



December 2018
Harbor Toxics TMDL Coordinated Compliance Monitoring and Reporting



2017/18 Annual Report Greater Los Angeles and Long Beach Harbor Waters

Prepared for:

Cities of Bellflower, Lakewood, Long Beach, Los Angeles, Paramount, Rancho Palos Verdes,
Rolling Hills, Rolling Hills Estates, and Signal Hill

Los Angeles County

Los Angeles County Flood Control District

Ports of Long Beach and Los Angeles

Kinder Morgan Liquid Terminals, LLC*

Metropolitan Stevedore Company*

Petro-Diamond Inc.*

Tesoro Refining & Marketing Company LLC*

NRG Energy, Inc.*

Vopak Long Beach Terminal, Inc.*

* The Industrial Individual Permit Holders listed are not a part of the Greater Harbor Waters Regional Monitoring Coalition; however, they contribute to the monitoring and reporting activities documented herein to comply with applicable elements of their permit requirements.

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Cities of Bellflower, Lakewood, Long Beach, Los Angeles, Paramount, Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates, and Signal Hill; Los Angeles County; Los Angeles County Flood Control District; Ports of Long Beach and Los Angeles; Kinder Morgan Liquid Terminals, LLC*; Metropolitan Stevedore Company*; Petro-Diamond Inc.*; Tesoro Refining & Marketing Company LLC*; NRG Energy, Inc.*, and Vopak Long Beach Terminal, Inc.*

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ABBREVIATIONS

µg/L	microgram per liter
Basin Plan	Water Quality Control Plan Los Angeles Region
CCMRP	Coordinated Compliance Monitoring and Reporting Plan
CTR	California Toxics Rule
CTR criteria (aquatic life)	CTR Criteria for the Protection of Aquatic Life – Saltwater Chronic
CTR criteria (human health)	CTR Criteria for the Protection of Human Health – Consumption of Organisms Only
DO	dissolved oxygen
DQO	data quality objective
EDD	electronic data deliverable
Harbor Toxics TMDL	Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters
HDPE	high-density polyethylene
L	liter
LA	load allocation
LARE	Los Angeles River Estuary
m	meter
MDL	method detection limit
mg/L	milligram per liter
mL	milliliter
MRL	method reporting limit
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
PCB	polychlorinated biphenyl
pH	hydrogen ion potential
ppt	parts per thousand
PQAPP	Programmatic Quality Assurance Project Plan
QA	quality assurance
QC	quality control
RPD	relative percent difference
SAP	Sampling and Analysis Plan
SQO	Sediment Quality Objective
SWAMP	California State Surface Water Ambient Monitoring Program
TMDL	Total Maximum Daily Load
TSS	total suspended solids
USEPA	U.S. Environmental Protection Agency

WGS84
WLA

World Geodetic System 1984
waste load allocation

1 Introduction

The *Total Maximum Daily Load for Toxic Pollutants in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters* (Harbor Toxics TMDL) became effective on March 23, 2012. The requirements of the Harbor Toxics TMDL are specified in Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region (RWQCB 2011). The Harbor Toxics TMDL was promulgated to protect and restore fish tissue, water, and sediment quality in Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters (including Consolidated Slip; Greater Harbor Waters).

1.1 Background

Section 303 (d)(1)(A) of the Clean Water Act requires states to identify waterbodies within its boundaries for which effluent limitations are not stringent enough to implement water quality standards applicable to those waters. This list of impaired waterbodies is commonly referred to as the Section 303(d) list. Subsequently, in accordance with Section 303 (d)(1)(C), states are required to develop a Total Maximum Daily Load (TMDL) for pollutants not meeting the effluent limitations and at a level necessary to implement the established water quality standards. A TMDL represents the maximum amount of a pollutant a waterbody can receive and still meet water quality standards.

The 2010 California 303(d) List of Water Quality Limited Segments identified Los Angeles and Long Beach Inner and Outer Harbors, Inner Cabrillo Beach, Cabrillo Marina, Consolidated Slip, Fish Harbor, Eastern San Pedro Bay, and Los Angeles River Estuary (LARE) as water segments where standards are not met and a TMDL is required. One or more pollutants or endpoints for each waterbody were listed as the cause of impairment for these waterbodies that comprise the Greater Harbor Waters (Table 1).

1.2 Harbor Toxics Total Maximum Daily Load

To protect marine life and minimize human health risks due to the consumption of fish, the Harbor Toxics TMDL includes annual contaminant limits in surface sediment, stormwater effluent, and fish tissues in the Greater Harbor Waters. These limits are defined as target loads or concentrations for compliance with the Harbor Toxics TMDL. The intent of a TMDL is to: 1) determine the quantity of contaminants a system can assimilate while protecting water quality; 2) determine all inputs of contaminants to the system and linkages of inputs to impairments; and 3) allocate reductions to each source to bring the waterbody into compliance with established criteria for the protection of beneficial uses related to water quality.

1.2.1 Numeric Targets

Applicable water quality objectives for the Harbor Toxics TMDL are narrative objectives for chemical constituents, bioaccumulation, and toxicity in the Water Quality Control Plan Los Angeles Region (Basin Plan; RWQCB 1994) and the numeric water quality criteria promulgated in 40 Code of Federal

Regulations 131.38 (the California Toxics Rule [CTR]). In addition, sediment condition objectives were determined using sediment quality guidelines and the State Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (Sediment Quality Objectives [SQOs] Part 1; SWRCB-Cal EPA 2009).

Water targets were determined by the Basin Plan and the CTR.

Sediment targets were determined by the narrative standards of the Basin Plan, fish-associated sediment targets as defined by the Harbor Toxics TMDL, and sediment quality guidelines (e.g., effects range low) recommended by Long et al. (1998) and MacDonald et al. (2000). The Harbor Toxics TMDL anticipates that revisions to specific sediment quality targets may be determined by development of site-specific sediment quality values.

Fish tissue targets were determined from *Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, Polychlorinated Biphenyls (PCBs), Selenium, and Toxaphene*, developed by the Office of Environmental Health Hazard Assessment (OEHHA 2008) to assist agencies in developing fish tissue-based criteria for pollution mitigation or elimination and to protect humans from consumption of contaminated fish.

1.2.2 Interim and Final Waste Load Allocations and Load Allocations

Final waste load allocations (WLAs) are assigned to stormwater dischargers (i.e., Municipal Separate Stormwater Sewer System, California Department of Transportation, general construction, and general industrial dischargers) and other National Pollutant Discharge Elimination System dischargers. Final load allocations (LAs) are assigned to direct atmospheric deposition and bedded sediments in both wet and dry weather. Mass-based allocations have been set where sufficient data were available to calculate mass-based allocations; otherwise, concentration-based allocations have been set.

The following interim and final allocations are listed in Attachment A to Resolution No. R11-008, Amendment to the Water Quality Control Plan – Los Angeles Region (RWQCB 2011):

- Interim concentration-based allocation for sediment in Dominguez Channel Estuary and Greater Harbor Waters
- Final concentration-based WLAs for receiving water in Dominguez Channel Estuary and Greater Harbor Waters
- Final mass-based WLAs and LAs for Dominguez Channel Estuary and Greater Harbor Waters
- Final concentration-based sediment WLAs for metals in Dominguez Channel Estuary, Consolidated Slip, and Fish Harbor
- Final mass-based WLAs and LAs for bioaccumulative compounds in fish tissue for Dominguez Channel Estuary and Greater Harbor Waters

1.3 Compliance Measures

The Harbor Toxics TMDL set WLAs in the Greater Harbor waterbodies to limit sediment-bound pollutant loadings from upstream and on-land sources. In addition, the Harbor Toxics TMDL set LAs in the Greater Harbor waterbodies to limit concentrations in bedded sediments believed to impact marine benthos (direct effects) and fish tissue (indirect effects).

Water quality currently meets water quality objectives for beneficial use. However, monitoring is required to confirm no degradation is occurring. Water column concentrations will be compared to CTR criteria for both the Protection of Aquatic Life – Saltwater Chronic and the Protection of Human Health for consumption of organisms only.

Ultimately, compliance with sediments may be demonstrated via any of the following three means:

- Final sediment allocations, as presented in the Basin Plan Amendment (RWQCB 2011), are met.
- The qualitative sediment condition of unimpacted or likely unimpacted, via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met—except for chromium, which is not included in the SQO Part 1.
- Sediment numeric targets are met in bedded sediments over a 3-year averaging period.

Ultimately, compliance with fish tissues may be demonstrated via any of the following four means:

- Fish tissue targets are met in species resident to the Harbor Toxics TMDL waterbodies.
- Final sediment allocations, as presented in the Basin Plan Amendment (RWQCB 2011), are met.
- Sediment numeric targets to protect fish tissue are met in bed sediment over a 3-year averaging period.
- The sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.

