STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

Submittal Type:	GEO_REPORT
Report Title:	GROUNDWATER DISCHARGE MONITORING REPORT QUARTER 4, 2016
Report Type:	NPDES / WDR Reports
Report Date:	1/13/2017
Facility Global ID:	SLT43185183
Facility Name:	Norwalk, Fuel Terminal DFSP - DOD - NORWALK DFSP
File Name:	Groundwater Discharge Monitoring Report Quarter 4, 2016 FINAL.PDF
Organization Name:	The Source Group, Inc.
Username:	SIGNAL HILL
IP Address:	66.214.148.134
Submittal Date/Time:	1/13/2017 9:17:07 AM
Confirmation Number:	6027052462

Copyright © 2017 State of California

January 13, 2017

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 4, 2016
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 Support for Energy (DLA Energy), The Source Group, Inc. (SGI) presents this groundwater discharge monitoring report to summarize the National Pollutant Discharge Elimination System (NPDES) monitoring activities for Quarter 4, 2016 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 that the annual acute toxicity sample collected on November 1, 2016 yielded a result of 0% survival (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 382,910 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 0.9 pounds (Table 2c) during Quarter 4, 2016.

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). 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 that the annual acute toxicity sampled collected on November 1, 2016 yielded a result of 0% survival. As indicated on Table 1, this result was received on November 7, 2016 and discharge was immediately terminated the same day after collecting a confirmation sample for laboratory analysis. Discharge resumed on November 23, 2016 based on a confirmation sample result of 98% survival per SGI's November 22, 2016 *Acute Toxicity Testing Exceedance Report* which also includes all of the associated notification details, investigative measures, and follow up actions taken and planned to help ensure continued permit compliance.

Per SGI's November 22, 2016 report, the anomalous November 1, 2016 acute toxicity test result was not repeatable and is considered suspect since no definitive cause could be identified. The system has been operating under normal conditions since before the annual toxicity sample was collected and no new chemicals have been introduced into the treatment train. Thus, test method variability and/or some other false positive has been determined to be the most likely cause. To help verify this is the case and in accordance with Section IV, Part A.4 of Monitoring and Reporting Program, accelerated monthly acute toxicity testing will be conducted for at least three consecutive months with the December 2016 results (100% survival) provided herein. Discharge will therefore continue with regular annual acute toxicity testing resuming once three consecutive monthly results show full compliance with the effluent limitation.

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 Energy report certification is provided in Appendix C.

Sincerely,

Michael Wood, P.E.
Senior Engineer

Neil F. Irish, P.G. 5484
Principal Geologist

Attachments:

Table 1 – Summary of Effluent Groundwater Analytical Sampling Results - 4th Quarter 2016
Table 2a – Groundwater Extraction and Treatment System Operations Summary - October
Table 2b – Groundwater Extraction and Treatment System Operations Summary - November
Table 2c – Groundwater Extraction and Treatment System Operations Summary - December

Appendix A – Laboratory Analytical Reports and Chain-of-Custody Documents
Appendix B – Laboratory ELAP Certification
Appendix C – Report Certification

Distribution List
cc: Mr. Paul Cho, LARWQCB
Ms. Adriana Figueroa, City of Norwalk
Mr. Eugene Garcia, RAB Community Member
Ms. Minxia Dong, Norwalk Regional Library
Ms. Carol Devier-Heeney, DLA-E
Mr. Brian Partington, Water Replenishment District
Mr. Everett Ferguson, Water Replenishment District
Mr. Charles Emig, City of Cerritos
Ms. Perla Hernandez, Office of Congresswoman Grace Napolitano
Mr. Jon Wreschinsky, March ARB
Ms. Angelina Mancillas, Office of Congresswoman Linda T. Sánchez
Ms. Yahaira Ortiz, Senior District Representative
Mr. Norman Dupont, Richards Watson Gershon

Distribution List - Continued

Mr. Adam Ly, Liberty Utilities
Mr. Walter Scherer, March ARB
Mr. Michael T. Wilson, Air Force Real Property Agency
Mr. Steve Defibaugh, KMI
Mr. Mark Wuttig, CH2M HILL
Mr. Dan Jablonski, CH2M HILL
Ms. Lorena Sierra, John Dolland Elementary School
Ms. Carina Chacon, Field Representative
Ms. Mary Jane McIntosh, RAB Community Member
Ms. Tracy Winkler, RAB Community Member

TABLES

TABLE 1
Summary of Effluent Groundwater Analytical Sampling Results - 4th Quarter 2016
DFSP, Norwalk
15306 Norwalk Blvd., Norwalk, CA

		Sampling Frequency	**Monthly**							**Quarterly**											**Annually**
		Laboratory Analysis Methods	--	SM 4500 H+B [a]	--	EPA 8015B (M)	EPA 8260B	EPA 8260B	EPA 6020	SM 5520 B	EPA 6020	SM 2130 B	SM 4500 S2-D	SM 4500-Cl F [b]	SM 2540 C	SM 2540 D	SM 2540 F	SM 5540 C	EPA 420.1	SM 5210 B	EPA 2000.0
		Daily Discharge 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	--
		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**	**Temp-erature**	**TPH**	**MTBE**	**TBA**	**Arsenic**	**Oil & Grease**	**Copper**	**Turbidity**	**Sulfides**	**Residual Chlorine**	**Total Dissolved Solids**	**Total Suspended Solids**	**Settleable Solids**	**MBAS**	**Phenols**	**BOD_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)
10/12/16	1	GW-2, GW-13, GW-15, GW-16	3.8	7.55	20.5	<100	<0.40	<7.0	**8.0**	--	--	--	--	--	--	--	--	--	--	--	--
11/01/16		GW-2, GW-13, GW-15, GW-16	4.2	7.50	22.0	<100	<0.40	<7.0	<6.0	**2.0 J**	<2.0	**0.35 J**	<0.027	<0.1	**1,200**	<5.0	<0.1	<0.05	<0.15	<5.0	0 *
11/07/16	2,3,4	GW-2, GW-13, GW-15, GW-16	5.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	98
12/05/16	5	GW-2, GW-13, GW-15	3.2	7.60	19.8	<100	<0.40	<7.0	<6.0	--	--	--	--	--	--	--	--	--	--	--	100

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 available or not analyzed
J = Laboratory estimated value since analyte detected below Method Reporting Limit (MRL) but above MDL.

a = Measured in the field using an Oakton® pH Tester Model 30.
b = Measured in the field using a HACH® Chlorine Test Kit Model CN-70.

1 = GWETS restarted following completion of groundwater monitoring and sampling activities (system off-line since 09/26/16).
2 = Annual acute toxicity testing result from 11/01/16 sampling event received on 11/07/16 (GWETS manually shutdown the same day after collecting confirmation sample for laboratory analysis).
3 = GWETS restarted on 11/23/16 based on acute toxicity testing result from 11/07/16 confirmation sample (i.e., 98% survival) and following associated regulatory notifications and NPDES permit required reporting.
4 = Pumps in wells GW-13, GW-15 and GW-16 off-line for maintenance from 11/23/16 to 11/28/16, 11/28/16 to 12/1/16 and 11/23/16 to 12/19/16, respectively.
5 = Results of additional monthly acute toxicity test samples collected as part of accelerated permit compliance monitoring (duplicate samples collected and sent to independent laboratories as a precautionary measure with both results yielding 100% survival).

* = See SGI's November 22, 2016 *Acute Toxicity Testing Exceedance Report* for notification details, investigative measures and follow up actions taken and planned to help ensure continued permit compliance.

TABLE 2a

Groundwater Extraction and Treatment System Operations Summary - October

DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

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

Cumulative Groundwater Discharged by the GWETS to Date (gallons)							
Period	October	Quarter 1, 2016	Quarter 2, 2016	Quarter 3, 2016	Quarter 4, 2016	2016 to Date	April 1996 to Date
Volume	108,254	496,032	407,531	698,046	108,254	1,709,863	75,569,591

Cumulative Mass DRO Removed by the GWETS [A] (lb)			
Period	October	Quarter 4 to Date	April 1996 to Date
Mass	0.21	0.21	9,943.1

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

Legend / Notes:

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

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

GWETS = Groundwater extraction and treatment system
µg/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: 10/12/16 (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 - November

DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

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

Cumulative Groundwater Discharged by the GWETS (gallons)							
Period	November	Quarter 1, 2016	Quarter 2, 2016	Quarter 3, 2016	Quarter 4, 2016	2016 to Date	April 1996 to Date
Volume	81,823	496,032	407,531	698,046	190,077	1,791,686	75,651,414

Cumulative Mass DRO Removed by the GWETS [A] (lb)			
Period	November	Quarter 4 to Date	April 1996 to Date
Mass	0.08	0.29	9,943.2

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

Legend / Notes:

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

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

A = Hydrocarbon removal is calculated using analytical laboratory result for DRO (if not detected, half the detection limit is used) from sample collected on: 11/01/16 (laboratory report attached).
-- = Not applicable
* = Operational values interpolated from chart recorder data or previous monitoring event.

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

TABLE 2c

Groundwater Extraction and Treatment System Operations Summary - December

DFSP, Norwalk

15306 Norwalk Blvd., Norwalk, CA

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

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

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

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

Legend / Notes:

1 = GW-15 brought back online (off-line for pump maintenance since 11/28/16).

2 = Collected monthly influent, intermediate, and effluent water samples for laboratory analysis.

3 = Collected monthly acute toxicity testing sample for laboratory analysis as part of required accelerated permit compliance monitoring.

4 = GW-16 brought back online (off-line for pump maintenance since 11/23/16).

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

GWETS = Groundwater extraction and treatment system

µg/L - Micrograms per liter

lb = Pounds

DRO = Diesel range organics

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

-- = Not applicable

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

APPENDIX A

Laboratory Analytical Reports and Chain-of-Custody Documents

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

October 26, 2016

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

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

A5331960 / 6J12014

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

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

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

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331960
Date Received: 10/12/16
Date Reported: 10/26/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8260B TPHGASOLINEBTEXOXY					
Effluent	6J12014-01	Water	5	10/12/16 11:04	10/12/16 16:45
Arsenic Total EPA 200.7					
Effluent	6J12014-01	Water	5	10/12/16 11:04	10/12/16 16:45
Diesel Range Organics 8015M					
Effluent	6J12014-01	Water	5	10/12/16 11:04	10/12/16 16:45

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5331960
Project No:	04-NDLA-013	**Date Received:**	10/12/16
Project Name:	DFSP Norwalk GWETS NPDES Monthly	**Date Reported:**	10/26/16
Method:	TPHG/BTEX/Oxygenates by GC/MS	**Units:**	ug/L

Date Sampled:	10/12/16		
Date Prepared:	10/19/16		
Date Analyzed:	10/19/16		
AA ID No:	6J12014-01		
Client ID No:	Effluent		
Matrix:	Water		
Dilution Factor:	1	MDL	MRL
8260B TPHGASOLINEBTEXOXY (EPA 8260B)			
tert-Butyl alcohol (TBA)	<7.0	7.0	10
Gasoline Range Organics (GRO)	<40	40	100
Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	2.0

Surrogates		**%REC Limits**
4-Bromofluorobenzene	108%	70-140
Dibromofluoromethane	121%	70-140
Toluene-d8	97%	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5331960
Project No:	04-NDLA-013	**Date Received:**	10/12/16
Project Name:	DFSP Norwalk GWETS NPDES Monthly	**Date Reported:**	10/26/16
Method:	Diesel Range Organics by GC/FID	**Units:**	ug/L

Date Sampled:	10/12/16		
Date Prepared:	10/17/16		
Date Analyzed:	10/17/16		
AA ID No:	6J12014-01		
Client ID No:	Effluent		
Matrix:	Water		
Dilution Factor:	1	MDL	MRL
Diesel Range Organics 8015M (EPA 8015M)			
Diesel Range Organics as Diesel	<60	60	100

Surrogates		**%REC Limits**
o-Terphenyl	107%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331960
Date Received: 10/12/16
Date Reported: 10/26/16

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MDL	MRL
Arsenic Total EPA 200.7 (EPA 200.7)									
6J12014-01	Effluent	10/12/16	10/17/16	10/17/16	1	**0.0080**	mg/L	0.006	0.007

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331960
Date Received: 10/12/16
Date Reported: 10/26/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS - Quality Control										
Batch B6J1932 - EPA 5030B										
Blank (B6J1932-BLK1)				Prepared & Analyzed: 10/19/16						
tert-Amyl Methyl Ether (TAME)	<0.30	0.30	ug/L							
Benzene	<0.20	0.20	ug/L							
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L							
Diisopropyl ether (DIPE)	<0.50	0.50	ug/L							
Ethylbenzene	<0.20	0.20	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	<0.40	0.40	ug/L							
Gasoline Range Organics (GRO)	<40	40	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	ug/L							
Toluene	<0.30	0.30	ug/L							
o-Xylene	<0.30	0.30	ug/L							
m,p-Xylenes	<0.40	0.40	ug/L							
Surrogate: 4-Bromofluorobenzene	*51.8*		*ug/L*	*50*		*104*	*70-140*			
Surrogate: Dibromofluoromethane	*59.0*		*ug/L*	*50*		*118*	*70-140*			
Surrogate: Toluene-d8	*48.9*		*ug/L*	*50*		*97.8*	*70-140*			
LCS (B6J1932-BS1)				Prepared & Analyzed: 10/19/16						
tert-Amyl Methyl Ether (TAME)	**19.9**	0.30	ug/L	20		99.4	70-130			
Benzene	**23.1**	0.20	ug/L	20		116	75-125			
tert-Butyl alcohol (TBA)	**118**	7.0	ug/L	100		118	70-130			
Diisopropyl ether (DIPE)	**23.1**	0.50	ug/L	20		116	70-130			
Ethylbenzene	**20.5**	0.20	ug/L	20		102	75-125			
Ethyl-tert-Butyl Ether (ETBE)	**21.4**	0.40	ug/L	20		107	70-130			
Gasoline Range Organics (GRO)	**442**	40	ug/L	500		88.4	70-130			
Methyl-tert-Butyl Ether (MTBE)	**42.1**	0.40	ug/L	40		105	70-135			
Toluene	**21.2**	0.30	ug/L	20		106	75-125			
o-Xylene	**19.7**	0.30	ug/L	20		98.4	75-125			
m,p-Xylenes	**40.0**	0.40	ug/L	40		100	70-130			
Surrogate: 4-Bromofluorobenzene	*53.8*		*ug/L*	*50*		*108*	*70-140*			
Surrogate: Dibromofluoromethane	*50.7*		*ug/L*	*50*		*101*	*70-140*			
Surrogate: Toluene-d8	*49.4*		*ug/L*	*50*		*98.9*	*70-140*			
Matrix Spike (B6J1932-MS1)			**Source: 6J12015-03**	Prepared & Analyzed: 10/19/16						

