hydrocarbons	EPA 8310	
117.210	000	Organochlorine Pesticides	EPA 8081A	
117.220	000	PCBs	EPA 8082	

**APPENDIX C** 

Report Certification



### DEFENSE LOGISTICS AGENCY INSTALLATION OPERATIONS ENERGY 8725 JOHN J. KINGMAN ROAD FORT BELYOIR VIRGINIA 22060-6221

April 10, 2018

Mr. Gensen Kai California Regional Water Quality Control Board - Los Angeles Region 320 West 4th Street, Suite 200 Los Angeles, California 90013

Dear Mr. Kai:

Please accept this letter as certification of the Groundwater Discharge Monitoring Report – Quarter 1 calendar year 2018 for Defense Fuel Support Point Norwalk, General National Pollutant Discharge Elimination System Permit No. CAG994004, CFN# CI-7585.

In summary, the acute toxicity sample collected on February 28, 2018, from the groundwater water extraction and treatment system (GWETS) did not meet the threshold specified in Section IV, Part A.4 of the Monitoring and Reporting Program. As you are aware, the GWETS has been offline since December 28, 2017, due to a previously reported copper exceedance. On February 28, 2018, our restoration contractor turned on the GWETS system to conduct the bioassay sampling and manually shut it down the same day. The discharge water was not contained while waiting for the analytical analyses results. We notified your office on March 2, 2018, and our contractor continued their investigation to determine potential causative factors. Since then, we employed a temporary holding tank for treated water and completed troubleshooting on the carbon filter and achieved a 100% success rate with a subsequent sample.

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 submitting false information, including the possibility of a fine and imprisonment for knowing violations.

If you have any questions or need additional information concerning this document, please contact Ms. Carol Devier-Heeney at (703) 767-9813 or <a href="mailto:carol.devier-heeney@dla.mil">carol.devier-heeney@dla.mil</a>.

Sincerely,

Jan A Herry

Digitally signed by | FLEMING.LAURA.ANN.127111262 | 5 | Date: 2018.04.11 17:36:50 -04'00'

Laura A. Fleming Chief, Environmental Division

Enclosure As stated

cc: CRWQB Information Technology Unit

GeoTracker ESI Page 1 of 1

# STATE WATER RESOURCES CONTROL BOARD

# **GEOTRACKER ESI**

# UPLOADING A GEO\_REPORT FILE

# **SUCCESS**

# Your GEO\_REPORT file has been successfully submitted!

<u>Submittal Type:</u> GEO\_REPORT

Report Title: GROUNDWATER DISCHARGE MONITORING REPORT

**QUARTER 1, 2018** 

Report Type: NPDES / WDR Reports

Report Date: 4/13/2018

Facility Global ID: SLT43185183

Facility Name: Norwalk, Fuel Terminal DFSP - DOD - NORWALK DFSP

GROUNDWATER DISCHARGE MONITORING REPORT

QUARTER 1, 2018.pdf

<u>Organization</u>

Name: The Source Group, Inc.

<u>Username:</u> SIGNAL HILL

<u>IP Address:</u> 66.214.148.134

<u>Submittal</u> 4/13/2018 7:14:16 AM <u>Date/Time:</u>

Confirmation

3969260096

Number:

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