1.4 Coordinated Compliance and Monitoring Reporting Plan

The Harbor Toxics TMDL requires monitoring activities by the responsible parties in the following three waterbody areas:

- Dominguez Channel, Torrance Lateral, and Dominguez Channel Estuary
- Greater Los Angeles and Long Beach Harbor Waters (including Consolidated Slip)
- Los Angeles River and San Gabriel River

The Coordinated Compliance Monitoring and Reporting Plan (CCMRP; Anchor QEA 2014a) outlines the monitoring activities to be conducted by the cooperating parties for the Greater Harbor Waters. To be consistent with and potentially collaborate with other regional monitoring programs, the sample collection methods prescribed within the CCMRP are to be conducted in accordance with methods established for use during the Southern California Coastal Water Research Project's Southern California

Bight Regional Monitoring Program or the California State Surface Water Ambient Monitoring Program (SWAMP). Compliance monitoring and reporting activities must also be conducted in accordance with the Programmatic Quality Assurance Project Plan (PQAPP; Anchor QEA 2014b) developed for the Harbor Waters Toxics TMDL to ensure usability and provide benefit to other Harbor Waters Toxics TMDL-related programs and studies. The Final CCMRP was approved on June 6, 2014 (Unger 2014).

1.5 Programmatic Quality Assurance Project Plan

The PQAPP (Anchor QEA 2014b) was developed to guide the collection of high-quality data as part of compliance monitoring and special studies required by and in support of the Harbor Toxics TMDL. The PQAPP includes the following key elements that focus on analytical methods and data generated under this program:

- **Program Management.** This section identifies the specific roles and responsibilities of data collectors and data managers and describes the process through which field and analytical data will be processed, reduced, and stored in an EQulS database by the managing consultant.
- **Field Sampling Data Quality Objectives (DQOs).** This section includes detailed information on field collection requirements, including sample processing, sample handling, sample identification, sample custody and shipping requirements, field quality control (QC) sample requirements with associated performance criteria, field records, and field electronic data deliverable (EDD) requirements.
- **Laboratory DQOs.** This section includes detailed information on analytical methods, analyte lists and reporting limits, laboratory QC sample requirements with associated performance criteria and corrective actions, laboratory record requirements, and laboratory EDD requirements.
- **Data Review, Verification, and Validation.** This section outlines the procedures used to meet the project DQOs.

The PQAPP was designed to be programmatic in nature to address data quality needs for both compliance monitoring and other Harbor Toxics TMDL-related sampling and analysis activities over the next 5 years. The benefit of the programmatic approach outlined in the PQAPP is that there will be a uniform data collection and management program for all Harbor Toxics TMDL-related studies that provides high-quality data and efficiencies due to standardization of sample collection, nomenclature, analysis, data review/validation, processing, storage, management, and seamless data export to the Regional Monitoring Coalition and State databases, regardless of study type or contractors performing the work.

The CCMRP (Anchor QEA 2014a) has been designed accordingly to incorporate relevant PQAPP elements in addition to supplemental information specific to the compliance monitoring program in order to develop a single, all-inclusive, monitoring plan compatible with SWAMP Quality Assurance Project Plan requirements.

2 Methods

Methods were conducted in accordance with the CCMRP (Anchor QEA 2014a) and accompanying matrix-specific Sampling and Analysis Plan (SAP). Event-specific methods not incorporated into the CCMRP or SAP are presented below. Deviations from the CCMRP and the SAP are presented in Section 3.2.

2.1 Station Locations

Station locations for water quality sampling were predetermined in both the CCMRP (Anchor QEA 2014a) and Water SAP (Anchor QEA 2014e).

Vessel positioning was accomplished to achieve the target locations using an on-vessel differential GPS with an accuracy of plus or minus 10 feet (3 meters [m]). The coordinates of the actual sampling locations were reported in latitude and longitude in decimal degrees on the field sample forms and were within 15 m of the proposed sampling station. Positions were relative to the World Geodetic System 1984 (WGS84). Samples were labeled accordingly and as detailed in the CCMRP (Anchor QEA 2014a). The station identification codes were consistent with the station numbers listed in the Harbor Toxics TMDL Basin Plan Amendment (RWQCB 2011).

2.2 Water

Water quality monitoring consisted of in situ measurements and collection of water samples for chemical analyses. Water samples were collected the following three times, representing one dry weather event and two wet weather events:

- Summer 2017: This dry weather sampling event occurred on September 5, 2017. It was conducted after a minimum 72-hour antecedent period of dry weather, as required.
- Fall 2017: This wet weather sampling event occurred on January 10, 2018. It was initiated within 24 hours after the storm event to constitute the first of two wet weather sampling events and encompass the first flush of the wet season. The qualifying storm occurred from January 8 to 9, and rainfall totals come from National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service (NWS). Total rainfall ranged from 1.17 inches recorded at Downtown Los Angeles to 1.3 inches recorded at Long Beach Airport for the 24-hour period ending the morning of January 10.
- Winter 2018: This wet weather sampling event occurred on February 27, 2018. It was initiated within 24 hours after the storm event began to constitute the second of two wet weather sampling events. The qualifying storm occurred on February 26, and total rainfall from NOAA's NWS ranged from 0.1 inch recorded at Los Angeles Airport to 0.21 inch recorded at Long Beach Airport for the 24-hour period.

NWS reports showing observed rainfall are available in Appendix A.

2.2.1 Field and Analytical Methods

Per the CCMRP, analytes and analytical processes were provided to the contracted laboratory. Sampling was conducted three times annually at 22 stations: two during wet weather events and one during a dry weather event. Water quality measurements and samples were collected at three depths (surface, mid-water column, and bottom). In situ measurements included temperature, dissolved oxygen (DO), hydrogen ion potential (pH), and salinity. Water samples were collected and submitted to the contracted laboratory for total suspended solids (TSS), total and dissolved metals, organochlorine pesticides, and PCB congeners.

2.2.2 Sampling Equipment

In situ water quality parameters were measured using a multi-parameter water quality instrument, equipped with sensors to measure temperature, DO, pH, and salinity. A lead line was attached to the instrument to estimate water depth at the time the measurements were taken. Once the instrument was lowered to the appropriate depth, it was allowed to equilibrate for at least 1 minute at the targeted depth. Water samples were collected using a Van Dorn style water sampler that was decontaminated prior to sample collection at each station.

2.2.3 Sample Identification

The sample nomenclature included the identifiers listed below, with examples in Figures 1, 2, and 3:

- Waterbody or site
- Media or sampling method code
- Station number
- Depth interval (in metric units), if applicable
- Date of collection
- Indication of field duplicate (i.e., add 1000 to station number) if applicable

For equipment blank or field blank samples, "EB" or "FB" was used, respectively, in place of the waterbody or site and station number. The date of sample collection was added to the end in YYYYMMDD format.

Sample nomenclature for water samples is shown in Figure 1 using the following example: a surface water sample grab, station number 09 from Outer Harbor – Los Angeles on July 31, 2018, is written as:

OA-RW-09-S-20180731

Sample nomenclature for field duplicates is shown in Figure 2, using the following example: a water sample collected at the surface, station number 09 from Outer Harbor – Los Angeles on July 31, 2018, that is a field duplicate is written as:

OA-RW-1009-S-20180731

Sample nomenclature for equipment blanks is shown in Figure 3, using the following example: an equipment blank of the decontaminated sample processing equipment after sample collection on July 31, 2018, is written as:

EB-20180731

2.2.4 Decontamination Procedures

All sample containers were pre-cleaned by laboratory standard procedures. All water quality equipment (e.g., Van Dorn sampler) in contact with the sample material was decontaminated using the following procedure:

1. Pre-rinse with tap or site water.
2. Wash with solution of distilled water and Alconox soap.
3. Rinse with site water.
4. At the conclusion of the sampling event, rinse well with distilled water.
5. Store in a clean closed container.

New disposable gloves were used at each site to prevent cross-contamination.

3 Results

Analytical chemistry results for water quality are presented in the following sections. Field sampling forms for water are in Appendix B. Laboratory chemistry reports for water are available in Appendix C.

3.1 Water

Water quality monitoring was conducted during three separate events: summer 2017, fall 2017 (coinciding with the first flush of the 2017/18 wet weather season), and winter 2018. Analytical results were compared to CTR Criteria for the Protection of Aquatic Life – Saltwater Chronic (CTR criteria [aquatic life]) and CTR Criteria for the Protection of Human Health – Consumption of Organisms Only (CTR criteria [human health]). In general, analytical results showed concentrations at non-detectable levels or below applicable water quality criteria, except for dissolved copper, 4,4'-DDT, and total DDX across the monitoring events. Toxaphene, total chlordane, dieldrin, and total PCB congeners were not detected in any water samples above the method detection limit (MDL); however, the MDLs for these compounds were elevated above their respective TMDL targets, which indicates that there is some uncertainty in the determination of exceedances for these analytes. Water sample chemistry reports are available in Appendix C. The number of samples with measurable concentrations greater than corresponding CTR criteria (aquatic life) for all events per waterbody is shown in Table 2.