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331960
Date Received: 10/12/16
Date Reported: 10/26/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS - Quality Control										
Batch B6J1932 - EPA 5030B										
Matrix Spike (B6J1932-MS1) Continued		**Source: 6J12015-03**	Prepared & Analyzed: 10/19/16							
tert-Amyl Methyl Ether (TAME)	**18.8**	0.30	ug/L	20		93.8	70-130			
Benzene	**23.0**	0.20	ug/L	20		115	70-130			
tert-Butyl alcohol (TBA)	**111**	7.0	ug/L	100		111	70-130			
Diisopropyl ether (DIPE)	**22.6**	0.50	ug/L	20		113	70-130			
Ethylbenzene	**23.2**	0.20	ug/L	20		116	70-130			
Ethyl-tert-Butyl Ether (ETBE)	**20.5**	0.40	ug/L	20		102	70-130			
Gasoline Range Organics (GRO)	**476**	40	ug/L	500		95.2	70-130			
Methyl-tert-Butyl Ether (MTBE)	**38.8**	0.40	ug/L	40	0.410	96.0	70-130			
Toluene	**24.4**	0.30	ug/L	20		122	70-130			
o-Xylene	**21.8**	0.30	ug/L	20		109	70-130			
m,p-Xylenes	**43.8**	0.40	ug/L	40		109	70-130			
Surrogate: 4-Bromofluorobenzene	*54.0*		*ug/L*	*50*		*108*	*70-140*			
Surrogate: Dibromofluoromethane	*48.0*		*ug/L*	*50*		*95.9*	*70-140*			
Surrogate: Toluene-d8	*53.0*		*ug/L*	*50*		*106*	*70-140*			
Matrix Spike Dup (B6J1932-MSD1)		**Source: 6J12015-03**	Prepared: 10/19/16 Analyzed: 10/20/16							
tert-Amyl Methyl Ether (TAME)	**21.2**	0.30	ug/L	20		106	70-130	12.0	30	
Benzene	**23.3**	0.20	ug/L	20		117	70-130	1.29	30	
tert-Butyl alcohol (TBA)	**108**	7.0	ug/L	100		108	70-130	2.74	30	
Diisopropyl ether (DIPE)	**23.9**	0.50	ug/L	20		120	70-130	5.37	30	
Ethylbenzene	**20.2**	0.20	ug/L	20		101	70-130	13.4	30	
Ethyl-tert-Butyl Ether (ETBE)	**22.9**	0.40	ug/L	20		114	70-130	11.2	30	
Gasoline Range Organics (GRO)	**545**	40	ug/L	500		109	70-130	13.5	30	
Methyl-tert-Butyl Ether (MTBE)	**43.6**	0.40	ug/L	40	0.410	108	70-130	11.7	30	
Toluene	**20.5**	0.30	ug/L	20		102	70-130	17.4	30	
o-Xylene	**19.5**	0.30	ug/L	20		97.4	70-130	11.3	30	
m,p-Xylenes	**39.3**	0.40	ug/L	40		98.2	70-130	10.7	30	
Surrogate: 4-Bromofluorobenzene	*53.3*		*ug/L*	*50*		*107*	*70-140*			
Surrogate: Dibromofluoromethane	*50.9*		*ug/L*	*50*		*102*	*70-140*			
Surrogate: Toluene-d8	*48.9*		*ug/L*	*50*		*97.8*	*70-140*			
Diesel Range Organics by GC/FID - Quality Control										

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331960
Date Received: 10/12/16
Date Reported: 10/26/16

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

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5331960
Project No:	04-NDLA-013	**Date Received:**	10/12/16
Project Name:	DFSP Norwalk GWETS NPDES Monthly	**Date Reported:**	10/26/16

Special Notes

Viorel Vasile
Operations Manager

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

125925

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

Client:	The Source Group, Inc.	**Project Name / No.:**	DFSP - Norwalk / 091-NDLA/ Monthly NPDES	**Sampler's Name:**	Glenn Androsko
Project Manager:	Neil Irish	**Site Address:**	15306 Norwalk Blvd	**Sampler's Signature:**	Glenn Androsko
Phone:	562-597-1055	**City:**	Norwalk	**P.O. No.:**	
Fax:	569-597-1070	**State & Zip:**	CA 90650	**Quote No.:**	

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	TPHd 8015M	TPHg/MTBE/TBA 8260B	Arsenic 200.7								Special Instructions
Effluent	6712014-01	10-12-16	1104	Water	5	✓	✓	✓								Report J-Flags

REVIEWED
Date 10/12/16 Time 1700
TAT N Days Sign:

Relinquished by	Date	Time	Received by
Glenn Androsko	10-12-16	1:15	[illegible]
Relinquished by	Date	Time	Received by
	10/12/16	1645	[illegible]
Relinquished by	Date	Time	Received by

A5331960/6712014

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

November 17, 2016

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

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

A5331985 / 6K01013

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

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

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

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8260B TPHGASOLINEBTEXOXY					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
Effluent-Dup	6K01013-02	Water	5	11/01/16 11:06	11/01/16 15:12
Arsenic Total EPA 200.7					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
BOD SM5210B					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
Copper Total EPA 200.7					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
Diesel Range Organics 8015M					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
Effluent-Dup	6K01013-02	Water	5	11/01/16 11:06	11/01/16 15:12
HEM Oil and Grease 1664					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
MBAS SM5540C					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
Phenols 420.1					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
SS SM2540F					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
Sulfide SM4500-S=D					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
TDS SM2540C					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
TSS SM2540D					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12
Turbidity 180.1					
Effluent	6K01013-01	Water	5	11/01/16 11:05	11/01/16 15:12

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-NDLA-013
Project Name: DFSP Norwalk GWETS NPDES Annually
Method: General Chemistry Analyses

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MRL
BOD SM5210B (SM5210B) *								
6K01013-01	Effluent	11/01/16	11/02/16	11/07/16	1	<5.0	mg/L	5
HEM Oil and Grease 1664 (EPA 1664)								
6K01013-01	Effluent	11/01/16	11/07/16	11/07/16	1	**2.0** J	mg/L	5
MBAS SM5540C (SM5540C) *								
6K01013-01	Effluent	11/01/16	11/02/16	11/02/16	1	<0.050	mg/L	0.05
Phenols 420.1 (EPA 420.1) *								
6K01013-01	Effluent	11/01/16	11/08/16	11/08/16	1	<0.15	mg/L	0.3
SS SM2540F (SM2540F)								
6K01013-01	Effluent	11/01/16	11/02/16	11/02/16	1	<0.100	mL/L	0.1
Sulfide SM4500-S=D (SM4500-S=D)								
6K01013-01	Effluent	11/01/16	11/03/16	11/03/16	1	<0.027	mg/L	0.05
TDS SM2540C (SM2540C)								
6K01013-01	Effluent	11/01/16	11/03/16	11/04/16	100	**1200**	mg/L	10
TSS SM2540D (SM2540D)								
6K01013-01	Effluent	11/01/16	11/03/16	11/03/16	1	<5.0	mg/L	10
Turbidity 180.1 (EPA 180.1)								
6K01013-01	Effluent	11/01/16	11/02/16	11/02/16	1	**0.35** J	NTU	1

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-NDLA-013
Project Name: DFSP Norwalk GWETS NPDES Annually
Method: General Chemistry Analyses

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MDL	MRL
BOD SM5210B (SM5210B) *									
6K01013-01	Effluent	11/01/16	11/02/16	11/07/16	1	<5.0	mg/L	5	5
HEM Oil and Grease 1664 (EPA 1664)									
6K01013-01	Effluent	11/01/16	11/07/16	11/07/16	1	**2.0**J	mg/L	1	5
MBAS SM5540C (SM5540C) *									
6K01013-01	Effluent	11/01/16	11/02/16	11/02/16	1	<0.050	mg/L	0.05	0.05
Phenols 420.1 (EPA 420.1) *									
6K01013-01	Effluent	11/01/16	11/08/16	11/08/16	1	<0.15	mg/L	0.15	0.3
SS SM2540F (SM2540F)									
6K01013-01	Effluent	11/01/16	11/02/16	11/02/16	1	<0.100	mL/L	0.1	0.1
Sulfide SM4500-S=D (SM4500-S=D)									
6K01013-01	Effluent	11/01/16	11/03/16	11/03/16	1	<0.027	mg/L	0.027	0.05
TDS SM2540C (SM2540C)									
6K01013-01	Effluent	11/01/16	11/03/16	11/04/16	100	**1200**	mg/L	6.2	10
TSS SM2540D (SM2540D)									
6K01013-01	Effluent	11/01/16	11/03/16	11/03/16	1	<5.0	mg/L	5	10
Turbidity 180.1 (EPA 180.1)									
6K01013-01	Effluent	11/01/16	11/02/16	11/02/16	1	**0.35**J	NTU	0.168	1

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16
Units: ug/L

Date Sampled:	11/01/16	11/01/16		
Date Prepared:	11/02/16	11/02/16		
Date Analyzed:	11/02/16	11/02/16		
AA ID No:	6K01013-01	6K01013-02		
Client ID No:	Effluent	Effluent-Dup		
Matrix:	Water	Water		
Dilution Factor:	1	1	MDL	MRL
8260B TPHGASOLINEBTEXOXY (EPA 8260B)				
tert-Amyl Methyl Ether (TAME)	<0.30	<0.30	0.30	2.0
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	0.20	0.50
Ethyl-tert-Butyl Ether (ETBE)	<0.40	<0.40	0.40	2.0
Gasoline Range Organics (GRO)	<40	<40	40	100
Methyl-tert-Butyl Ether (MTBE)	<0.40	<0.40	0.40	2.0
Toluene	<0.30	<0.30	0.30	0.50
o-Xylene	<0.30	<0.30	0.30	0.50
m,p-Xylenes	<0.40	<0.40	0.40	1.0

Surrogates			**%REC Limits**
4-Bromofluorobenzene	113%	116%	70-140
Dibromofluoromethane	123%	120%	70-140
Toluene-d8	99%	100%	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16
Units: ug/L

Date Sampled:	11/01/16	11/01/16		
Date Prepared:	11/04/16	11/04/16		
Date Analyzed:	11/04/16	11/04/16		
AA ID No:	6K01013-01	6K01013-02		
Client ID No:	Effluent	Effluent-Dup		
Matrix:	Water	Water		
Dilution Factor:	1	1	MDL	MRL
Diesel Range Organics 8015M (EPA 8015M)				
Diesel Range Organics as Diesel	<60	<60	60	100
Surrogates			**%REC Limits**	
o-Terphenyl	109%	72%	50-150	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MDL	MRL
Arsenic Total EPA 200.7 (EPA 200.7)									
6K01013-01	Effluent	11/01/16	11/07/16	11/07/16	1	<0.0060	mg/L	0.006	0.007
Copper Total EPA 200.7 (EPA 200.7)									
6K01013-01	Effluent	11/01/16	11/07/16	11/07/16	1	<0.0020	mg/L	0.002	0.002

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
General Chemistry Analyses - Quality Control										
Batch B6K0224 - NO PREP										
Blank (B6K0224-BLK1)				Prepared & Analyzed: 11/02/16						
Total Settleable Solids	<0.100	0.100	mL/L							
Batch B6K0231 - NO PREP										
Blank (B6K0231-BLK1)				Prepared & Analyzed: 11/02/16						
Turbidity	<0.17	0.17	NTU							
Duplicate (B6K0231-DUP1)		**Source: 6K01013-01**		Prepared & Analyzed: 11/02/16						
Turbidity	**0.320**	0.17	NTU		0.350			8.96	20	J
Batch B6K0232 - NO PREP										
Blank (B6K0232-BLK1)				Prepared & Analyzed: 11/03/16						
Total Suspended Solids	<5.0	5.0	mg/L							
LCS (B6K0232-BS1)				Prepared & Analyzed: 11/03/16						
Total Suspended Solids	**42.0**	5.0	mg/L	50		84.0	80-120			
LCS Dup (B6K0232-BSD1)				Prepared & Analyzed: 11/03/16						
Total Suspended Solids	**45.0**	5.0	mg/L	50		90.0	80-120	6.90	20	
Duplicate (B6K0232-DUP1)		**Source: 6J28004-01**		Prepared & Analyzed: 11/03/16						
Total Suspended Solids	**28.0**	5.0	mg/L		30.0			6.90	20	
Duplicate (B6K0232-DUP2)		**Source: 6J31007-04**		Prepared & Analyzed: 11/03/16						
Total Suspended Solids	**47.0**	5.0	mg/L		46.5			1.07	20	
Duplicate (B6K0232-DUP3)		**Source: 6J28002-01**		Prepared & Analyzed: 11/03/16						
Total Suspended Solids	**34.0**	5.0	mg/L		35.6			4.60	20	
Batch B6K0326 - NO PREP										
Blank (B6K0326-BLK1)				Prepared & Analyzed: 11/03/16						
Sulfide	<0.027	0.027	mg/L							
LCS (B6K0326-BS1)				Prepared & Analyzed: 11/03/16						
Sulfide	**0.494**	0.027	mg/L	0.50		98.8	80-120		25	
LCS Dup (B6K0326-BSD1)				Prepared & Analyzed: 11/03/16						
Sulfide	**0.483**	0.027	mg/L	0.50		96.6	80-120	2.25	25	
Duplicate (B6K0326-DUP1)		**Source: 6K01013-01**		Prepared & Analyzed: 11/03/16						
Sulfide	**<0.027**	0.027	mg/L		<0.050				20	
Matrix Spike (B6K0326-MS1)		**Source: 6J28002-02**		Prepared & Analyzed: 11/03/16						