A detailed discussion of water quality results for each sampling event is provided in the following sections.

3.1.1 Summer 2017

3.1.1.1 Field Data

On September 6, 2017, water samples and water quality measurements were collected at 22 predetermined locations through the Port of Los Angeles, Port of Long Beach, and Eastern San Pedro Bay (Figure 4). Each station's coordinates and water depth were recorded. Measurements of DO, pH, salinity, and temperature were collected using a multi-parameter water quality instrument. Results were within expected ranges: DO ranged from 2.4 to 9.3 milligrams per liter (mg/L), pH ranged from 7.8 to 8.5 units, salinity ranged from 31.7 to 39.1 parts per thousand (ppt), and temperature ranged from 15.4°C to 24.1°C (Table 3). Field forms are provided in Appendix B.

DO below 5.0 mg/L is considered an exceedance of water quality criteria in accordance with the Basin Plan (RWQCB 1994). The depressed DO measurement (2.4 mg/L in one instance) occurred at the bottom-depth sampling point at Station 18. This station is at the mouth of the LARE in Eastern San Pedro Bay. A DO measurement below 5.0 mg/L is unexpected at this station; Anchor QEA believes there was an isolated an operator error or potential instrument error. There have been three subsequent sampling events at this location in which the DO was above 5.0 mg/L each time.

3.1.1.2 Laboratory Data

Water samples were analyzed for several conventional parameters, total and dissolved metals, organochlorine pesticides, and PCB congeners. Analytical results are presented in Table 4. The number and percentage of exceedances relative to CTR criteria for all samples collected within the Greater Harbor Waters is also shown in Table 4. Dissolved copper exceeded CTR criteria (aquatic life) of 3.1 micrograms per liter (µg/L) at two locations (representing 9% of all samples collected). Exceedances occurred in Fish Harbor and Cabrillo Marina. Total DDX exceeded CTR criteria of aquatic life, 0.001 µg/L, and that of human health, 0.00059 µg/L, at seven stations (representing 32% of all samples collected). Exceedances of the aquatic life criteria occurred in Inner Los Angeles Harbor, Fish Harbor, and Inner Long Beach Harbor. Exceedances of the human health criteria occurred in Outer Long Beach Harbor and East San Pedro Bay. Water sample chemistry reports are available in Appendix C.

As noted in the data validation report in Appendix D, and based on the data quality assessment in Section 4, the following issue was identified:

- Dissolved copper was detected in the equipment and field blank. Dissolved copper detections in the samples were not qualified because the laboratory identified their reagent water source as potentially contaminated with low level copper and because receiving water samples did not come into contact with laboratory reagent water.

3.1.2 Fall 2017

3.1.2.1 Field Data

On January 10, 2018, water samples and water quality measurements were collected at 22 predetermined locations through the Port of Los Angeles, Port of Long Beach, and Eastern San Pedro Bay (Figure 5). Each station's coordinates and water depth were recorded. Measurements of DO, pH, salinity, and temperature were collected using a multi-parameter water quality instrument. Results were within expected ranges: DO ranged from 5.8 to 9.4 mg/L, pH ranged from 7.5 to 8.7 units, and temperature ranged from 15.3°C to 16.5°C (Table 5). Salinity ranged from 7.7 to 38.6 ppt. This range in salinity is evidence that the monitoring event successfully sampled the receiving water while it was being influenced by freshwater discharges associated with a large rain event. Field forms are provided in Appendix B.

3.1.2.2 Laboratory Data

Water samples were analyzed for several conventional parameters, total and dissolved metals, organochlorine pesticides, and PCB congeners. Analytical results are presented in Table 6. The number and percentage of exceedances relative to CTR criteria for all samples collected within the Greater Harbor Waters is also shown in Table 6. Dissolved copper exceeded CTR criteria (aquatic life) of 3.1 µg/L at 10 locations (representing 45% of all samples collected). Exceedances occurred in Consolidated Slip, Inner Los Angeles Harbor, Fish Harbor, Cabrillo Beach, Inner Long Beach Harbor,

Eastern San Pedro Bay, and LARE. Total DDX exceeded CTR criteria of aquatic life, 0.001 µg/L, and that of human health, 0.00059 µg/L, at seven stations (representing 32% of all samples collected). Exceedances of the aquatic life criteria occurred in Consolidated Slip, Inner Long Beach Harbor, Eastern San Pedro Bay, and LARE. Exceedances of the human health criteria occurred in Outer Long Beach Harbor. Water sample chemistry reports are available in Appendix C.

As noted in the data validation report in Appendix D, and based on the data quality assessment in Section 4, the following issue was identified:

- Dissolved copper was again detected in the equipment and field blank. Dissolved copper detections in the samples were not qualified because receiving water samples did not come into contact with laboratory reagent water, and the field crew later identified water had been supplied in amber glass bottles, indicating the reagent water was obtained from the laboratory's organics-free water source instead of the metals-free water source. Total and dissolved copper concentrations in both the field and equipment blanks were elevated, indicating the contamination was not due to equipment contamination.

3.1.3 Winter 2018

3.1.3.1 Field Data

On February 27, 2018, water samples and water quality measurements were collected at 22 predetermined locations through the Port of Los Angeles, Port of Long Beach, and Eastern San Pedro Bay (Figure 6). Each station's coordinates and water depth were recorded. Measurements of DO, pH, salinity, and temperature were collected using a multi-parameter water quality instrument. Results were within expected ranges, except for salinity. DO ranged from 5.8 to 8.7 mg/L, pH ranged from 7.5 to 8.0 units, and temperature ranged from 12.2°C to 15.2°C (Table 7). Salinity ranged from 20.1 to 34.1 ppt. This range in salinity is evidence that the monitoring event successfully sampled the receiving water while it was being influenced by freshwater discharges associated with a large rain event. Field forms are provided in Appendix B.

3.1.3.2 Laboratory Data

Water samples were analyzed for several conventional parameters, total and dissolved metals, organochlorine pesticides, and PCB congeners. Analytical results are presented in Table 8. The number and percentage of exceedances relative to CTR criteria for all samples collected within the Greater Harbor Waters is also shown in Table 8. Dissolved copper exceeded CTR criteria (aquatic life) of 3.1 µg/L at four locations (representing 18% of all samples collected). Exceedances of dissolved copper ranged from 3.17 at Station 7 in Fish Harbor to 8.42 at Station 22 in LARE (see Table 8 for a complete list of dissolved copper exceedances). The analyte 4,4'-DDT exceeded CTR criteria (aquatic life) of 0.001 µg/L at one location (Station 19 in San Pedro Bay) and exceeded CTR criteria (human health) of 0.00059 µg/L at two locations (Stations 19 and 20 in San Pedro Bay), representing 9% of all samples collected. Total DDX exceeded CTR criteria (aquatic life) of 0.001 µg/L at 14 locations, representing 64% of all

samples collected. Exceedances of dissolved copper ranged from 0.0017 µg/L at Station 3 in Outer Los Angeles Harbor to 0.0053 µg/L at Station 19 in San Pedro Bay (see Table 8 for a complete list of total DDX exceedances). Water sample chemistry reports are available in Appendix C.

As noted in the data validation report in Appendix D, and based on the data quality assessment in Section 4, the following issue was identified:

- The organic pesticide 2,4-DDE was detected in the equipment blank, and low-level metals were detected in the equipment and field blank. Detections were not qualified in the receiving water samples because the laboratory supplied the water for the equipment blank in a high-density polyethylene (HDPE) bottle, which may have contributed a positive interference to the pesticide analysis by U.S. Environmental Protection Agency (USEPA) 8081A. A special study conducted by the laboratory for metals contamination resulted in detections of copper in the metals-free laboratory water as well.

3.2 Deviations from the Sampling and Analysis Plan

During all three sampling events (summer 2017, fall 2017, and winter 2018), Stations 21 and 22 were too shallow for measurements to be collected at the mid and bottom depths. The surface sample is to be taken 1 m from the surface, and the bottom sample is to be taken 1 m above the bottom with a mid-depth sample in between. If the depth of a station is less than 2.3 m, the surface, mid, and bottom samples would occur at the same depths.

4 Data Quality Assessment

4.1 Field Data Quality

Most field data quality assurance (QA) measures outlined in the PQAPP (Anchor QEA 2014b) were followed. Field duplicate samples were proposed by the PQAPP to be collected at a 5% frequency. Three water quality field duplicate samples were collected with 66 normal samples, at a frequency of one per sampling event. This resulted in a 4.5% frequency for metals, pesticides, and PCBs, which is slightly less than the PQAPP requirement. Eleven TSS duplicates were collected in association with 186 normal TSS samples, so the field duplicate frequency for TSS was slightly above the goal, at 5.9%. Results of the field duplicates are included in the data validation reports in Appendix D. Most results were within the project-required control limit of less than or equal to 25% relative percent difference (RPD). In cases where one of the samples or duplicate results fell below five times the method reporting limit (MRL), the RPD DQO did not apply. In these cases, the difference between the two results needed to be less than the MRL to meet project DQOs. Field and rinsate blanks were collected with each water quality sampling event. There were some detections of total and dissolved metals in the field and equipment blanks, and the pesticide 2,4'-DDE was detected in the equipment blank collected on February 27, 2018 (winter sampling event). No data were qualified based on field or equipment blank results. Field and equipment blank detections are summarized in the data validation reports in Appendix D.

Corrective actions associated with metals and pesticides detections in the equipment and field blank include the following:

- Laboratory will supply organics-free water in amber glass bottles for pesticides and PCBs for the equipment blank.
- Laboratory will supply metals-free water in specially cleaned HDPE bottles for total and dissolved metals and total and dissolved mercury for the field and equipment blanks.
- The field blank will be prepared by pouring laboratory-grade deionized metals-free water from its original HDPE container into two specially cleaned sample bottles and two clear glass bottles while in the field; this sample will be analyzed for total and dissolved metals and mercury.
- The equipment blank will be collected by pouring laboratory-grade deionized organics-free water from the sampling device into two 1-liter (L) amber glass bottles for pesticides and PCBs and by pouring laboratory-grade deionized metals-free water into two specially cleaned 250-milliliter (mL) HDPE bottles and two 250-mL clear glass bottles.
- Total volume of reagent water required is 3 L for metals, and 4 L for organics.

4.2 Analytical Data Quality

DQOs and QA procedures are provided in the PQAPP (Anchor QEA 2014b) and in the individual SAPs for each matrix (Anchor QEA 2014c). All data were validated according to Stage 2A guidelines (USEPA

2009). All data qualifiers applied to the data during final validation have been incorporated into the database for this project. Data were considered useable as reported or as qualified. Data qualifiers assigned during data validation include the following:

- "J" indicates that the associated numerical value is an estimated concentration.
- "U" indicates a reporting limit below which the analyte was not detected.
- "UJ" indicates an approximate reporting limit below which the analyte was not detected.
- "R" indicates data are rejected and unusable.

No results were rejected as a result of the validation process. Certain data were qualified as estimated values for a particular analysis based on a specified protocol or technical advisory, as stated in the data validation reports (Appendix D).

Most reporting limits were deemed acceptable to meet project objectives. Reporting limits for undetected results usually met or were below the target reporting limits specified in the SAPs. Some results were qualified as non-detect at raised reporting limits due to field or method blank contamination.

4.2.1 Supplemental Data Review

A supplemental data review was conducted to further evaluate the reliability and accuracy of DDX analytes measured as part of the 2017 to 2018 sampling events. Specifically, there was concern about accuracy due to observed station increases in detected concentrations of DDX analytes starting in summer 2017 that were not near any potential source, and a detection in the equipment blank in winter 2018. The review also confirmed no analytical method or personnel changes at the contracted laboratory could account for these results.

4.3 Data Completeness

Data completeness includes collection of required samples in the field and laboratory analysis for target chemicals as outlined in the project SAPs (Anchor QEA 2014c). All target samples were collected and submitted for the analyses specified in the SAPs.

Laboratory data completeness was measured by percentage of results reported by the analytical laboratory. Data completeness levels were set at 95% for all parameters, according to DQOs specified in the PQAPP (Anchor QEA 2014b). No data were rejected after data validation. DQOs were met with 99.9% completeness.

5 Summary

This annual report presents results from water quality monitoring activities required as part of the Harbor Toxics TMDL compliance monitoring and reporting program. Key results and conclusions from these activities include the following:

5.1 Water Quality

In general, water quality continued to meet water quality objectives. In situ and physical parameters were all within expected ranges. Chemical results were all below applicable water quality criteria, except for dissolved copper, 4,4'-DDT, and total DDX. Dissolved copper, 4,4'-DDT, and total DDX exceeded CTR criteria (aquatic life and human health) in one or more samples collected from Consolidated Slip, Cabrillo Marina, Inner Long Beach Harbor, Outer Long Beach Harbor, and LARE. In fall 2017, seven stations (32%) exceeded the CTR criteria for DDX, and in winter 2018, 14 stations (64%) exceeded the CTR criteria for DDX.

Results of a supplemental data review indicated potential concerns about the accuracy of the DDX analysis in receiving water samples and equipment blanks due to potential issues associated with baseline noise associated with interferences, co-elution of DDX analytes with gamma chlordane, and high RPD values between columns of dissimilar phases. Due to these concerns, an alternate analytical method, USEPA 8270D, was evaluated to determine if the reporting limits required under this monitoring program could be achieved along with potentially lower background noise/interferences, co-elution, and lower RPD values. Since the development of the initial CCMRP in 2014, the reporting limits and MDLs for Method 8270D have improved and can now meet the requirements of the TMDL monitoring program. In addition, Method 8270D has an improved level of accuracy for identification of DDX analytes. Consequently, in future sampling events, Method 8270D will be recommended to improve analytical accuracy.

6 References

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Tables

Table 1
Sediment Quality 303(d) Listings for Harbor Waters

Waterbody	Pollutants Requiring TMDL (Sediment and/or Tissue)	Other Requirements
Los Angeles/Long Beach Inner Harbor	Tissue: Chlordane, Dieldrin, DDT, PCBs, Toxaphene Sediment: Metals (Copper, Zinc), Benzo(a)pyrene, Chrysene	Toxicity, benthic community effects
Los Angeles/Long Beach Outer Harbor	Tissue: Chlordane, Dieldrin, DDT, PCBs, Toxaphene Sediment: None	Toxicity
Los Angeles Harbor – Inner Cabrillo Beach	Tissue: Chlordane, Dieldrin, DDT, PCBs, Toxaphene Sediment: Metals	None
Los Angeles Harbor – Cabrillo Marina	Tissue: Chlordane, Dieldrin, DDT, PCBs, Toxaphene Sediment: Benzo(a)pyrene, Pyrene	None
Los Angeles Harbor – Fish Harbor	Tissue: Chlordane, Dieldrin, DDT, PCBs, Toxaphene Sediment: Metals (Copper, Lead, Mercury, Zinc), Chlordane, DDT, PCBs, PAHs (Benzo[a]pyrene, Phenanthrene, Benzo[a]anthracene, Chrysene, Pyrene, Dibenzo[a,h]anthracene)	Toxicity
Consolidated Slip	Tissue: Chlordane, Dieldrin, DDT, PCBs, Toxaphene Sediment: Metals (Cadmium, Copper, Chromium, Lead, Zinc, Mercury), Chlordane, DDT, PCBs, PAHs (Benzo[a]pyrene, 2-methyl-naphthalene, Phenanthrene, Benzo[a]anthracene, Chrysene, Pyrene)	Toxicity, benthic community effects
San Pedro Bay	Tissue: Chlordane, Dieldrin, DDT, PCBs, Toxaphene Sediment: Metals, Chlordane, PAHs, DDT	Toxicity
Los Angeles River Estuary	Tissue: None Sediment: Metals, Chlordane, DDT, PCBs	Toxicity

Notes:

Bold pollutants are listed in the Harbor Toxics TMDL.

PAH: polycyclic aromatic hydrocarbon

PCB: polychlorinated biphenyl

TMDL: total maximum daily load

Table 2
Summary of Water Quality Exceedances per Event

	Consolidated Slip				Inner Harbor – LA				Fish Harbor				Outer Harbor – LA				Cabrillo Marina				Cabrillo Beach				Inner Harbor – LB				Outer Harbor – LB				Eastern San Pedro Bay				Los Angeles River Estuary				
	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=3)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=15)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=3)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=6)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=3)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=3)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=12)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=6)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=9)	Summer 2017	Fall 2017	Winter 2018	Total No. Exceeded for the Year (n=6)	
	Dissolved Metals																																								
Cadmium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chromium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper	0	1	0	1	0	4	0	4	1	1	1	3	0	0	0	0	1	0	1	2	0	1	0	1	0	1	0	1	0	0	0	0	0	1	0	1	0	1	2	3	
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Organic Compounds																																									
Chlordane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4,4'-DDT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	1	0	2	3	0	0	0	0	0
Total DDx	0	1	1	2	2	0	4	6	1	0	1	2	1	0	2	3	0	0	1	1	0	0	1	1	1	1	2	4	0	1	0	1	2	1	2	5	0	2	0	2	0
Total PCBs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dieldrin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Toxaphene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