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
General Chemistry Analyses - Quality Control										
Batch B6K0326 - NO PREP										
Matrix Spike (B6K0326-MS1) Continued Source: 6J28002-02				Prepared & Analyzed: 11/03/16						
Sulfide	**0.552**	0.027	mg/L	0.50		110	75-125		25	
Matrix Spike Dup (B6K0326-MSD1) Source: 6J28002-02				Prepared & Analyzed: 11/03/16						
Sulfide	**0.559**	0.027	mg/L	0.50		112	75-125	1.26	25	
Batch B6K0411 - NO PREP										
Blank (B6K0411-BLK1)				Prepared: 11/03/16 Analyzed: 11/04/16						
Total Dissolved Solids	<6.2	6.2	mg/L							
LCS (B6K0411-BS1)				Prepared: 11/03/16 Analyzed: 11/04/16						
Total Dissolved Solids	**46.0**	6.2	mg/L	50		92.0	80-120			
LCS Dup (B6K0411-BSD1)				Prepared: 11/03/16 Analyzed: 11/04/16						
Total Dissolved Solids	**51.0**	6.2	mg/L	50		102	80-120	10.3	25	
Duplicate (B6K0411-DUP1) Source: 6K01013-01				Prepared: 11/03/16 Analyzed: 11/04/16						
Total Dissolved Solids	**1130**	620	mg/L		1160			2.62	20	
Batch B6K0718 - NO PREP										
Blank (B6K0718-BLK1)				Prepared & Analyzed: 11/07/16						
HEM (Oil and Grease)	<1.0	1.0	mg/L							
LCS (B6K0718-BS1)				Prepared & Analyzed: 11/07/16						
HEM (Oil and Grease)	**35.0**	1.0	mg/L	40		87.5	75-125			
LCS Dup (B6K0718-BSD1)				Prepared & Analyzed: 11/07/16						
HEM (Oil and Grease)	**33.1**	1.0	mg/L	40		82.8	75-125	5.58	30	
*Batch B6K1737 - *** DEFAULT PREP ****										
Blank (B6K1737-BLK1)				Prepared: 11/02/16 Analyzed: 11/07/16						*
Biochemical Oxygen Demand	<5.0	5.0	mg/L							
LCS (B6K1737-BS1)				Prepared: 11/02/16 Analyzed: 11/07/16						*
Biochemical Oxygen Demand	**189**	5.0	mg/L	200		94.7	80-120			
Batch B6K1738 - NO PREP										
Blank (B6K1738-BLK1)				Prepared & Analyzed: 11/02/16						*
Methylene Blue Active Substances	<0.050	0.050	mg/L							
LCS (B6K1738-BS1)				Prepared & Analyzed: 11/02/16						*
Methylene Blue Active Substances	**0.410**	0.050	mg/L	0.50		82.0	80-120			

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
General Chemistry Analyses - Quality Control										
Batch B6K1738 - NO PREP										
LCS Dup (B6K1738-BSD1)				Prepared & Analyzed: 11/02/16						*
Methylene Blue Active Substances	**0.415**	0.050	mg/L	0.50		83.0	80-120	1.21	30	
Matrix Spike (B6K1738-MS1)		**Source: 6K01013-01**		Prepared & Analyzed: 11/02/16						*
Methylene Blue Active Substances	**0.475**	0.050	mg/L	0.50	<0.050	95.0	70-130			
Matrix Spike Dup (B6K1738-MSD1)		**Source: 6K01013-01**		Prepared & Analyzed: 11/02/16						*
Methylene Blue Active Substances	**0.495**	0.050	mg/L	0.50	<0.050	99.0	70-130	4.12	30	
Batch B6K1739 - NO PREP										
Blank (B6K1739-BLK1)				Prepared & Analyzed: 11/08/16						*
Phenolics	<0.15	0.15	mg/L							
LCS (B6K1739-BS1)				Prepared & Analyzed: 11/08/16						*
Phenolics	**0.451**	0.15	mg/L	0.50		90.2	80-120			
LCS Dup (B6K1739-BSD1)				Prepared & Analyzed: 11/08/16						*
Phenolics	**0.422**	0.15	mg/L	0.50		84.4	80-120	6.64	15	
Matrix Spike (B6K1739-MS1)		**Source: 6K01013-01**		Prepared & Analyzed: 11/08/16						*
Phenolics	**0.426**	0.15	mg/L	0.50	<0.30	85.2	80-120			
Matrix Spike Dup (B6K1739-MSD1)		**Source: 6K01013-01**		Prepared & Analyzed: 11/08/16						*
Phenolics	**0.438**	0.15	mg/L	0.50	<0.30	87.6	80-120	2.78	15	
TPHG/BTEX/Oxygenates by GC/MS - Quality Control										
Batch B6K0215 - EPA 5030B										
Blank (B6K0215-BLK1)				Prepared & Analyzed: 11/02/16						
tert-Amyl Methyl Ether (TAME)	<0.30	0.30	ug/L							
Benzene	<0.20	0.20	ug/L							
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L							
Diisopropyl ether (DIPE)	<0.50	0.50	ug/L							
Ethylbenzene	<0.20	0.20	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	<0.40	0.40	ug/L							
Gasoline Range Organics (GRO)	<40	40	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	ug/L							
Toluene	<0.30	0.30	ug/L							
o-Xylene	<0.30	0.30	ug/L							
m,p-Xylenes	<0.40	0.40	ug/L							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS - Quality Control										
Batch B6K0215 - EPA 5030B										
Blank (B6K0215-BLK1) Continued				Prepared & Analyzed: 11/02/16						
Surrogate: 4-Bromofluorobenzene	*55.5*		*ug/L*	*50*		*111*	*70-140*			
Surrogate: Dibromofluoromethane	*59.2*		*ug/L*	*50*		*118*	*70-140*			
Surrogate: Toluene-d8	*50.0*		*ug/L*	*50*		*99.9*	*70-140*			
LCS (B6K0215-BS1)				Prepared & Analyzed: 11/02/16						
tert-Amyl Methyl Ether (TAME)	**20.1**	0.30	ug/L	20		100	70-130			
Benzene	**24.0**	0.20	ug/L	20		120	75-125			
tert-Butyl alcohol (TBA)	**96.8**	7.0	ug/L	100		96.8	70-130			
Diisopropyl ether (DIPE)	**24.5**	0.50	ug/L	20		123	70-130			
Ethylbenzene	**21.0**	0.20	ug/L	20		105	75-125			
Ethyl-tert-Butyl Ether (ETBE)	**22.7**	0.40	ug/L	20		114	70-130			
Gasoline Range Organics (GRO)	**530**	40	ug/L	500		106	70-130			
Methyl-tert-Butyl Ether (MTBE)	**42.0**	0.40	ug/L	40		105	70-135			
Toluene	**19.8**	0.30	ug/L	20		99.0	75-125			
o-Xylene	**19.2**	0.30	ug/L	20		96.1	75-125			
m,p-Xylenes	**38.5**	0.40	ug/L	40		96.2	70-130			
Surrogate: 4-Bromofluorobenzene	*55.9*		*ug/L*	*50*		*112*	*70-140*			
Surrogate: Dibromofluoromethane	*54.9*		*ug/L*	*50*		*110*	*70-140*			
Surrogate: Toluene-d8	*50.3*		*ug/L*	*50*		*101*	*70-140*			
LCS Dup (B6K0215-BSD1)				Prepared & Analyzed: 11/02/16						
tert-Amyl Methyl Ether (TAME)	**19.7**	0.30	ug/L	20		98.7	70-130	1.66	30	
Benzene	**22.8**	0.20	ug/L	20		114	75-125	5.26	30	
tert-Butyl alcohol (TBA)	**95.0**	7.0	ug/L	100		95.0	70-130	1.91	30	
Diisopropyl ether (DIPE)	**23.4**	0.50	ug/L	20		117	70-130	4.50	30	
Ethylbenzene	**20.4**	0.20	ug/L	20		102	75-125	2.89	30	
Ethyl-tert-Butyl Ether (ETBE)	**22.1**	0.40	ug/L	20		111	70-130	2.54	30	
Gasoline Range Organics (GRO)	**545**	40	ug/L	500		109	70-130	2.79	30	
Methyl-tert-Butyl Ether (MTBE)	**39.4**	0.40	ug/L	40		98.4	70-135	6.51	30	
Toluene	**20.2**	0.30	ug/L	20		101	75-125	2.10	30	
o-Xylene	**19.4**	0.30	ug/L	20		96.9	75-125	0.829	30	
m,p-Xylenes	**38.5**	0.40	ug/L	40		96.2	70-130	0.0520	30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS - Quality Control										
Batch B6K0215 - EPA 5030B										
LCS Dup (B6K0215-BSD1) Continued				Prepared & Analyzed: 11/02/16						
Surrogate: 4-Bromofluorobenzene	*57.4*		*ug/L*	*50*		*115*	*70-140*			
Surrogate: Dibromofluoromethane	*54.1*		*ug/L*	*50*		*108*	*70-140*			
Surrogate: Toluene-d8	*50.9*		*ug/L*	*50*		*102*	*70-140*			
Diesel Range Organics by GC/FID - Quality Control										
Batch B6K0401 - EPA 3510C										
Blank (B6K0401-BLK1)				Prepared & Analyzed: 11/04/16						
Diesel Range Organics as Diesel	<60	60	ug/L							
Surrogate: o-Terphenyl	*59.2*		*ug/L*	*40*		*148*	*50-150*			
LCS (B6K0401-BS1)				Prepared & Analyzed: 11/04/16						
Diesel Range Organics as Diesel	**789**	60	ug/L	800		98.7	75-125		30	
Surrogate: o-Terphenyl	*54.8*		*ug/L*	*40*		*137*	*50-150*			
LCS Dup (B6K0401-BSD1)				Prepared & Analyzed: 11/04/16						
Diesel Range Organics as Diesel	**718**	60	ug/L	800		89.8	75-125	9.44	30	
Surrogate: o-Terphenyl	*44.4*		*ug/L*	*40*		*111*	*50-150*			
Total Metals by ICP Atomic Emission Spectroscopy - Quality Control										
Batch B6K0714 - EPA 200.7										
Blank (B6K0714-BLK1)				Prepared & Analyzed: 11/07/16						
Arsenic	<0.0060	0.0060	mg/L							
Copper	<0.0020	0.0020	mg/L							
LCS (B6K0714-BS1)				Prepared & Analyzed: 11/07/16						
Copper	**0.208**	0.0020	mg/L	0.20		104	80-120		20	
Arsenic	**0.208**	0.0060	mg/L	0.20		104	80-120		20	
LCS Dup (B6K0714-BSD1)				Prepared & Analyzed: 11/07/16						
Arsenic	**0.211**	0.0060	mg/L	0.20		105	80-120	1.34	20	
Copper	**0.208**	0.0020	mg/L	0.20		104	80-120	0.192	20	
Duplicate (B6K0714-DUP1)		**Source: 6K01014-05**		Prepared & Analyzed: 11/07/16						
Arsenic	**0.0170**	0.0060	mg/L		0.0150			12.5	30	
Copper	**<0.0020**	0.0020	mg/L						30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5331985
Date Received: 11/01/16
Date Reported: 11/17/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals by ICP Atomic Emission Spectroscopy - Quality Control										
Batch B6K0714 - EPA 200.7										
Matrix Spike (B6K0714-MS1)		**Source: 6K01013-01** Prepared & Analyzed: 11/07/16								
Arsenic	**0.197**	0.0060	mg/L	0.20	<0.0070	98.4	75-125		20	
Copper	**0.206**	0.0020	mg/L	0.20	<0.0020	103	75-125		20	
Matrix Spike Dup (B6K0714-MSD1)		**Source: 6K01013-01** Prepared & Analyzed: 11/07/16								
Arsenic	**0.212**	0.0060	mg/L	0.20	<0.0070	106	75-125	7.39	20	
Copper	**0.214**	0.0020	mg/L	0.20	<0.0020	107	75-125	3.62	20	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5331985
Project No:	04-NDLA-013	**Date Received:**	11/01/16
Project Name:	DFSP Norwalk GWETS NPDES Annually	**Date Reported:**	11/17/16

Special Notes

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

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

Viorel Vasile
Operations Manager

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

American Analytics
9765 Eton Avenue
Chatsworth, CA 91311-4306

Telephone: (818)998-5547
Attention: Viorel Vasile

Number of Pages 4
Date Received 11/02/2016
Date Reported 11/17/2016

Job Number	Order Date	Client
85089	11/02/2016	AA

Project ID: A5331985/6K01013
Project Name: PO# SUB3279-A5331985

Enclosed please find results of analyses of 1 water samples which were 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. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

HETL

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

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

85089

A.A. COC No.: 70047392

Page 1 of 1

Client: American Analytics	Project Name / No.: A5331985/6K01013	Sampler's Name:	
Project Manager: Viorel Vasile	Site Address:	Sampler's Signature:	
Phone:	City:	P.O. No.: SUB 3279-A5331985	
Fax:	State & Zip:	Quote No.:	

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	BOD5 SM5210B	mBOD SM5540C	Phenols 420.1								Special Instructions
						Please enter the TAT Turnaround Codes ** below										
6K01013-01	85089.01	11/1/16	11:05	Water	2	X	X	X								
																Normal TAT

For Laboratory Use	Relinquished by	Date	Time	Received by
	[signature]	11/2/16	1000	[signature]
	Relinquished by	Date	Time	Received by
	[signature]	11/02/16	1050	[signature]
A.A. Project No.:	Relinquished by	Date	Time	Received by

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.