Bold: sum of exceedances per year per analyte

PCB: polychlorinated biphenyl

Table 3
Summer 2017 Water Quality Field Data

Station ID	Sample ID	Latitude	Longitude	Date	Time	Depth (m)	DO	pH	Salinity (ppt)	Temperature (°C)	Sample Collected (Y/N)	Description of Sample			
												Floating Material	Odor	Sheen	Color
CS-RW-01	CS-RW-01-G-S-20170905	33.774938	118.24667	9/5/2017	10:46	1.0	6.6	7.8	31.7	22.4	Y	N/A	N/A	N/A	Transparent
	CS-RW-01-G-M-20170905				10:52	3.2	7.9	7.9	33.1	20.5	Y	N/A	N/A	N/A	Transparent
	CS-RW-01-G-B-20170905				10:54	6.1	7.5	8.0	33.0	19.8	Y	N/A	N/A	N/A	Transparent
IA-RW-02	IA-RW-02-G-S-20170905	33.76683	118.25322	9/5/2017	11:16	1.0	7.6	8.0	32.5	22.0	Y	N/A	N/A	N/A	Transparent
	IA-RW-02-G-M-20170905				11:22	8.8	7.6	8.0	32.8	20.0	Y	N/A	N/A	N/A	Transparent
	IA-RW-02-G-B-20170905				11:25	17.1	6.8	8.0	33.0	18.8	Y	N/A	N/A	N/A	Transparent
IA-RW-03	IA-RW-03-G-S-20170905	33.76213	118.27437	9/5/2017	12:00	1.0	7.7	7.9	32.4	21.6	Y	N/A	N/A	N/A	Transparent
	IA-RW-03-G-M-20170905				12:04	9.0	7.5	7.9	32.9	20.1	Y	N/A	N/A	N/A	Transparent
	IA-RW-03-G-B-20170905				12:06	17.1	7.0	7.9	33.2	19.4	Y	N/A	N/A	N/A	Transparent
IA-RW-04	IA-RW-04-G-S-20170905	33.75416	118.27125	9/5/2017	12:30	1.0	7.7	7.9	32.3	21.1	Y	N/A	N/A	N/A	Transparent
	IA-RW-04-G-M-20170905				12:32	9.3	7.3	7.9	32.7	19.9	Y	N/A	N/A	N/A	Transparent
	IA-RW-04-G-B-20170905				12:34	18.4	6.9	7.9	32.9	19.4	Y	N/A	N/A	N/A	Transparent
IA-RW-05	IA-RW-05-G-S-20170905	33.73237	118.25132	9/5/2017	14:47	1.0	8.3	8.1	33.1	22.3	Y	N/A	N/A	N/A	Transparent
	IA-RW-05-G-M-20170905				14:49	9.0	7.3	8.1	32.8	19.3	Y	N/A	N/A	N/A	Transparent
	IA-RW-05-G-B-20170905				14:51	16.9	6.8	8.0	33.1	15.4	Y	Trace small white particulate	N/A	N/A	Transparent
IA-RW-06	IA-RW-06-G-S-20170905	33.72575	118.27144	9/5/2017	13:35	1.0	8.0	8.0	32.3	21.3	Y	N/A	N/A	N/A	Transparent
	IA-RW-06-G-M-20170905				8:52	9.1	7.4	8.0	32.8	20.0	Y	N/A	N/A	N/A	Transparent
	IA-RW-06-G-B-20170905				13:39	16.5	7.5	7.9	32.9	17.4	Y	N/A	N/A	N/A	Transparent
FH-RW-07	FH-RW-07-G-S-20170905	33.73581	118.26728	9/5/2017	14:09	1.0	9.0	8.0	32.4	23.5	Y	N/A	N/A	N/A	Transparent
	FH-RW-07-G-M-20170905				14:11	3.0	8.7	8.0	32.6	21.7	Y	N/A	N/A	N/A	Transparent
	FH-RW-07-G-B-20170905				14:13	5.9	7.6	8.0	33.0	20.7	Y	N/A	N/A	N/A	Transparent
OA-RW-08	OA-RW-08-G-S-20170905	33.71463	118.24252	9/5/2017	13:30	1.0	8.0	8.2	36.7	20.8	Y	N/A	N/A	N/A	Transparent
	OA-RW-08-G-M-20170905				13:35	13.0	8.2	8.1	36.9	20.5	Y	N/A	N/A	N/A	Transparent
	OA-RW-08-G-B-20170905				13:40	26.0	8.4	8.2	37.1	20.3	Y	N/A	N/A	N/A	Transparent
OA-RW-09	OA-RW-09-G-S-20170905	33.71209	118.26337	9/5/2017	13:00	1.0	8.0	8.2	36.7	21.1	Y	N/A	N/A	N/A	Transparent
	OA-RW-09-G-M-20170905				13:03	3.5	8.1	8.2	36.6	21.0	Y	N/A	N/A	N/A	Transparent
	OA-RW-09-G-B-20170905				13:05	6.0	8.2	8.2	36.7	20.9	Y	N/A	N/A	N/A	Transparent
CM-RW-10	CM-RW-10-G-S-20170905	33.71935	118.27907	9/5/2017	15:40	1.0	8.3	8.0	32.5	23.0	Y	N/A	N/A	N/A	Transparent
	CM-RW-10-G-M-20170905				15:42	5.1	7.4	8.0	32.8	20.3	Y	N/A	N/A	N/A	Transparent
	CM-RW-10-G-B-20170905				15:44	9.5	6.8	8.0	33.1	18.8	Y	N/A	N/A	N/A	Transparent
CB-RW-11	CB-RW-11-G-S-20170905	33.71178	118.28107	9/5/2017	16:15	1.0	7.7	8.1	32.8	20.8	Y	N/A	N/A	N/A	Transparent
	CB-RW-11-G-M-20170905				16:17	1.5	7.0	8.1	33.0	20.8	Y	N/A	N/A	N/A	Transparent
	CB-RW-11-G-B-20170905				16:19	2.8	6.9	8.1	33.4	20.4	Y	N/A	N/A	N/A	Transparent
IB-RW-12	IB-RW-12-G-S-20170905	33.76805	118.23037	9/5/2017	9:39	1.0	7.9	8.0	33.2	21.4	Y	N/A	N/A	N/A	Transparent
	IB-RW-12-G-M-20170905				9:48	8.5	7.9	7.8	32.8	20.6	Y	N/A	N/A	N/A	Transparent
	IB-RW-12-G-B-20170905				9:51	16.6	7.3	8.0	32.9	20.0	Y	N/A	N/A	N/A	Transparent
IB-RW-13	IB-RW-13-G-S-20170905	33.75374	118.21639	9/5/2017	8:54	1.0	8.1	8.2	34.0	21.8	Y	N/A	N/A	N/A	Transparent
	IB-RW-13-G-M-20170905				8:56	12.1	8.2	8.2	34.0	19.7	Y	N/A	N/A	N/A	Transparent
	IB-RW-13-G-B-20170905				8:58	23.1	5.9	8.1	34.0	16.5	Y	N/A	N/A	N/A	Transparent
IB-RW-14	IB-RW-14-G-S-20170905	33.74901	118.23086	9/5/2017	9:27	1.0	8.4	8.3	34.0	22.3	Y	N/A	N/A	N/A	Transparent
	IB-RW-14-G-M-20170905				9:30	8.2	8.3	8.3	34.0	20.4	Y	N/A	N/A	N/A	Transparent
	IB-RW-14-G-B-20170905				9:32	15.4	6.7	8.2	34.0	18.6	Y	N/A	N/A	N/A	Transparent
IB-RW-15	IB-RW-15-G-S-20170905	33.74215	118.19945	9/5/2017	10:00	1.0	7.9	8.3	33.9	22.6	Y	N/A	N/A	N/A	Transparent
	IB-RW-15-G-M-20170905				10:03	9.5	7.6	8.3	34.0	20.8	Y	N/A	N/A	N/A	Transparent
	IB-RW-15-G-B-20170905				10:06	18.1	6.5	8.2	34.0	17.6	Y	N/A	N/A	N/A	Transparent
OB-RW-16	OB-RW-16-G-S-20170905	33.73115	118.22101	9/5/2017	10:27	1.0	8.1	8.3	34.0	22.3	Y	N/A	N/A	N/A	Transparent
	OB-RW-16-G-M-20170905				10:30	9.4	8.1	8.3	34.0	20.5	Y	N/A	N/A	N/A	Transparent
	OB-RW-16-G-B-20170905				10:32	17.8	6.4	8.3	34.0	17.3	Y	N/A	N/A	N/A	Transparent
OB-RW-17	OB-RW-17-G-S-20170905	33.72763	118.18601	9/5/2017	14:00	1.0	7.8	8.3	35.5	22.3	Y	N/A	N/A	N/A	Transparent
	OB-RW-17-G-M-20170905				14:03	13.0	8.0	8.2	37.7	19.8	Y	N/A	N/A	N/A	Transparent
	OB-RW-17-G-B-20170905				14:05	25.0	8.1	8.2	39.1	18.2	Y	N/A	N/A	N/A	Transparent