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

American Analytics
9765 Eton Avenue
Chatsworth, CA 91311-4306

Telephone: (818)998-5547
Attention: Viorel Vasile

Project ID: A5331985/6K01013
Date Received 11/02/2016
Date Reported 11/17/2016

Job Number	Order Date	Client
85089	11/02/2016	AA

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 1 samples with the following specification on 11/02/2016.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
85089.01	6K01013-01	11/01/2016	Aqueous	2

Method ^ Submethod	Req Date	Priority	TAT	Units
420.1	11/09/2016	2	Normal	mg/L
SM-5540C	11/09/2016	2	Normal	mg/L
SM5210B	11/09/2016	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. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

American Analytics
9765 Eton Avenue
Chatsworth, CA 91311-4306

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

Project ID: **A5331985/6K01013**
Project Name: **PO# SUB3279-A5331985**

AETL Job Number	Submitted	Client
85089	11/02/2016	AA

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

QC Batch No: MB110816-1

Our Lab I.D.			Method Blank	**85089.01**			
Client Sample I.D.				6K01013-01			
Date Sampled				**11/01/2016**			
Date Prepared			**11/08/2016**	**11/08/2016**			
Preparation Method			**420.1**	**420.1**			
Date Analyzed			**11/08/2016**	**11/08/2016**			
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**			

QUALITY CONTROL REPORT

QC Batch No: MB110816-1; Dup or Spiked Sample: 85089.01; LCS: Clean Water; QC Prepared: 11/08/2016; QC Analyzed: 11/08/2016; Units: mg/L

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Phenol	**0.00**	**0.500**	**0.426**	**85.2**	**0.500**	**0.438**	**87.6**	**2.8**	**80-120**	**<15**

QC Batch No: MB110816-1; Dup or Spiked Sample: 85089.01; LCS: Clean Water; QC Prepared: 11/08/2016; QC Analyzed: 11/08/2016; Units: mg/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Phenol	**0.500**	**0.451**	**90.2**	**0.500**	**0.422**	**84.4**	**6.6**	**80-120**	**<20**	

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

American Analytics
9765 Eton Avenue
Chatsworth, CA 91311-4306

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

Project ID: **A5331985/6K01013**
Project Name: **PO# SUB3279-A5331985**

AETL Job Number	Submitted	Client
85089	11/02/2016	AA

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

QC Batch No: CO110216-1

Our Lab I.D.			Method Blank	**85089.01**			
Client Sample I.D.				6K01013-01			
Date Sampled				**11/01/2016**			
Date Prepared			**11/02/2016**	**11/02/2016**			
Preparation Method			**SM5540C**	**SM5540C**			
Date Analyzed			**11/02/2016**	**11/02/2016**			
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**			

QUALITY CONTROL REPORT

QC Batch No: CO110216-1; Dup or Spiked Sample: 85089.01; LCS: Clean Water; QC Prepared: 11/02/2016; QC Analyzed: 11/02/2016; Units: mg/L

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Surfactants (MBAS)	**0.00**	**200**	**190**	**94.9**	**200**	**198**	**98.9**	**4.1**	**80-120**	**<15**

QC Batch No: CO110216-1; Dup or Spiked Sample: 85089.01; LCS: Clean Water; QC Prepared: 11/02/2016; QC Analyzed: 11/02/2016; Units: mg/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Surfactants (MBAS)	**200**	**164**	**82.0**	**200**	**166**	**83.0**	**1.2**	**80-120**	**<15**	

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

American Analytics
9765 Eton Avenue
Chatsworth, CA 91311-4306

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

Project ID: **A5331985/6K01013**
Project Name: **PO# SUB3279-A5331985**

AETL Job Number	Submitted	Client
85089	11/02/2016	AA

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

QC Batch No: BO110216-1

Our Lab I.D.			Method Blank	**85089.01**			
Client Sample I.D.				6K01013-01			
Date Sampled				**11/01/2016**			
Date Prepared			**11/02/2016**	**11/02/2016**			
Preparation Method			**SM5210B**	**SM5210B**			
Date Analyzed			**11/07/2016**	**11/07/2016**			
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**			

QUALITY CONTROL REPORT

QC Batch No: BO110216-1; Dup or Spiked Sample: 85063.01; LCS: Clean Water; LCS Prepared: 11/02/2016; LCS Analyzed: 11/07/2016; Units: mg/L

Analytes	SM Result	SM DUP Result	RPD %	SM RPD % Limit	LCS Concen	LCS Recov	LCS % REC	LCS/LCSD % Limit		
Biochemical Oxygen Demand (BOD)	**ND**	**ND**	**<1**	**<15**	**198**	**189**	**95.4**	**80-120**		

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

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.

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

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.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

LABORATORY REPORT

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

Date: November 7, 2016

Client: American Analytics
9765 Eton Avenue
Chatsworth, CA 91311
Attn: Viorel Vasile

Laboratory No.: A-16110208-001
Project No.: A5331985
Sample ID.: 6K01013-01

Sample Control: The sample was received by ATL chilled directly from the field and with the chain of custody record attached.

Date Sampled:	11/01/16
Date Received:	11/02/16
Temp. Received:	3.8°C
Chlorine (TRC):	0.0 mg/l
Date Tested:	11/02/16 to 11/06/16

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
6K01013-01	0% Survival (TUa > 1.0)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of the Laboratory's name for advertising or publicity purpose without authorization is prohibited

FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0

Aquatic Testing Laboratories

Lab No.: A-16110208-001
Client/ID: American Analytics 6K01013-01 **Start Date: 11/02/2016**

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-161101.

TEST DATA

		°C	DO	pH	# Dead A	# Dead B	# Dead C	# Dead D	Analyst & Time of Readings
INITIAL	Control	20.2	9.0	7.9	0	0	0	0	2 1300 11-2-16
	100%	20.2	9.0	8.0	0	0	0	0	
24 Hr	Control	20.2	8.6	7.9	0	0	0	0	2 1300 11-3-16
	100%	20.0	8.8	8.2	4	9	9	4	
48 Hr	Control	20.1	8.6	8.0	0	0	0	0	2 1300 11-4-16
	100%	20.0	8.7	8.1	2	1	1	6	
Renewal	Control	20.1	8.6	8.0	0	0	0	0	2 1300 11-4-16
	100%	–	–	–	–	–	–	–	
72 Hr	Control	20.2	8.5	8.0	0	0	0	0	2 1300 11-5-16
	100%	–	–	–	–	–	–	–	
96 Hr	Control	20.2	8.4	8.0	0	0	0	0	2 1300 11-6-16
	100%	–	–	–	–	–	–	–	

Comments:
Sample as received: Chlorine: 0 mg/l; Temp: 3.8 °C; DO: 4.7 mg/l; pH: 7.4 ;
Alkalinity: 484 mg/l; Hardness: 824 mg/l; Conductivity: 2314 umho; NH_3-N: 1.1 mg/l.
Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No.
Control: Alkalinity: 59 mg/l; Hardness: 90 mg/l.; Conductivity: 307 umho.
Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes / No
Original sample (-001) sample used for renewal kept at 0-6°C with minimal headspace.
Dissolved Oxygen (DO) readings in mg/l O_2.

RESULTS

Percent Survival In: Control: 100 % 100% Sample: 0 %

AQUATIC TESTING LABS

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

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

A.A. COC No.: 70047393
Page 1 of 1

Client: American Analytics	Project Name / No.: A5331985/6K01013	Sampler's Name:
Project Manager: Vicrel Vasile	Site Address:	Sampler's Signature:
Phone:	City:	P.O. No.: 5083280 - A5331985
Fax:	State & Zip:	Quote No.:

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	Acute Toxicity										Special Instructions
						Please enter the TAT Turnaround Codes ** below										
6K01013-01		11/1/16	11.05	WATER	1	X										40 CFR Part 136
																EPA 821-R-02-012
																Normal TAT

For Laboratory Use	Relinquished by	Date	Time	Received by
	[signature]	11/1/16	1000	[signature]
	[signature]	11-2-16	12:15	[signature]
A.A. Project No.:	Relinquished by	Date	Time	Received by

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.

Aquatic
Testing
Laboratories

REFERENCE TOXICANT DATA

FATHEAD MINNOW ACUTE
Reference Toxicant - SDS

Aquatic Testing Laboratories

QA/QC Batch No.: RT-161101

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

	INITIAL			24 Hr					48 Hr				
Date/Time:	11-1-16 1300			11-2-16 1300					11-3-16 1300				
Analyst:	J			J					J				
	°C	DO	pH	°C	DO	pH	# Dead A	# Dead B	°C	DO	pH	# Dead A	# Dead B
Control	20.3	8.5	8.1	20.1	8.6	8.2	0	0	20.1	8.7	7.9	0	0
1.0 mg/l	20.1	8.6	8.1	20.0	8.6	8.1	0	0	20.0	8.7	7.9	0	0
2.0 mg/l	20.2	8.6	8.0	20.0	8.5	8.0	0	0	20.1	8.8	7.9	0	0
4.0 mg/l	20.2	8.5	8.0	20.0	8.4	8.1	2	3	20.1	8.6	7.9	2	0
8.0 mg/l	20.3	8.4	8.0	20.0	8.3	8.1	10	10	-	-	-	-	-
16.0 mg/l	20.3	8.4	8.1	20.0	8.2	8.1	10	10	-	-	-	-	-

	RENEWAL			72 Hr					96 Hr				
Date/Time:	11-3-16 1300			11-4-16 1300					11-5-16 1300				
Analyst:	J			J					J				
	°C	DO	pH	°C	DO	pH	# Dead A	# Dead B	°C	DO	pH	# Dead A	# Dead B
Control	20.0	8.6	7.9	20.1	8.6	8.1	0	0	20.0	8.4	7.8	0	0
1.0 mg/l	20.0	8.6	8.0	20.0	8.6	8.1	0	0	20.0	8.5	7.8	0	0
2.0 mg/l	20.1	8.6	8.0	20.1	8.6	8.2	0	0	20.0	8.5	7.8	0	0
4.0 mg/l	20.0	8.8	8.0	20.1	8.6	8.1	0	0	19.9	8.5	7.8	0	0
8.0 mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-
16.0 mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments: Control: Alkalinity: 60 mg/l; Hardness: 91 mg/l; Conductivity: 321 umho.
SDS: Alkalinity: 60 mg/l; Hardness: 90 mg/l; Conductivity: 310 umho.

Concentration-response relationship acceptable? (see attached computer analysis):
Yes (response curve normal)
No (dose interrupted indicated or non-normal)

Acute Fish Test-96 Hr Survival

Start Date:	11/1/2016 13:00	Test ID:	RT161101f	Sample ID:	REF-Ref Toxicant
End Date:	11/5/2016 13:00	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	SDS-Sodium dodecyl sulfate
Sample Date:	11/1/2016	Protocol:	EPAAW02-EPA/821/R-02-01	Test Species:	PP-Pimephales promelas
Comments:					

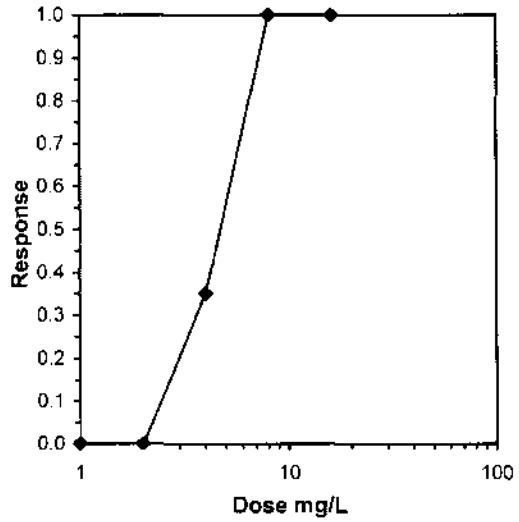
Conc-mg/L	1	2
D-Control	1.0000	1.0000
1	1.0000	1.0000
2	1.0000	1.0000
4	0.6000	0.7000
8	0.0000	0.0000
16	0.0000	0.0000

			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	0.6500	0.6500	0.9386	0.8861	0.9912	7.916	2	7	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%	4.4383	3.8283	5.1455
5.0%	4.4842	3.8003	5.2911
10.0%	4.5292	3.7448	5.4779
20.0%	4.6141	3.5048	6.0745
Auto-0.0%	4.4383	3.8283	5.1455

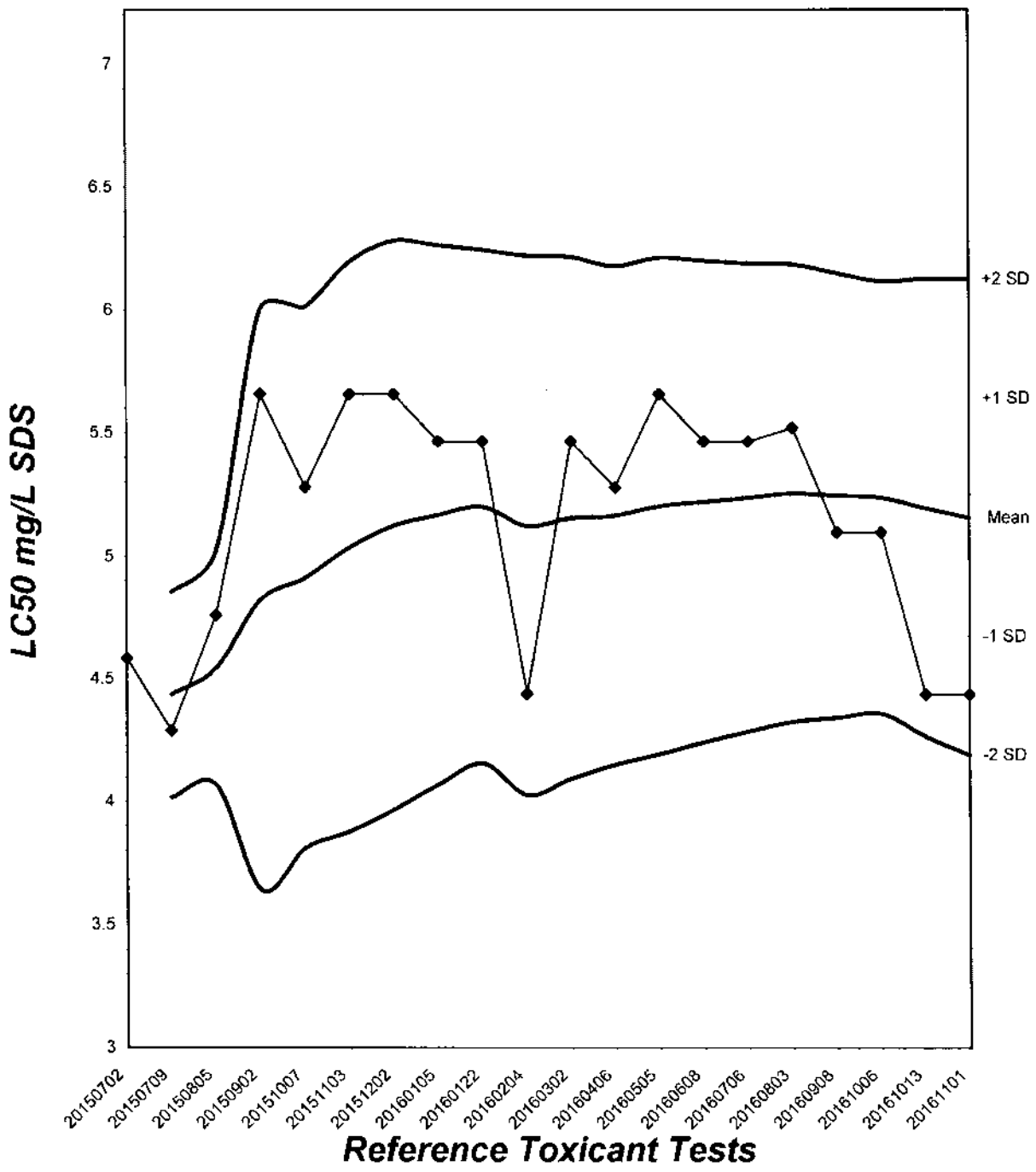


ToxCalc v5.0.23

Reviewed by:

Fathead Minnow Acute Laboratory Control Chart

CV% = 9.37



TEST ORGANISM LOG

FATHEAD MINNOW - LARVAL
(*Pimephales promelas*)

Aquatic Testing Laboratories

QA/QC BATCH NO.: RT-161101

SOURCE: In-Lab Culture

DATE HATCHED: 10-18-16

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATE USED IN LAB: 11 / 1 / 16

AVERAGE FISH WEIGHT: 0.006 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.: 20.3 °C pH: 8.1 Ammonia: 0 mg/l NH_3-N

DO: 8.5 mg/l Alkalinity: 60 mg/l Hardness: 91 mg/l

READINGS RECORDED BY: [signature] DATE: 11-2-16

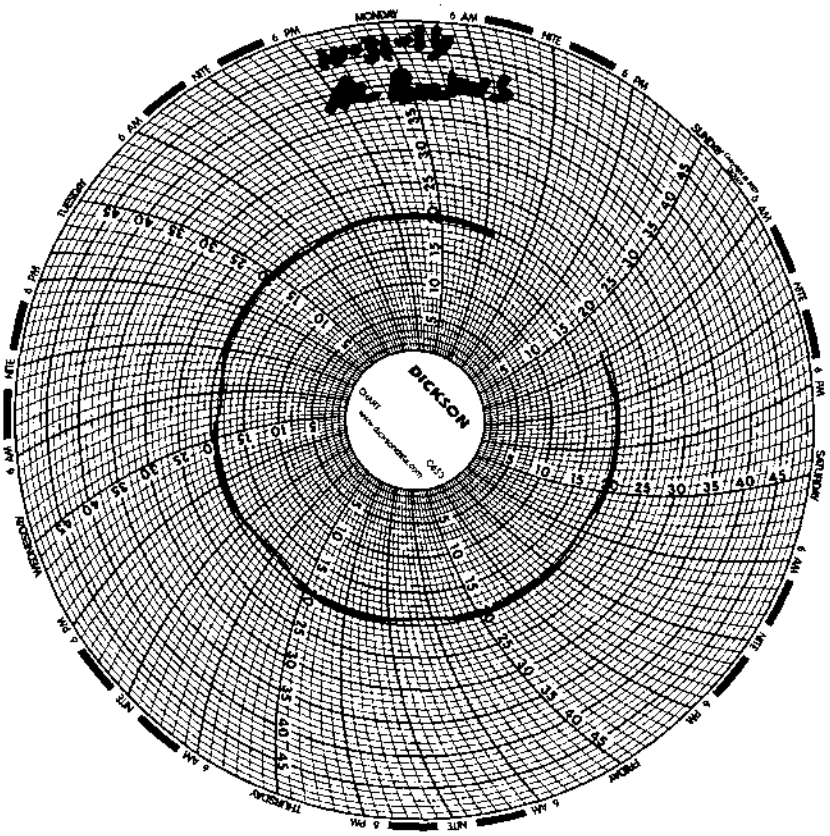
Aquatic Testing Laboratories

Test Temperature Chart

Test No: RT-161101

Date Tested: 11/01/16 to 11/05/16

Acceptable Range: 20 +/- 1°C



AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

COC# 126062

9765 ETON AVE., CHATSWORTH, CA 91311

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

Approved N.V.

Client: The Source Group, Inc.	**Project Name / No.:** DFSP - Norwalk / 04-SDLA / ~~Quarterly~~ NPDES	**Sampler's Name:** Glenn Andcoska	
Project Manager: Neil Irish	**Site Address:** 15306 Norwalk Blvd	**Sampler's Signature:** Glenn Andcoska	
Phone: 562-597-1055	**City:** Norwalk	**P.O. No.:**	
Fax: 569-597-1070	**State & Zip:** CA 90650	**Quote No.:**	

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	TPHd 8015M	TPHg/MTBE/TBA 8260B	Arsenic 200.7	TDS, TSS, Turbidity	BOD5 20 deg C	Oil & Grease	Settleable Solids	Sulfides, Phenols	Residual Chlorine	Copper	Methylene Blue Active Substances	Acute Toxicity 40 CFR 136	Special Instructions
Effluent	6K01013-01	11-1-16	1105	Water	6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	Report J-Flags
Effluent-Dup	02	11-1-16	1106	Water	5	✓	✓											

SAMPLE INTEGRITY
INTACT (Y) N TEMP 5°

'16 NOV 1 15:12

PRIORITY

Rush Res SH
Date 11/1/16 Time 16:15 Sign

AS331985/6K01013

Relinquished by	Date	Time	Received by
Glenn Andcoska	11-1-16	13:15	
Relinquished by	Date	Time	Received by
	11/1/16	1512	
Relinquished by	Date	Time	Received by

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

November 22, 2016

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

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

A5331992 / 6K07016

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 11/07/16 17:14 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

aquatic bioassay & consulting laboratories, inc

November 22, 2016

Mr. Viorel Vasile
American Analytics
9765 Eton Avenue
Chatsworth, CA 91311

Dear Mr. Vasile:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012.* "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:*

CLIENT:	American Analytics
SAMPLE I.D.:	6K07016-01
DATE RECEIVED:	8 Nov - 2016
ABC LAB. NO.:	AAN1116.124

96 HOUR ACUTE FATHEAD MINNOW SURVIVAL BIOASSAY

LC50 = 98 % Survival in 100 % Sample
*TU(a) = 0.18
* TU(a) Is calculated by: log (% Mortality)/1.7

Yours very truly,

Scott Johnson
Laboratory Director

ABC Labs

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

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

A.A. COC No.: 70047373

Page 1 of 1

Client: AMERICAN ANALYTICS | Project Name / No.: A5331992/ 6K07016 | Sampler's Name:

Project Manager: Viorel Vasile | Site Address: | Sampler's Signature:

Phone: | City: | P.O. No.: SUB03288-A5331992

Fax: | State & Zip: | Quote No.:

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	Acute Toxicity									Special Instructions
6K07016-01		11/7/16	1155	Water	1	X									by EPA-821-R-02-012
															% Survival
															96-hour
															Fathead Minnow
							Temp. deg. C					=	4.2 °C		
							Chlorine (mg/L)					=	<0.1		
							NH3 (mg/L)					=	0.7		

For Laboratory Use	Relinquished by	Date	Time	Received by
		11-8-16	800	
	Relinquished by	11-8-16	1000	Received by
A.A. Project No.:	Relinquished by	Date	Time	Received by

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.

CETIS Summary Report

Report Date:	22 Nov-16 09:13 (p 1 of 1)
Test Code:	AAN1116.124 | 04-7423-0407

Fathead Minnow 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	02-4788-7411	**Test Type:**	Survival (96h)	**Analyst:**	
Start Date:	08 Nov-16 14:30	**Protocol:**	EPA/821/R-02-012 (2002)	**Diluent:**	Laboratory Water
Ending Date:	12 Nov-16 12:45	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	94h	**Source:**	Aquatic Biosystems, CO	**Age:**	

Sample ID:	12-0542-6079	**Code:**	AAN1116.124	**Client:**	American Analytics
Sample Date:	07 Nov-16 11:55	**Material:**	Sample Water	**Project:**	A5331992/6K07016
Receipt Date:	08 Nov-16 10:00	**Source:**	Bioassay Report		
Sample Age:	27h (4.2 °C)	**Station:**	6K07016-01		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
15-4475-8302	96h Survival Rate	Wilcoxon Rank Sum Two-Sample Test	0.5000	100% passed 96h survival rate

Test Acceptability

Analysis ID	Endpoint	Attribute	Test Stat	TAC Limits Lower	TAC Limits Upper	Overlap	Decision
15-4475-8302	96h Survival Rate	Control Resp	1	0.9	>>	Yes	Passes Criteria

96h Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
100		4	0.9750	0.8954	1.0000	0.9000	1.0000	0.0250	0.0500	5.13%	2.50%

96h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
100		0.9000	1.0000	1.0000	1.0000

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	10/10	10/10	10/10	10/10
100		9/10	10/10	10/10	10/10

CETIS Analytical Report

Report Date: 22 Nov-16 09:13 (p 1 of 2)
Test Code: AAN1116.124 | 04-7423-0407

Fathead Minnow 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	15-4475-8302	**Endpoint:**	96h Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	22 Nov-16 9:13	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	02-4788-7411	**Test Type:**	Survival (96h)	**Analyst:**	
Start Date:	08 Nov-16 14:30	**Protocol:**	EPA/821/R-02-012 (2002)	**Diluent:**	Laboratory Water
Ending Date:	12 Nov-16 12:45	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	94h	**Source:**	Aquatic Biosystems, CO	**Age:**	

Sample ID:	12-0542-6079	**Code:**	AAN1116.124	**Client:**	American Analytics
Sample Date:	07 Nov-16 11:55	**Material:**	Sample Water	**Project:**	A5331992/6K07016
Receipt Date:	08 Nov-16 10:00	**Source:**	Bioassay Report		
Sample Age:	27h (4.2 °C)	**Station:**	6K07016-01		

Data Transform	Alt Hyp	Comparison Result	PMSD
Angular (Corrected)	C > T	100% passed 96h survival rate	5.56%

Wilcoxon Rank Sum Two-Sample Test

Control	vs	Conc-%	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision(α:5%)
Negative Control		100	16	n/a	1	6	Exact	0.5000	Non-Significant Effect

Test Acceptability Criteria

Attribute	Test Stat	TAC Limits Lower	TAC Limits Upper	Overlap	Decision
Control Resp	1	0.9	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0033199	0.0033199	1	1	0.3559	Non-Significant Effect
Error	0.0199195	0.0033199	6			
Total	0.0232394		7			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Levene Equality of Variance Test	9	13.75	0.0240	Equal Variances
Variances	Mod Levene Equality of Variance Test	1	13.75	0.3559	Equal Variances
Distribution	Anderson-Darling A2 Normality Test	1.162	3.878	0.0049	Non-Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.375	0.3313	0.0015	Non-Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.7065	0.6451	0.0027	Non-Normal Distribution

96h Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
100		4	0.9750	0.8954	1.0000	1.0000	0.9000	1.0000	0.0250	5.13%	2.50%

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.412	1.412	1.412	1.412	1.412	1.412	0	0.00%	0.00%
100		4	1.371	1.242	1.501	1.412	1.249	1.412	0.04074	5.94%	2.89%

96h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
100		0.9000	1.0000	1.0000	1.0000

Angular (Corrected) Transformed Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.412	1.412	1.412	1.412
100		1.249	1.412	1.412	1.412

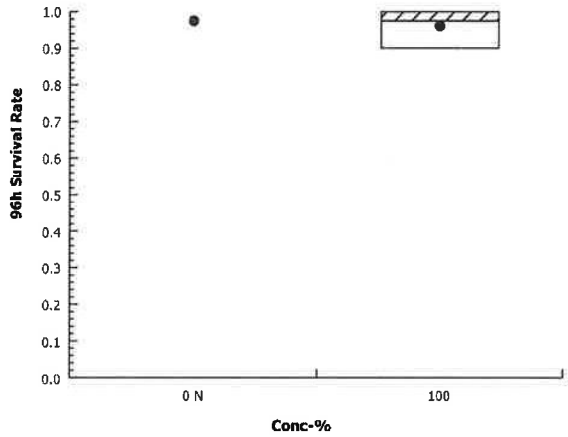
Fathead Minnow 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

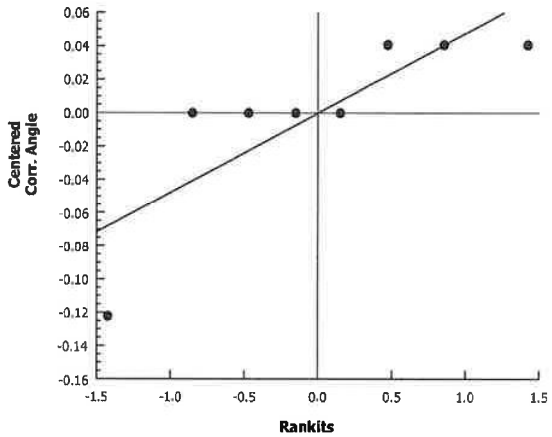
Analysis ID:	15-4475-8302	**Endpoint:**	96h Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	22 Nov-16 9:13	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	10/10	10/10	10/10	10/10
100		9/10	10/10	10/10	10/10

Graphics





CETIS Measurement Report

Fathead Minnow 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	02-4788-7411	**Test Type:**	Survival (96h)	**Analyst:**	
Start Date:	08 Nov-16 14:30	**Protocol:**	EPA/821/R-02-012 (2002)	**Diluent:**	Laboratory Water
Ending Date:	12 Nov-16 12:45	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	94h	**Source:**	Aquatic Biosystems, CO	**Age:**	

Sample ID:	12-0542-6079	**Code:**	AAN1116.124	**Client:**	American Analytics
Sample Date:	07 Nov-16 11:55	**Material:**	Sample Water	**Project:**	A5331992/6K07016
Receipt Date:	08 Nov-16 10:00	**Source:**	Bioassay Report		
Sample Age:	27h (4.2 °C)	**Station:**	6K07016-01		

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	61.67	54.5	68.84	60	65	1.667	2.887	4.68%	0
100		3	525	525	525	525	525	0	0	0.0%	0
Overall		6	293.3	27	559.7	60	525	103.6	253.8	86.52%	0 (0%)

Conductivity-µmhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	335.3	321.7	349	329	339	3.18	5.508	1.64%	0
100		3	2137	2056	2218	2118	2175	18.84	32.62	1.53%	0
Overall		6	1236	200.3	2272	329	2175	403	987.2	79.85%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	7.633	6.383	8.884	7.1	8.1	0.2906	0.5033	6.59%	0
100		3	7.167	5.025	9.308	6.4	8.1	0.4978	0.8622	12.03%	0
Overall		6	7.4	6.685	8.115	6.4	8.1	0.2781	0.6812	9.21%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	90.33	88.9	91.77	90	91	0.3333	0.5774	0.64%	0
100		3	108	108	108	108	108	0	0	0.0%	0
Overall		6	99.17	89	109.3	90	108	3.953	9.683	9.77%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	7.967	7.68	8.254	7.9	8.1	0.06667	0.1155	1.45%	0
100		3	7.667	7.15	8.184	7.5	7.9	0.1202	0.2082	2.72%	0
Overall		6	7.817	7.583	8.051	7.5	8.1	0.09098	0.2229	2.85%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	24	24	24	24	24	0	0	0.0%	0
100		3	24.07	23.78	24.35	24	24.2	0.06664	0.1154	0.48%	0
Overall		6	24.03	23.95	24.12	24	24.2	0.03333	0.08165	0.34%	0 (0%)

Alkalinity (CaCO3)-mg/L

Conc-%	Code	1	2	3
0	N	65	60	60
100		525	525	525

Conductivity-µmhos

Conc-%	Code	1	2	3
0	N	339	329	338
100		2175	2119	2118

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3
0	N	7.7	8.1	7.1
100		6.4	8.1	7

Hardness (CaCO3)-mg/L

Conc-%	Code	1	2	3
0	N	91	90	90
100		108	108	108

pH-Units

Conc-%	Code	1	2	3
0	N	8.1	7.9	7.9
100		7.5	7.6	7.9

Temperature-°C

Conc-%	Code	1	2	3
0	N	24	24	24
100		24	24.2	24

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

126107

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

Client:	The Source Group, Inc.	**Project Name / No.:**	DFSP - Norwalk / 04-SDLA / Quarterly NPDES	**Sampler's Name:**	Glenn Androsko
Project Manager:	Neil Irish	**Site Address:**	15306 Norwalk Blvd	**Sampler's Signature:**	Glenn Androsko
Phone:	562-597-1055	**City:**	Norwalk	**P.O. No.:**	
Fax:	569-597-1070	**State & Zip:**	CA 90650	**Quote No.:**	

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	TPHd 8015M	TPHg/MTBE/TBA 8260B	Arsenic 200.7	TDS, TSS, Turbidity	BOD5 405.1, C	Oil & Grease	Settleable Solids	Sulfides, Phenols	Residual Chlorine, Copper	Methylene Blue Active Substances	Acute Toxicity 40 CFR 136	Special Instructions
Effluent	6K07016-01	11-7-16	1155	Water	1											X	Report J-Flags

REVIEWED
Date 11/16 Time 1730
TAT N Days Sign.