Table 3
Summer 2017 Water Quality Field Data

Station ID	Sample ID	Latitude	Longitude	Date	Time	Depth (m)	DO	pH	Salinity (ppt)	Temperature (°C)	Sample Collected (Y/N)	Description of Sample			
												Floating Material	Odor	Sheen	Color
SP-RW-18	SP-RW-18-G-S-20170905	33.75358	118.18090	9/5/2017	13:04	1.0	8.5	8.4	33.2	24.1	Y	N/A	N/A	N/A	Transparent
	SP-RW-18-G-M-20170905				13:07	6.5	8.2	8.4	34.1	22.2	Y	N/A	N/A	N/A	Transparent
	SP-RW-18-G-B-20170905				13:10	12.1	2.4	8.2	34.0	18.4	Y	N/A	N/A	N/A	Transparent
SP-RW-19	SP-RW-19-G-S-20170905	33.73665	118.13148	9/5/2017	15:25	1.0	7.9	8.2	35.1	22.8	Y	N/A	N/A	N/A	Transparent
	SP-RW-19-G-M-20170905				15:30	5.0	7.8	8.2	35.1	22.8	Y	N/A	N/A	N/A	Transparent
	SP-RW-19-G-B-20170905				15:35	8.5	7.7	8.2	35.1	22.8	Y	N/A	N/A	N/A	Transparent
SP-RW-20	SP-RW-20-G-S-20170905	33.72554	118.15695	9/5/2017	14:55	1.0	7.6	8.5	35.2	22.6	Y	N/A	N/A	N/A	Transparent
	SP-RW-20-G-M-20170905				15:00	8.5	7.3	8.2	35.4	22.3	Y	N/A	N/A	N/A	Transparent
	SP-RW-20-G-B-20170905				15:05	16.0	7.4	8.2	37.4	20.1	Y	N/A	N/A	N/A	Transparent
LE-RW-21	LE-RW-21-G-S-20170905	33.75621	118.19327	9/5/2017	12:25	1.0	9.1	8.2	32.0	24.0	Y	N/A	N/A	N/A	Transparent
	LE-RW-21-G-M-20170905				Too shallow to sample										
	LE-RW-21-G-B-2016122														
LE-RW-22	LE-RW-22-G-S-20170905	33.76107	118.20215	9/5/2017	11:34	1.0	9.3	8.3	32.4	23.7	Y	N/A	N/A	N/A	Transparent
	LE-RW-22-G-M-20170905				Too shallow to sample										
	LE-RW-22-G-B-20170905														

Notes:
DO: dissolved oxygen
m: meter
N/A: not applicable
ppt: parts per thousand

Table 4
Summer 2017 Water Quality Chemistry Results

Area				Consolidated Slip CS-RW-	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Fish Harbor FH-RW-	Outer Harbor - LA	Outer Harbor - LA	Cabrillo Marina	Cabrillo Beach
Location ID				01_201709 CS-RW-01-G-S-	IA-RW-02_201709 IA-RW-02-G-S-	IA-RW-02_201709 IA-RW-1002-G-M-	IA-RW-03_201709 IA-RW-03-G-S-	IA-RW-04_201709 IA-RW-04-G-S-	IA-RW-05_201709 IA-RW-05-G-S-	IA-RW-06_201709 IA-RW-06-G-S-	07_201709 FH-RW-07-G-S-	08_201709 OA-RW-08-G-S-	09_201709 OA-RW-09-G-S-	10_201709 CM-RW-10-G-S-	11_201709 CB-RW-11-G-S-	
Sample ID				20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905
Sample Date				9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017
Start Depth				1 m	1 m	8.8 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m
Sample Type				N	N	FD	N	N	N	N	N	N	N	N	N	N
Matrix				WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
X				-118.24667	-118.25322	-118.25322	-118.27437	-118.27125	-118.25132	-118.27144	-118.26728	-118.24252	-118.26337	-118.27907	-118.28107	-118.28107
Y				33.775938	33.76683	33.76683	33.76213	33.75416	33.73237	33.72575	33.73581	33.71463	33.71209	33.71935	33.71178	33.71178
				Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration										
Conventional Parameters (mg/L)																
Total suspended solids (surface)	SM2540D	--	--	0.83 U	0.83 U	--	0.83 U	0.83 U	3.0	0.83 U	0.83 U	0.83 U	1.0	0.83 U	7.1	
Total suspended solids (middle)*	SM2540D	--	--	0.83 U	1.2	1.2	1.6	2.4	3.1	0.83 U	1.00	0.83 U	0.83 U	1.3	7.7	
Total suspended solids (bottom)*	SM2540D	--	--	0.90 J	1.4	--	0.90 J	2.7	5.8	1.7	1.5	1.1	0.83 U	1.3	7.1	
Metals (µg/L)																
Cadmium	E1640	--	--	0.0743	0.0415	--	0.0371	0.0384	0.0266 J	0.0258 J	0.0342	0.0148 J	0.0214 J	0.0494	0.0404	
Chromium	E1640	--	--	0.400 J	0.250 J	--	0.252 J	0.272 J	0.325 J	0.294 J	0.226 J	0.187 J	0.189 J	0.236 J	0.547	
Copper	E1640	--	--	3.12	2.28	--	1.98	2.10	1.29	1.22	4.81	0.836 J	2.23 J	69.1	1.43	
Lead	E1640	--	--	0.233	0.111	--	0.119	0.0833	0.0832	0.0778	0.0751	0.0777	0.0452	0.0599	0.186	
Mercury	E1631E	--	--	0.00227	0.00193	--	0.00242	0.00222	0.00236	0.0016	0.00168	0.000682	0.000959	0.000915	0.00255	
Zinc	E1640	--	--	26.1	13.4	--	8.40	10.1	7.04	5.73	14.9	4.70 J	13.5 J	27.9	3.52	
Metals, Dissolved (µg/L)																
Cadmium	E1640	--	9.3	0.0624	0.0377	--	0.0320	0.0316	0.0257 J	0.0282 J	0.0327	0.0136 J	0.0226 J	0.0409	0.0352	
Chromium	E1640	--	50	0.295 J	0.214 J	--	0.187 J	0.200 J	0.165 J	0.174 J	0.164 U	0.166 J	0.164 U	0.188 J	0.177 J	
Copper	E1640	--	3.1	2.70	1.69	--	1.20	1.40	0.949	1.07	3.93	0.588 J	2.00 J	7.57	0.692	
Lead	E1640	--	8.1	0.121	0.0286 J	--	0.0190 J	0.0197 J	0.0190 J	0.0211 J	0.0228 J	0.0216 J	0.0182 J	0.0171 J	0.0159 J	
Mercury	E1631E	0.051	0.94	0.00115	0.00106	--	0.000113 U	0.00101	0.000854	0.00114	0.00100	0.000113 U	0.000113 U	0.000678	0.00108	
Zinc	E1640	--	81	23.1	11.3	--	4.52	4.67	1.86	3.28	13.3	3.40	11.3	29.4	1.90	
Pesticides (µg/L)																
2,4'-DDD (o,p'-DDD)	SW8081A	--	--	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 UJ	0.00050 UJ	0.00050 U	0.00050 U	
2,4'-DDE (o,p'-DDE)	SW8081A	--	--	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 UJ	0.00050 UJ	0.00050 U	0.00050 U	
2,4'-DDT (o,p'-DDT)	SW8081A	--	--	0.0010 U	0.0010 U	--	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	
4,4'-DDD (p,p'-DDD)	SW8081A	--	--	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 UJ	0.00050 UJ	0.00050 U	0.00050 U	
4,4'-DDE (p,p'-DDE)	SW8081A	--	--	0.00050 U	0.0017	--	0.0012 J	0.00050 U	0.00050 U	0.00050 U	0.0012 J	0.00050 UJ	0.00093 J	0.00050 U	0.00050 U	
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 UJ	0.00050 UJ	0.00050 U	0.00050 U	
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 UJ	0.0017 UJ	0.0017 U	0.0017 U	
Chlordane, beta- (Chlordane, trans-)	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 UJ	0.0017 U	0.0017 U	0.0017 U	0.0017 UJ	0.0017 UJ	0.0017 U	0.0017 U	
Dieldrin	SW8081A	0.00014	0.0019	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 UJ	0.00050 UJ	0.00050 U	0.00050 U	
Nonachlor, cis-	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 UJ	0.0017 UJ	0.0017 U	0.0017 U	
Nonachlor, trans-	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 UJ	0.0017 UJ	0.0017 U	0.0017 U	
Oxychlordane	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 UJ	0.0017 UJ	0.0017 U	0.0017 U	
Toxaphene	SW8081A	--	0.0002	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 UJ	0.025 UJ	0.025 U	0.025 U	
Total Chlordane (U = 0)		0.00059	0.004	0.00085 U	0.00085 U	--	0.00085 U	0.00085 UJ	0.00085 U	0.00085 U	0.00085 U	0.00085 UJ	0.00085 UJ	0.00085 U	0.00085 U	
Total DDx (U = 0)		0.00059	0.001	0.00050 U	0.0017	--	0.0012 J	0.00050 U	0.00050 U	0.00050 U	0.0012 J	0.00050 UJ	0.00093 J	0.00050 U	0.00050 U	
PCB Congeners – Low Resolution (µg/L)																
PCB-018	SW8270CSIM	--	--	0.00046 U	0.00046 U	--	0.00046 U	0.00046 U	0.00046 U	0.00046 U	0.00046 U	0.00044 U	0.00045 U	0.00046 U	0.00046 U	
PCB-028	SW8270CSIM	--	--	0.00053 U	0.00053 U	--	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00051 U	0.00051 U	0.00053 U	0.00053 U	
PCB-037	SW8270CSIM	--	--	0.00030 U	0.00030 U	--	0.00030 U	0.00030 U	0.00030 U	0.00030 U	0.00030 U	0.00029 U	0.00029 U	0.00030 U	0.00030 U	
PCB-044	SW8270CSIM	--	--	0.00071 U	0.00071 U	--	0.00071 U	0.00071 U	0.00071 U	0.00071 U	0.00071 U	0.00068 U	0.00069 U	0.00071 U	0.00071 U	
PCB-049	SW8270CSIM	--	--	0.00053 U	0.00053 U	--	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00051 U	0.00051 U	0.00053 U	0.00053 U	
PCB-052	SW8270CSIM	--	--	0.00056 U	0.00056 U	--	0.00056 U	0.00056 U	0.00056 U	0.00056 U	0.00056 U	0.00053 U	0.00054 U	0.00056 U	0.00056 U	
PCB-066	SW8270CSIM	--	--	0.00040 U	0.00040 U	--	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00039 U	0.00039 U	0.00040 U	0.00040 U	
PCB-070	SW8270CSIM	--	--	0.00041 U	0.00041 U	--	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00040 U	0.00040 U	0.00041 U	0.00041 U	
PCB-074	SW8270CSIM	--	--	0.00049 U	0.00049 U	--	0.00049 U	0.00049 U	0.00049 U	0.00049 U	0.00049 U	0.00047 U	0.00047 U	0.00049 U	0.00049 U	
PCB-077	SW8270CSIM	--	--	0.00062 U	0.00062 U	--	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00062 U	0.00060 U	0.00060 U	0.00062 U	0.00062 U	
PCB-081	SW8270CSIM	--	--	0.00048 U	0.00048 U	--	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00047 U	0.00047 U	0.00048 U	0.00048 U	
PCB-087	SW8270CSIM	--	--	0.00071 U	0.00071 U	--	0.00071 U	0.00071 U	0.00071 U	0.00071 U	0.00071 U	0.00068 U	0.00069 U	0.00071 U	0.00071 U	
PCB-099	SW8270CSIM	--	--	0.00061 U	0.00061 U	--	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00061 U	0.00059 U	0.00059 U	0.00061 U	0.00061 U	
PCB-101	SW8270CSIM	--	--	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00048 U	0.00048 U	0.00050 U	0.00050 U	