Relinquished by	Date	Time	Received by
Glenn Androsko	11-7-16	1210	[illegible]
[illegible]	11/7/16	1714	[illegible]

AS331992/6K07016

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

December 22, 2016

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

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

A5332013 / 6L05013

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

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

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

Sincerely,

Viorel Vasile

Operations Manager

aquatic bioassay & consulting laboratories, inc

December 22, 2016

Mr. Viorel Vasile
American Analytics
9765 Eton Avenue
Chatsworth, CA 91311

Dear Mr. Vasile:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012.* "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:*

CLIENT:	American Analytics
SAMPLE I.D.:	6L05013-01
DATE RECEIVED:	6 Dec - 2016
ABC LAB. NO.:	AAN1216.041

96 HOUR ACUTE FATHEAD MINNOW SURVIVAL BIOASSAY

LC50 = 100 % Survival in 100 % Sample
*TU(a) = 0.00
* TU(a) Is calculated by: log (% Mortality)/1.7

Yours very truly,

Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 22 Dec-16 14:23 (p 1 of 1)
Test Code: AAN1216.041 | 19-8906-9365

Fathead Minnow 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	21-0166-7510	**Test Type:**	Survival (96h)	**Analyst:**	
Start Date:	06 Dec-16 15:35	**Protocol:**	EPA/821/R-02-012 (2002)	**Diluent:**	Laboratory Water
Ending Date:	10 Dec-16 14:50	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	95h	**Source:**	Aquatic Biosystems, CO	**Age:**	

Sample ID:	15-7596-8751	**Code:**	AAN1216.041	**Client:**	American Analytics
Sample Date:	05 Dec-16 11:27	**Material:**	Sample Water	**Project:**	A5332013/6L05013
Receipt Date:	06 Dec-16 12:00	**Source:**	Bioassay Report		
Sample Age:	28h (3.5 °C)	**Station:**	6L05013-01		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
01-7528-0745	96h Survival Rate	Wilcoxon Rank Sum Two-Sample Test	1.0000	100% passed 96h survival rate

Test Acceptability

Analysis ID	Endpoint	Attribute	Test Stat	TAC Limits Lower	TAC Limits Upper	Overlap	Decision
01-7528-0745	96h Survival Rate	Control Resp	1	0.9	>>	Yes	Passes Criteria

96h Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
100		4	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%

96h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000

96h Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	10/10	10/10	10/10	10/10
100		10/10	10/10	10/10	10/10

CETIS Analytical Report

Report Date: 22 Dec-16 14:23 (p 1 of 2)
Test Code: AAN1216.041 | 19-8906-9365

Fathead Minnow 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	01-7528-0745	**Endpoint:**	96h Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	22 Dec-16 14:23	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Batch ID:	21-0166-7510	**Test Type:**	Survival (96h)	**Analyst:**	
Start Date:	06 Dec-16 15:35	**Protocol:**	EPA/821/R-02-012 (2002)	**Diluent:**	Laboratory Water
Ending Date:	10 Dec-16 14:50	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	95h	**Source:**	Aquatic Biosystems, CO	**Age:**	

Sample ID:	15-7596-8751	**Code:**	AAN1216.041	**Client:**	American Analytics
Sample Date:	05 Dec-16 11:27	**Material:**	Sample Water	**Project:**	A5332013/6L05013
Receipt Date:	06 Dec-16 12:00	**Source:**	Bioassay Report		
Sample Age:	28h (3.5 °C)	**Station:**	6L05013-01		

Data Transform	Alt Hyp	Comparison Result
Angular (Corrected)	C > T	100% passed 96h survival rate

Wilcoxon Rank Sum Two-Sample Test

Control	vs	Conc-%	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision(α:5%)
Negative Control		100	18	n/a	1	6	Exact	1.0000	Non-Significant Effect

Test Acceptability Criteria

		TAC Limits			
Attribute	**Test Stat**	**Lower**	**Upper**	**Overlap**	**Decision**
Control Resp	1	0.9	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0	0	1	65540	<1.0E-37	Significant Effect
Error	0	0	6			
Total	0		7			

96h Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
100		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.412	1.412	1.412	1.412	1.412	1.412	0	0.00%	0.00%
100		4	1.412	1.412	1.412	1.412	1.412	1.412	0	0.00%	0.00%

96h Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000

Angular (Corrected) Transformed Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.412	1.412	1.412	1.412
100		1.412	1.412	1.412	1.412

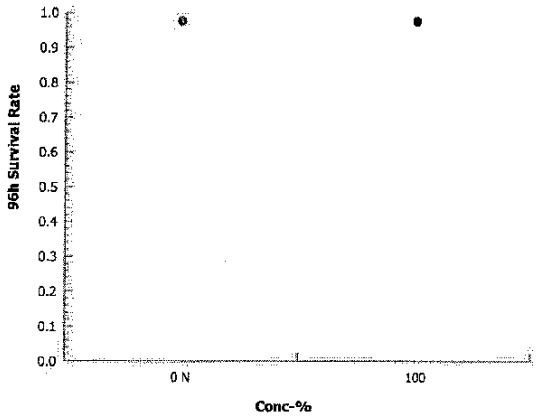
96h Survival Rate Binomials

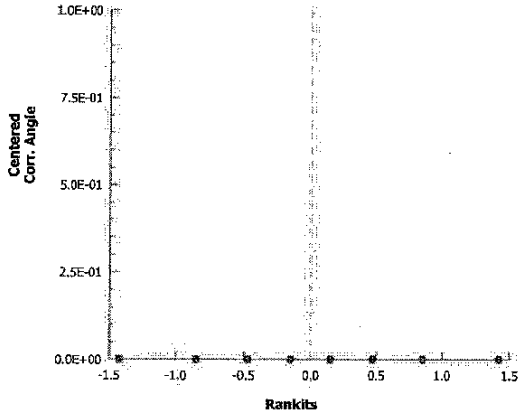
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	10/10	10/10	10/10	10/10
100		10/10	10/10	10/10	10/10

Fathead Minnow 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	01-7528-0745	**Endpoint:**	96h Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	22 Dec-16 14:23	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





CETIS Measurement Report

Fathead Minnow 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	21-0166-7510	**Test Type:**	Survival (96h)	**Analyst:**	
Start Date:	06 Dec-16 15:35	**Protocol:**	EPA/821/R-02-012 (2002)	**Diluent:**	Laboratory Water
Ending Date:	10 Dec-16 14:50	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	95h	**Source:**	Aquatic Biosystems, CO	**Age:**	

Sample ID:	15-7596-8751	**Code:**	AAN1216.041	**Client:**	American Analytics
Sample Date:	05 Dec-16 11:27	**Material:**	Sample Water	**Project:**	A5332013/6L05013
Receipt Date:	06 Dec-16 12:00	**Source:**	Bioassay Report		
Sample Age:	28h (3.5 °C)	**Station:**	6L05013-01		

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	61	61	61	61	61	0	0	0.0%	0
100		3	480	480	480	480	480	0	0	0.0%	0
Overall		6	270.5	29.66	511.3	61	480	93.69	229.5	84.84%	0 (0%)

Conductivity-µmhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	349.3	285.3	413.4	328	378	14.89	25.79	7.38%	0
100		3	2106	2065	2147	2096	2125	9.504	16.46	0.78%	0
Overall		6	1228	217.7	2238	328	2125	392.9	962.4	78.39%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	7.467	6.668	8.265	7.1	7.7	0.1856	0.3215	4.31%	0
100		3	7.1	5.309	8.891	6.5	7.9	0.4163	0.7211	10.16%	0
Overall		6	7.283	6.719	7.848	6.5	7.9	0.2197	0.5382	7.39%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	88	88	88	88	88	0	0	0.0%	0
100		3	674	674	674	674	674	0	0	0.0%	0
Overall		6	381	44.17	717.8	88	674	131	321	84.24%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	7.933	7.416	8.45	7.7	8.1	0.1202	0.2082	2.62%	0
100		3	7.533	7.154	7.913	7.4	7.7	0.08819	0.1528	2.03%	0
Overall		6	7.733	7.447	8.02	7.4	8.1	0.1116	0.2733	3.53%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	3	24	24	24	24	24	0	0	0.0%	0
100		3	24	24	24	24	24	0	0	0.0%	0
Overall		6	24	24	24	24	24	0	0	0.00%	0 (0%)

Alkalinity (CaCO3)-mg/L

Conc-%	Code	1	2	3
0	N	61	61	61
100		480	480	480

Conductivity-µmhos

Conc-%	Code	1	2	3
0	N	328	342	378
100		2125	2097	2096

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3
0	N	7.6	7.7	7.1
100		6.5	7.9	6.9

Hardness (CaCO3)-mg/L

Conc-%	Code	1	2	3
0	N	88	88	88
100		674	674	674

pH-Units

Conc-%	Code	1	2	3
0	N	8.1	7.7	8
100		7.4	7.5	7.7

Temperature-°C

Conc-%	Code	1	2	3
0	N	24	24	24
100		24	24	24

ABC Labs

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

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

A.A. COC No.: 70047533
Page 1 of 1

Client: AMERICAN ANALYTICS Project Name / No.: A5332013/6L05013 Sampler's Name:
Project Manager: Viorel Vatle Site Address: Sampler's Signature:
Phone: City: P.O. No.: SC803301-A5332013
Fax: State & Zip: Quote No.:

TAT Turnaround Codes **

1 = Same Day Rush
2 = 24 Hour Rush
3 = 48 Hour Rush
4 = 72 Hour Rush
5 = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	Acute Toxicity	Special Instructions
6L05013-01		12/5/16	1123	Water	1	X	by EPA-821-R-02-012
							% Survival
							96-hour
							Fathead Minnow
						Temp deg C =	3.5°C
						Chlorine (mg/L) =	<0.1
						NH3 (mg/L) =	0.2

Please enter the TAT Turnaround Codes ** below

For Laboratory Use	Relinquished by	Date	Time	Received by
		12-6-16	8:30	
	Relinquished by	Date	Time	Received by
		12-6-16	1200	
A.A. Project No.:	Relinquished by	Date	Time	Received by

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.

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

126 262

9765 ETON AVE., CHATSWORTH, CA 91311

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

Client:	The Source Group, Inc.	**Project Name / No.:**	DFSP - Norwalk / 091-NDLA/ Monthly NPDES	**Sampler's Name:**	Glenn Androsko
Project Manager:	Neil Irish	**Site Address:**	15306 Norwalk Blvd	**Sampler's Signature:**	Glenn Androsko
Phone:	562-597-1055	**City:**	Norwalk	**P.O. No.:**	
Fax:	569-597-1070	**State & Zip:**	CA 90650	**Quote No.:**	

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	TPHd 8015M	TPHg/MTBE/TBA 8260B	Arsenic 200.7	Bioi-Fish Assay 40CFR 136							Special Instructions
Effluent	6L05013-01	12-5-16	1127	Water	1				✓							Report J-Flags

SAMPLE INTEGRITY
INTACT (Y) N TEMP 5°

REVIEWED
Date 12/5/16 Time 1345
TAT N Days Sign.

16 DEC 5

For Laboratory Use

A5332013/6L05013

Relinquished by	Date	Time	Received by
Glenn Androsko	12-5-16	1145	
	12/5/16	1319	

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

December 13, 2016

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

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

A5332014 / 6L05014

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

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

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

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY REPORT

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

Date: December 11, 2016

Client: American Analytics
9765 Eton Avenue
Chatsworth, CA 91311
Attn: Viorel Vasile

Laboratory No.: A-16120605-001
Project No.: A5332014
Sample ID.: 6L05014-01

Sample Control: The sample was received by ATL chilled directly from the field and with the chain of custody record attached.

Date Sampled:	12/05/16
Date Received:	12/06/16
Temp. Received:	1.3°C
Chlorine (TRC):	0.0 mg/l
Date Tested:	12/06/16 to 12/10/16

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
6L05014-01	100% Survival (TUa = 0.0)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of the Laboratory's name for advertising or publicity purpose without authorization is prohibited.

FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0

Aquatic Testing Laboratories

Lab No.: A-16120605-001
Client/ID: American Analytics 6L05014-01 **Start Date: 12/06/2016**

TEST SUMMARY

Species: *Pimephales promelas.*
Age: 13 (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-161203.

TEST DATA

		°C	DO	pH	# Dead A	# Dead B	# Dead C	# Dead D	Analyst & Time of Readings
INITIAL	Control	20.6	8.5	8.0	0	0	0	0	J 12-6-16
	100%	20.3	6.7	7.5	0	0	0	0	1400
24 Hr	Control	19.9	8.5	7.9	0	0	0	0	J 12-7-16
	100%	19.8	8.0	8.1	0	0	0	0	1330
48 Hr	Control	19.9	8.4	7.8	0	0	0	0	J 12-8-16
	100%	19.7	8.5	7.8	0	0	0	0	1330
Renewal	Control	20.0	8.5	8.0	0	0	0	0	J 12-8-16
	100%	20.0	8.6	7.8	0	0	0	0	1330
72 Hr	Control	20.1	8.2	7.9	0	0	0	0	J 12-9-16
	100%	20.0	8.2	7.7	0	0	0	0	1330
96 Hr	Control	20.2	8.1	7.9	0	0	0	0	J 12-10-16
	100%	20.2	8.1	7.6	0	0	0	0	1400

Comments:
Sample as received: Chlorine: 0 mg/l; Temp: 13 °C; DO: 6.6 mg/l; pH: 7.3 ;
Alkalinity: 489 mg/l; Hardness: 662 mg/l; Conductivity: 1954 umho; NH_3-N: 0.3 mg/l.
Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / (No)
Control: Alkalinity: 59 mg/l; Hardness: 90 mg/l.; Conductivity: 287 umho.
Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes / (No).
Original sample (-001) sample used for renewal kept at 0-6°C with minimal headspace.
Dissolved Oxygen (DO) readings in mg/l O_2.

RESULTS

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

Aquatic Testing Labs

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

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

A.A. COC No.: 70047534

Client: AMERICAN ANALYTICS	Project Name / No.: AS332014 / GL05014	Sampler's Name:
Project Manager: Viorel Vasile	Site Address:	Sampler's Signature:
Phone:	City:	P.O. No.: SUG03302- AS332014
Fax:	State & Zip:	Quote No.:

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	Acute Toxicity										Special Instructions
GL05014-01		12/5/16	1127	Water	1	X										by EPA 821-R02012
																% Survival
																96-hour
																Fathead Minnow

For Laboratory Use	Relinquished by	Date	Time	Received by
		12-6-16	8:30	
	Relinquished by	Date	Time	Received by
		12-6-16	1135	
A.A. Project No.:	Relinquished by	Date	Time	Received by

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.

Aquatic
Testing
Laboratories

REFERENCE TOXICANT DATA

FATHEAD MINNOW ACUTE
Reference Toxicant - SDS

Aquatic Testing Laboratories

QA/QC Batch No.: RT-161203

TEST SUMMARY

Species: *Pimephales promelas.*
Age: 13 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:	12-3-16 1130			12-4-16 1100					12-5-16 1100				
Analyst:	J			J					[illegible]				
	°C	DO	pH	°C	DO	pH	# Dead A	# Dead B	°C	DO	pH	# Dead A	# Dead B
Control	19.6	8.7	8.0	20.0	8.6	8.2	0	0	19.4	8.6	7.8	0	0
1.0 mg/l	19.6	9.0	8.0	19.4	8.1	8.1	0	0	19.4	8.7	7.8	0	0
2.0 mg/l	19.7	8.8	8.0	19.5	8.2	8.1	0	0	19.3	8.7	7.8	0	0
4.0 mg/l	19.6	8.4	8.0	19.6	8.1	8.1	0	0	19.3	8.6	7.8	2	1
8.0 mg/l	19.6	8.8	8.0	19.5	8.3	8.1	10	10	-	-	-	-	-
16.0 mg/l	19.6	8.7	8.0	19.5	8.4	8.1	10	10	-	-	-	-	-

	RENEWAL			72 Hr					96 Hr				
Date/Time:	12-5-16 1100			12-6-16 1100					12-7-16 1130				
Analyst:	[illegible]			J					J				
	°C	DO	pH	°C	DO	pH	# Dead A	# Dead B	°C	DO	pH	# Dead A	# Dead B
Control	19.6	9.0	8.2	19.7	8.3	8.2	0	0	19.4	8.4	8.1	0	0
1.0 mg/l	19.5	9.1	8.2	19.6	8.3	8.2	0	0	19.8	8.2	8.2	0	0
2.0 mg/l	19.4	9.0	8.2	19.7	8.3	8.1	0	0	19.4	8.2	8.2	0	0
4.0 mg/l	19.3	9.0	8.3	19.6	8.2	8.2	0	0	19.8	8.1	8.2	0	0
8.0 mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-
16.0 mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments: Control: Alkalinity: 60 mg/l; Hardness: 91 mg/l; Conductivity: 297 umho.
SDS: Alkalinity: 61 mg/l; Hardness: 90 mg/l; Conductivity: 284 umho.

Concentration-response relationship acceptable? (see attached computer analysis):
Yes (response curve normal)
No (dose interrupted indicated or non-normal)

Acute Fish Test-96 Hr Survival

Start Date:	12/3/2016 11:30	Test ID:	RT161203f	Sample ID:	REF-Ref Toxicant
End Date:	12/7/2016 11:30	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	SDS-Sodium dodecyl sulfate
Sample Date:	12/3/2016	Protocol:	EPAAW02-EPA/821/R-02-01	Test Species:	PP-Pimephales promelas
Comments:					

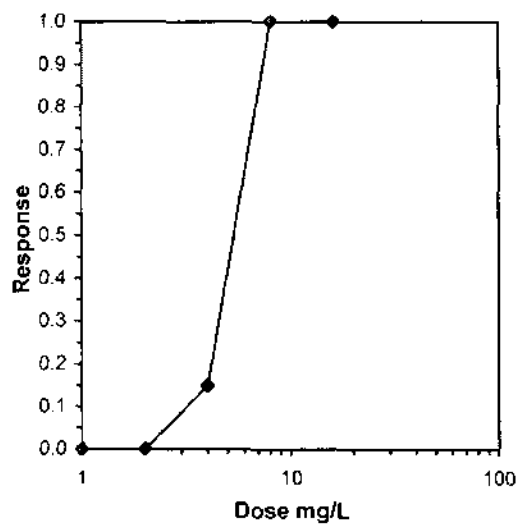
Conc-mg/L	1	2
D-Control	1.0000	1.0000
1	1.0000	1.0000
2	1.0000	1.0000
4	0.8000	0.9000
8	0.0000	0.0000
16	0.0000	0.0000

			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	0.8500	0.8500	1.1781	1.1071	1.2490	8.517	2	3	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%	5.0982	4.5640	5.6950
5.0%	5.2099	4.5766	5.9309
10.0%	5.2897	4.4710	6.2583
20.0%	5.3212	4.9289	5.7449
Auto-0.0%	5.0982	4.5640	5.6950

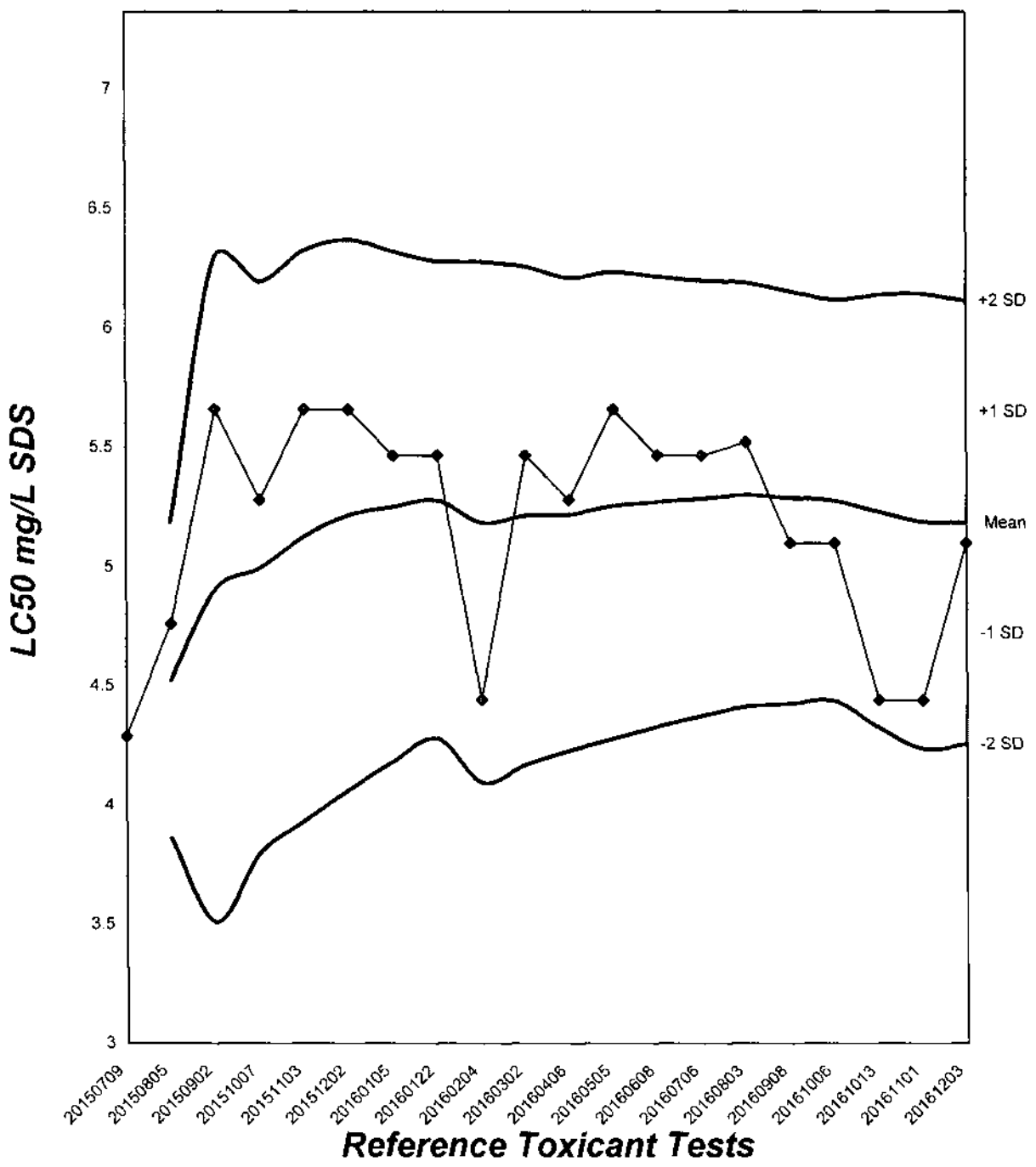


ToxCalc v5.0.23

Reviewed by: _____

Fathead Minnow Acute Laboratory Control Chart

CV% = 8.96



TEST ORGANISM LOG

FATHEAD MINNOW - LARVAL
(*Pimephales promelas*)

Aquatic Testing Laboratories

QA/QC BATCH NO.: RT-161203

SOURCE: In-Lab Culture

DATE HATCHED: 11-20-16

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATE USED IN LAB: 12/3/16

AVERAGE FISH WEIGHT: 0.006 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.: 19.6 °C pH: 8.0 Ammonia: 0 mg/l NH_3-N

DO: 8.7 mg/l Alkalinity: 60 mg/l Hardness: 97 mg/l

READINGS RECORDED BY: [signature] DATE: 12-4-16

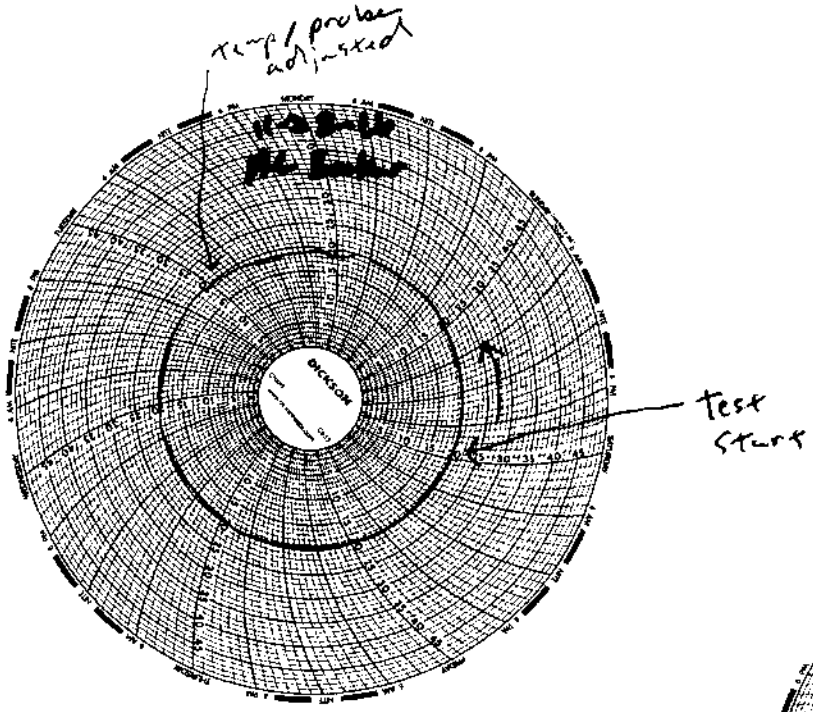
Aquatic Testing Laboratories

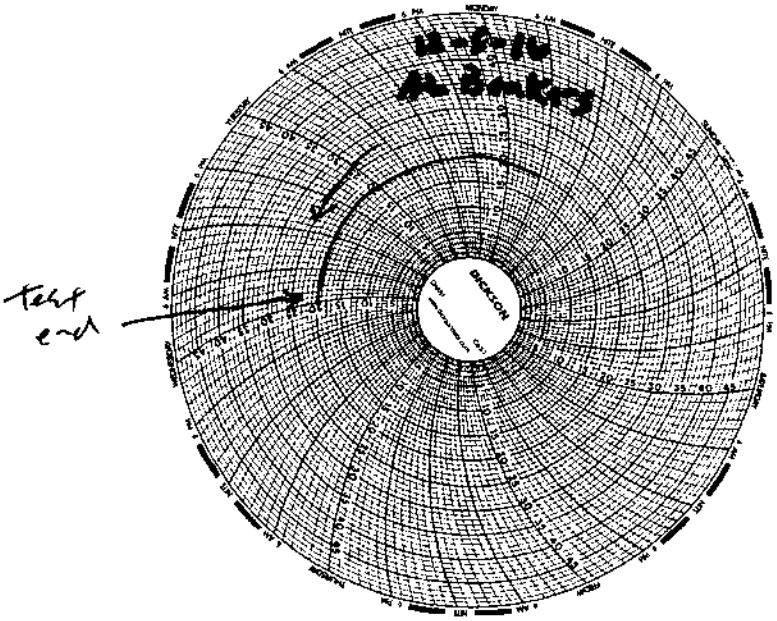
Test Temperature Chart

Test No: RT-161203

Date Tested: 12/03/16 to 12/07/16

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

126263

Client:	The Source Group, Inc.	**Project Name / No.:**	DFSP - Norwalk / 091-NDLA/ Monthly NPDES	**Sampler's Name:**	Glenn Androsko
Project Manager:	Neil Irish	**Site Address:**	15306 Norwalk Blvd	**Sampler's Signature:**	Glenn Androsko
Phone:	562-597-1055	**City:**	Norwalk	**P.O. No.:**	
Fax:	569-597-1070	**State & Zip:**	CA 90650	**Quote No.:**	