Table 4
Summer 2017 Water Quality Chemistry Results

Area				Consolidated Slip CS-RW-	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Inner Harbor - LA	Fish Harbor FH-RW-	Outer Harbor - LA	Outer Harbor - LA	Cabrillo Marina	Cabrillo Beach	
Location ID				01_201709 CS-RW-01-G-S-	IA-RW-02_201709 IA-RW-02-G-S-	IA-RW-02_201709 IA-RW-1002-G-M-	IA-RW-03_201709 IA-RW-03-G-S-	IA-RW-04_201709 IA-RW-04-G-S-	IA-RW-05_201709 IA-RW-05-G-S-	IA-RW-06_201709 IA-RW-06-G-S-	07_201709 FH-RW-07-G-S-	08_201709 OA-RW-08-G-S-	09_201709 OA-RW-09-G-S-	10_201709 CM-RW-10-G-S-	11_201709 CB-RW-11-G-S-	
Sample ID				20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905
Sample Date				9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017
Start Depth				1 m	1 m	8.8 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m
Sample Type				N	N	FD	N	N	N	N	N	N	N	N	N	N
Matrix				WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
X				-118.24667	-118.25322	-118.25322	-118.27437	-118.27125	-118.25132	-118.27144	-118.26728	-118.24252	-118.26337	-118.27907	-118.28107	-118.28107
Y				33.775938	33.76683	33.76683	33.76213	33.75416	33.73237	33.72575	33.73581	33.71463	33.71209	33.71935	33.71178	33.71178
		Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration													
	Method															
PCB-105	SW8270CSIM	--	--	0.00047 U	0.00047 U	--	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00045 U	0.00045 U	0.00047 U	0.00047 U	0.00047 U
PCB-110	SW8270CSIM	--	--	0.00034 U	0.00034 U	--	0.00034 U	0.00034 U	0.00034 U	0.00034 U	0.00034 U	0.00032 U	0.00033 U	0.00034 U	0.00034 U	0.00034 U
PCB-114	SW8270CSIM	--	--	0.00047 U	0.00047 U	--	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00045 U	0.00045 U	0.00047 U	0.00047 U	0.00047 U
PCB-118	SW8270CSIM	--	--	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00048 U	0.00048 U	0.00050 U	0.00050 U	0.00050 U
PCB-119	SW8270CSIM	--	--	0.00017 U	0.00017 U	--	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U
PCB-123	SW8270CSIM	--	--	0.00083 U	0.00083 U	--	0.00083 U	0.00083 U	0.00083 U	0.00083 U	0.00083 U	0.00080 U	0.00081 U	0.00083 U	0.00083 U	0.00083 U
PCB-126	SW8270CSIM	--	--	0.00025 U	0.00025 U	--	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00024 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U
PCB-128	SW8270CSIM	--	--	0.00043 U	0.00043 U	--	0.00043 U	0.00043 U	0.00043 U	0.00043 U	0.00043 U	0.00042 U	0.00042 U	0.00043 U	0.00043 U	0.00043 U
PCB-132/153	SW8270CSIM	--	--	0.00069 U	0.00069 U	--	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00069 U	0.00067 U	0.00067 U	0.00069 U	0.00069 U	0.00069 U
PCB-138/158	SW8270CSIM	--	--	0.00060 U	0.00060 U	--	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00057 U	0.00058 U	0.00060 U	0.00060 U	0.00060 U
PCB-149	SW8270CSIM	--	--	0.00023 U	0.00023 U	--	0.00023 U	0.00023 U	0.00023 U	0.00023 U	0.00023 U	0.00022 U	0.00023 U	0.00023 U	0.00023 U	0.00023 U
PCB-151	SW8270CSIM	--	--	0.00040 U	0.00040 U	--	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00039 U	0.00039 U	0.00040 U	0.00040 U	0.00040 U
PCB-156	SW8270CSIM	--	--	0.00040 U	0.00040 U	--	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00039 U	0.00039 U	0.00040 U	0.00040 U	0.00040 U
PCB-157	SW8270CSIM	--	--	0.00041 U	0.00041 U	--	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00039 U	0.00039 U	0.00041 U	0.00041 U	0.00041 U
PCB-167	SW8270CSIM	--	--	0.00081 U	0.00081 U	--	0.00081 U	0.00081 U	0.00081 U	0.00081 U	0.00081 U	0.00078 U	0.00078 U	0.00081 U	0.00081 U	0.00081 U
PCB-168	SW8270CSIM	--	--	0.00052 U	0.00052 U	--	0.00052 U	0.00052 U	0.00052 U	0.00052 U	0.00052 U	0.00050 U	0.00050 U	0.00052 U	0.00052 U	0.00052 U
PCB-169	SW8270CSIM	--	--	0.00040 U	0.00040 U	--	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00039 U	0.00039 U	0.00040 U	0.00040 U	0.00040 U
PCB-170	SW8270CSIM	--	--	0.00042 U	0.00042 U	--	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00041 U	0.00041 U	0.00042 U	0.00042 U	0.00042 U
PCB-177	SW8270CSIM	--	--	0.00028 U	0.00028 U	--	0.00028 U	0.00028 U	0.00028 U	0.00028 U	0.00028 U	0.00027 U	0.00027 U	0.00028 U	0.00028 U	0.00028 U
PCB-180	SW8270CSIM	--	--	0.00060 U	0.00060 U	--	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00058 U	0.00058 U	0.00060 U	0.00060 U	0.00060 U
PCB-183	SW8270CSIM	--	--	0.00052 U	0.00052 U	--	0.00052 U	0.00052 U	0.00052 U	0.00052 U	0.00052 U	0.00050 U	0.00051 U	0.00052 U	0.00052 U	0.00052 U
PCB-187	SW8270CSIM	--	--	0.00043 U	0.00043 U	--	0.00043 U	0.00043 U	0.00043 U	0.00043 U	0.00043 U	0.00041 U	0.00042 U	0.00043 U	0.00043 U	0.00043 U
PCB-189	SW8270CSIM	--	--	0.00049 U	0.00049 U	--	0.00049 U	0.00049 U	0.00049 U	0.00049 U	0.00049 U	0.00047 U	0.00047 U	0.00049 U	0.00049 U	0.00049 U
PCB-194	SW8270CSIM	--	--	0.00025 U	0.00025 U	--	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00024 U	0.00024 U	0.00025 U	0.00025 U	0.00025 U
PCB-201	SW8270CSIM	--	--	0.00047 U	0.00047 U	--	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00045 U	0.00045 U	0.00047 U	0.00047 U	0.00047 U
PCB-206	SW8270CSIM	--	--	0.00043 U	0.00043 U	--	0.00043 U	0.00043 U	0.00043 U	0.00043 U	0.00043 U	0.00041 U	0.00042 U	0.00043 U	0.00043 U	0.00043 U
Total PCB Congener – Low Resolution (U = 0)						--	0.000415 U	0.000415 U	0.000415 U	0.000415 U	0.000415 U	0.00040 U	0.000405 U	0.000415 U	0.000415 U	0.000415 U