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	TPHd 8015M	TPHg/MTBE/TBA 8260B	Arsenic 200.7	Bio-Fish Assay 40 CFR 136							Special Instructions
						Please enter the TAT Turnaround Codes ** below										
Effluent	6L05014-01	12-5-16	1127	Water	1				✓							Report J-Flags

SAMPLE INTEGRITY
INTACT (Y) N TEMP 6°

REVIEWED
Date 12/5/16 Time 1345
TAT N Days Sign:

16DEC 5

Relinquished by	Date	Time	Received by
Glenn Androsko	12-5-16	11:45	
	12/5/16	1319	

A5332014 / 6L05014

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

December 20, 2016

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

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

A5332015 / 6L05015

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

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

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

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5332015
Date Received: 12/05/16
Date Reported: 12/20/16

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
8260B TPHGASOLINEBTEXOXY					
Effluent	6L05015-01	Water	5	12/05/16 10:49	12/05/16 13:19
Arsenic Total EPA 200.7					
Effluent	6L05015-01	Water	5	12/05/16 10:49	12/05/16 13:19
Diesel Range Organics 8015M					
Effluent	6L05015-01	Water	5	12/05/16 10:49	12/05/16 13:19

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5332015
Project No:	04-NDLA-013	**Date Received:**	12/05/16
Project Name:	DFSP Norwalk GWETS NPDES Monthly	**Date Reported:**	12/20/16
Method:	TPHG/BTEX/Oxygenates by GC/MS	**Units:**	ug/L

Date Sampled:	12/05/16		
Date Prepared:	12/13/16		
Date Analyzed:	12/13/16		
AA ID No:	6L05015-01		
Client ID No:	Effluent		
Matrix:	Water		
Dilution Factor:	1	MDL	MRL
8260B TPHGASOLINEBTEXOXY (EPA 8260B)			
tert-Butyl alcohol (TBA)	<7.0	7.0	10
Gasoline Range Organics (GRO)	<40	40	100
Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	2.0

Surrogates		**%REC Limits**
4-Bromofluorobenzene	97%	70-140
Dibromofluoromethane	123%	70-140
Toluene-d8	96%	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5332015
Project No:	04-NDLA-013	**Date Received:**	12/05/16
Project Name:	DFSP Norwalk GWETS NPDES Monthly	**Date Reported:**	12/20/16
Method:	Diesel Range Organics by GC/FID	**Units:**	ug/L

Date Sampled:	12/05/16		
Date Prepared:	12/06/16		
Date Analyzed:	12/06/16		
AA ID No:	6L05015-01		
Client ID No:	Effluent		
Matrix:	Water		
Dilution Factor:	1	MDL	MRL
Diesel Range Organics 8015M (EPA 8015M)			
Diesel Range Organics as Diesel	<60	60	100

Surrogates		**%REC Limits**
o-Terphenyl	108%	50-150

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5332015
Date Received: 12/05/16
Date Reported: 12/20/16

AA I.D. No.	Client I.D. No.	Sampled	Prepared	Analyzed	Dilution	Result	Units	MDL	MRL
Arsenic Total EPA 200.7 (EPA 200.7)									
6L05015-01	Effluent	12/05/16	12/07/16	12/08/16	1	<0.0060	mg/L	0.006	0.007

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5332015
Date Received: 12/05/16
Date Reported: 12/20/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS - Quality Control										
Batch B6L1324 - EPA 5030B										
Blank (B6L1324-BLK1)				Prepared & Analyzed: 12/13/16						
tert-Amyl Methyl Ether (TAME)	<0.30	0.30	ug/L							
Benzene	<0.20	0.20	ug/L							
tert-Butyl alcohol (TBA)	<7.0	7.0	ug/L							
Diisopropyl ether (DIPE)	<0.50	0.50	ug/L							
Ethylbenzene	<0.20	0.20	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	<0.40	0.40	ug/L							
Gasoline Range Organics (GRO)	<40	40	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<0.40	0.40	ug/L							
Toluene	<0.30	0.30	ug/L							
o-Xylene	<0.30	0.30	ug/L							
m,p-Xylenes	<0.40	0.40	ug/L							
Surrogate: 4-Bromofluorobenzene	*48.9*		*ug/L*	*50*		*97.8*	*70-140*			
Surrogate: Dibromofluoromethane	*58.4*		*ug/L*	*50*		*117*	*70-140*			
Surrogate: Toluene-d8	*47.7*		*ug/L*	*50*		*95.4*	*70-140*			
LCS (B6L1324-BS1)				Prepared & Analyzed: 12/13/16						
tert-Amyl Methyl Ether (TAME)	**17.7**	0.30	ug/L	20		88.5	70-130			
Benzene	**21.3**	0.20	ug/L	20		106	75-125			
tert-Butyl alcohol (TBA)	**115**	7.0	ug/L	100		115	70-130			
Diisopropyl ether (DIPE)	**20.4**	0.50	ug/L	20		102	70-130			
Ethylbenzene	**21.4**	0.20	ug/L	20		107	75-125			
Ethyl-tert-Butyl Ether (ETBE)	**18.9**	0.40	ug/L	20		94.3	70-130			
Gasoline Range Organics (GRO)	**471**	40	ug/L	500		94.2	70-130			
Methyl-tert-Butyl Ether (MTBE)	**38.8**	0.40	ug/L	40		97.0	70-135			
Toluene	**20.9**	0.30	ug/L	20		104	75-125			
o-Xylene	**20.4**	0.30	ug/L	20		102	75-125			
m,p-Xylenes	**42.3**	0.40	ug/L	40		106	70-130			
Surrogate: 4-Bromofluorobenzene	*49.2*		*ug/L*	*50*		*98.5*	*70-140*			
Surrogate: Dibromofluoromethane	*49.4*		*ug/L*	*50*		*98.9*	*70-140*			
Surrogate: Toluene-d8	*49.6*		*ug/L*	*50*		*99.3*	*70-140*			
Matrix Spike (B6L1324-MS1)			**Source: 6L05015-01**	Prepared & Analyzed: 12/13/16						

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5332015
Date Received: 12/05/16
Date Reported: 12/20/16

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
TPHG/BTEX/Oxygenates by GC/MS - Quality Control										
Batch B6L1324 - EPA 5030B										
Matrix Spike (B6L1324-MS1) Continued Source: 6L05015-01 Prepared & Analyzed: 12/13/16										
tert-Amyl Methyl Ether (TAME)	**19.1**	0.30	ug/L	20		95.4	70-130			
Benzene	**20.8**	0.20	ug/L	20		104	70-130			
tert-Butyl alcohol (TBA)	**117**	7.0	ug/L	100	<10	117	70-130			
Diisopropyl ether (DIPE)	**20.2**	0.50	ug/L	20		101	70-130			
Ethylbenzene	**21.0**	0.20	ug/L	20		105	70-130			
Ethyl-tert-Butyl Ether (ETBE)	**19.6**	0.40	ug/L	20		98.0	70-130			
Methyl-tert-Butyl Ether (MTBE)	**40.4**	0.40	ug/L	40	<2.0	101	70-130			
Toluene	**20.0**	0.30	ug/L	20		100	70-130			
o-Xylene	**20.0**	0.30	ug/L	20		100	70-130			
m,p-Xylenes	**41.4**	0.40	ug/L	40		103	70-130			
Surrogate: 4-Bromofluorobenzene	*48.2*		*ug/L*	*50*		*96.5*	*70-140*			
Surrogate: Dibromofluoromethane	*49.2*		*ug/L*	*50*		*98.4*	*70-140*			
Surrogate: Toluene-d8	*49.3*		*ug/L*	*50*		*98.5*	*70-140*			
Matrix Spike Dup (B6L1324-MSD1) Source: 6L05015-01 Prepared & Analyzed: 12/13/16										
tert-Amyl Methyl Ether (TAME)	**20.1**	0.30	ug/L	20		100	70-130	5.15	30	
Benzene	**20.5**	0.20	ug/L	20		102	70-130	1.45	30	
tert-Butyl alcohol (TBA)	**121**	7.0	ug/L	100	<10	121	70-130	3.36	30	
Diisopropyl ether (DIPE)	**20.3**	0.50	ug/L	20		101	70-130	0.346	30	
Ethylbenzene	**21.2**	0.20	ug/L	20		106	70-130	1.19	30	
Ethyl-tert-Butyl Ether (ETBE)	**20.4**	0.40	ug/L	20		102	70-130	3.85	30	
Methyl-tert-Butyl Ether (MTBE)	**45.8**	0.40	ug/L	40	<2.0	115	70-130	12.7	30	
Toluene	**20.2**	0.30	ug/L	20		101	70-130	0.994	30	
o-Xylene	**20.3**	0.30	ug/L	20		101	70-130	1.29	30	
m,p-Xylenes	**42.1**	0.40	ug/L	40		105	70-130	1.63	30	
Surrogate: 4-Bromofluorobenzene	*49.3*		*ug/L*	*50*		*98.6*	*70-140*			
Surrogate: Dibromofluoromethane	*49.6*		*ug/L*	*50*		*99.3*	*70-140*			
Surrogate: Toluene-d8	*49.1*		*ug/L*	*50*		*98.1*	*70-140*			
Diesel Range Organics by GC/FID - Quality Control										
Batch B6L0618 - EPA 3510C										
Blank (B6L0618-BLK1) Prepared & Analyzed: 12/06/16										

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

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

AA Project No: A5332015
Date Received: 12/05/16
Date Reported: 12/20/16

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 B6L0618 - EPA 3510C										
Blank (B6L0618-BLK1) Continued				Prepared & Analyzed: 12/06/16						
Diesel Range Organics as Diesel	<60	60	ug/L							
Surrogate: o-Terphenyl	*44.8*		*ug/L*	*40*		*112*	*50-150*			
LCS (B6L0618-BS1)				Prepared & Analyzed: 12/06/16						
Diesel Range Organics as Diesel	**652**	60	ug/L	800		81.5	75-125		30	
Surrogate: o-Terphenyl	*40.7*		*ug/L*	*40*		*102*	*50-150*			
LCS Dup (B6L0618-BSD1)				Prepared & Analyzed: 12/06/16						
Diesel Range Organics as Diesel	**880**	60	ug/L	800		110	75-125	29.7	30	
Surrogate: o-Terphenyl	*49.6*		*ug/L*	*40*		*124*	*50-150*			
Total Metals by ICP Atomic Emission Spectroscopy - Quality Control										
Batch B6L0715 - EPA 200.7										
Blank (B6L0715-BLK1)				Prepared: 12/07/16 Analyzed: 12/08/16						
Arsenic	<0.0060	0.0060	mg/L							
LCS (B6L0715-BS1)				Prepared: 12/07/16 Analyzed: 12/08/16						
Arsenic	**0.186**	0.0060	mg/L	0.20		92.8	80-120		20	
LCS Dup (B6L0715-BSD1)				Prepared: 12/07/16 Analyzed: 12/08/16						
Arsenic	**0.194**	0.0060	mg/L	0.20		97.0	80-120	4.37	20	
Duplicate (B6L0715-DUP1)		**Source: 6L05016-04**		Prepared: 12/07/16 Analyzed: 12/08/16						
Arsenic	**0.0186**	0.0060	mg/L		0.0200			7.25	30	
Matrix Spike (B6L0715-MS1)		**Source: 6L05015-01**		Prepared: 12/07/16 Analyzed: 12/08/16						
Arsenic	**0.206**	0.0060	mg/L	0.20	<0.0070	103	75-125		20	
Matrix Spike Dup (B6L0715-MSD1)		**Source: 6L05015-01**		Prepared: 12/07/16 Analyzed: 12/08/16						
Arsenic	**0.203**	0.0060	mg/L	0.20	<0.0070	102	75-125	1.27	20	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5332015
Project No:	04-NDLA-013	**Date Received:**	12/05/16
Project Name:	DFSP Norwalk GWETS NPDES Monthly	**Date Reported:**	12/20/16

Special Notes

Viorel Vasile
Operations Manager

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

126264

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

Client:	The Source Group, Inc.	**Project Name / No.:**	DFSP - Norwalk / 091-NDLA/ Monthly NPDES	**Sampler's Name:**	Glenn Androsko
Project Manager:	Neil Irish	**Site Address:**	15306 Norwalk Blvd	**Sampler's Signature:**	Glenn Androsko
Phone:	562-597-1055	**City:**	Norwalk	**P.O. No.:**	
Fax:	569-597-1070	**State & Zip:**	CA 90650	**Quote No.:**	

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	TPHd 8015M	TPHg/MTBE/TBA 8260B	Arsenic 200.7								Special Instructions
Effluent	6605015-01	12-5-16	1049	Water	5	✓	✓	✓								Report J-Flags

SAMPLE INTEGRITY
INTACT (Y) N TEMP 6°

REVIEWED
Date 12/5/16 Time 1545
TAT N Days Sign:

	Relinquished by	Date	Time	Received by
	Glenn Androsko	12-5-16	11:45	
	Relinquished by	Date	Time	Received by
		12/5/16	1319	
A5337015 / 6605015	Relinquished by	Date	Time	Received by

16 DEC 5 1319

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.

APPENDIX B

Laboratory ELAP Certification

CALIFORNIA
Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE

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: **3/31/2017**

Effective Date: **4/1/2015**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

APPENDIX C

Report Certification

DEFENSE LOGISTICS AGENCY
INSTALLATION SUPPORT FOR ENERGY
8725 JOHN J. KINGMAN ROAD
FT. BELVOIR VIRGINIA 22060-6221

January 11, 2017

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:

In reference to General National Pollutant Discharge Elimination System (NPDES) Permit (NPDES No. CAG994004) CFN# CI-7585, please accept this letter as DLA's certification of the Groundwater Discharge Monitoring Report – Quarter 4 of calendar year 2016 for the Defense Fuel Support Point (DFSP) Norwalk facility in Norwalk, California.

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 carol.devier-heeney@dla.mil.

Sincerely,

William Y. Potter

Digitally signed by POTTER.WILLIAM.Y.1394566272
Date: 2017.01.11 13:37:40 -05'00'

William Y. Potter
Chief, Restoration Branch

Enclosure
As stated

cc:
CRWQB Information Technology Unit
Carol Devier-Heeney, DLA
Mike Wood, P.E., Senior Engineer, The Source Group, Inc.