Table 4
Summer 2017 Water Quality Chemistry Results

				Area	Cabrillo Beach CB-RW- Location ID 11_201709 CB-RW-1011-G-M	Inner Harbor - LB IB-RW-12_201709 IB-RW-12-G-S-	Inner Harbor - LB IB-RW-12_201709 IB-RW-1012-G-B-	Inner Harbor - LB IB-RW-13_201709 IB-RW-13-G-S-	Inner Harbor - LB IB-RW-14_201709 IB-RW-14-G-S-	Inner Harbor - LB IB-RW-15_201709 IB-RW-15-G-S-	Outer Harbor - LB OB-RW- 16_201709 OB-RW-16-G-S-	Outer Harbor - LB OB-RW- 17_201709 OB-RW-17-G-S-	San Pedro Bay SP-RW- 18_201709 SP-RW-18-G-S-	San Pedro Bay SP-RW- 19_201709 SP-RW-19-G-S-	San Pedro Bay SP-RW- 20_201709 SP-RW-20-G-S-	Los Angeles River Estuary LE-RW-21_201709 LE-RW-21-G-S-
				Sample ID	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905
				Sample Date	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017
				Start Depth	1.5 m	1 m	16.6 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m
				Sample Type	N	N	FD	N	N	N	N	N	N	N	N	N
				Matrix	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
				X	-118.28107	-118.23037	-118.23037	-118.21639	-118.23086	-118.19945	-118.22101	-118.18601	-118.18090	-118.13148	-118.15695	-118.19327
				Y	33.71178	33.76605	33.76605	33.75374	33.74901	33.74215	33.73115	33.72763	33.75358	33.73665	33.72554	33.75621
		Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration	Method												
Conventional Parameters (mg/L)																
Total suspended solids (surface)	SM2540D	--	--		--	0.83 U	--	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	2.1	0.83 U	0.83 U	2.5
Total suspended solids (middle)*	SM2540D	--	--		7.3	1.8	--	1.0	0.83 U	2.6	0.83 U	0.83 U	0.90 J	0.83 U	0.83 U	--
Total suspended solids (bottom)*	SM2540D	--	--		--	2.4	2.4	2.4	3.9	2.8	6.4	4.1	3.9	3.7	0.83 U	--
Metals (µg/L)																
Cadmium	E1640	--	--		--	0.0315	--	0.0175 J	0.0174 J	0.0174 J	0.0124 J	0.0122 J	0.0159 J	0.0100 J	0.0120 J	0.0274 J
Chromium	E1640	--	--		--	0.164 U	--	0.208 J	0.195 J	0.170 J	0.193 J	0.179 J	0.212 J	0.240 J	0.183 J	0.282 J
Copper	E1640	--	--		--	2.20	--	1.64 J	0.924 J	0.745 J	0.606 J	0.469 J	0.670 J	0.364 J	0.504 J	1.72 J
Lead	E1640	--	--		--	0.0613	--	0.0624	0.0500	0.0388	0.0533	0.0331	0.102	0.0582	0.0487	0.424
Mercury	E1631E	--	--		--	0.00326	--	0.000602	0.00149	0.00142	0.00146	0.00104	0.00136	0.00018 J	0.000313 J	0.0106
Zinc	E1640	--	--		--	4.85	--	8.39 J	4.90 J	10.7 J	1.69 J	3.02 J	2.08 J	3.98 J	10.2 J	13.4 J
Metals, Dissolved (µg/L)																
Cadmium	E1640	--	9.3		--	0.0359	--	0.0149 J	0.0218 J	0.0179 J	0.0129 J	0.0124 J	0.0152 J	0.00961 J	0.0109 J	0.0233 J
Chromium	E1640	--	50		--	0.164 U	--	0.164 U	0.166 J	0.164 U	0.164 U	0.164 U	0.164 U	0.164 U	0.172 J	0.164 U
Copper	E1640	--	3.1		--	1.14	--	0.769 J	0.649 J	0.634 J	0.370 J	0.478 J	0.502 J	0.289 J	0.394 J	1.02 J
Lead	E1640	--	8.1		--	0.0303	--	0.0196 J	0.0135 UJ	0.0135 UJ	0.0135 UJ	0.0165 J	0.0310 J	0.0165 J	0.0142 J	0.0308 J
Mercury	E1631E	0.051	0.94		--	0.000807	--	0.000407 U	0.00101 U	0.00136 U	0.000757 U	0.000473 U	0.00120 U	0.000113 U	0.000113 U	0.00109 U
Zinc	E1640	--	81		--	4.08	--	4.81	2.26	8.91	1.68	4.30	2.52	4.80	9.22	5.07
Pesticides (µg/L)																
2,4'-DDD (o,p'-DDD)	SW8081A	--	--		--	0.00050 U	--	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ
2,4'-DDE (o,p'-DDE)	SW8081A	--	--		--	0.00050 U	--	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ
2,4'-DDT (o,p'-DDT)	SW8081A	--	--		--	0.0010 U	--	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 UJ
4,4'-DDD (p,p'-DDD)	SW8081A	--	--		--	0.00050 U	--	0.00050 UJ	0.00050 UJ	0.0037 J	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ
4,4'-DDE (p,p'-DDE)	SW8081A	--	--		--	0.00050 U	--	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001		--	0.00050 U	--	0.00050 UJ	0.00050 UJ	0.00091 J	0.00050 UJ	0.00050 UJ	0.00095 J	0.00050 UJ	0.00050 UJ	0.00050 UJ
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--		--	0.0017 U	--	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ
Chlordane, beta- (Chlordane, trans-)	SW8081A	--	--		--	0.0017 U	--	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ
Dieldrin	SW8081A	0.00014	0.0019		--	0.00050 U	--	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ	0.00050 UJ
Nonachlor, cis-	SW8081A	--	--		--	0.0017 U	--	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ
Nonachlor, trans-	SW8081A	--	--		--	0.0017 U	--	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ
Oxychlordane	SW8081A	--	--		--	0.0017 U	--	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ	0.0017 UJ
Toxaphene	SW8081A	--	0.0002		--	0.025 U	--	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ
Total Chlordane (U = 0)		0.00059	0.004		--	0.00085 U	--	0.00085 UJ	0.00085 UJ	0.00085 UJ	0.00085 UJ	0.00085 UJ	0.00085 UJ	0.00085 UJ	0.00085 UJ	0.00085 UJ
Total DDx (U = 0)		0.00059	0.001		--	0.00050 U	--	0.00050 UJ	0.00050 UJ	0.0046 J	0.00050 UJ	0.00050 UJ	0.00095 J	0.00050 UJ	0.00071 J	0.00050 UJ
PCB Congeners – Low Resolution (µg/L)																
PCB-018	SW8270CSIM	--	--		--	0.00046 U	--	0.00044 U	0.00044 U	0.00046 U	0.00044 U	0.00046 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U
PCB-028	SW8270CSIM	--	--		--	0.00053 U	--	0.00051 U	0.00051 U	0.00053 U	0.00051 U	0.00053 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U
PCB-037	SW8270CSIM	--	--		--	0.00030 U	--	0.00029 U	0.00029 U	0.00030 U	0.00029 U	0.00030 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U
PCB-044	SW8270CSIM	--	--		--	0.00071 U	--	0.00068 U	0.00068 U	0.00071 U	0.00068 U	0.00071 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U
PCB-049	SW8270CSIM	--	--		--	0.00053 U	--	0.00051 U	0.00051 U	0.00053 U	0.00051 U	0.00053 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U
PCB-052	SW8270CSIM	--	--		--	0.00056 U	--	0.00053 U	0.00053 U	0.00056 U	0.00053 U	0.00056 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U
PCB-066	SW8270CSIM	--	--		--	0.00040 U	--	0.00039 U	0.00039 U	0.00040 U	0.00039 U	0.00040 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U
PCB-070	SW8270CSIM	--	--		--	0.00041 U	--	0.00040 U	0.00040 U	0.00041 U	0.00040 U	0.00041 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U
PCB-074	SW8270CSIM	--	--		--	0.00049 U	--	0.00047 U	0.00047 U	0.00049 U	0.00047 U	0.00049 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U
PCB-077	SW8270CSIM	--	--		--	0.00062 U	--	0.00060 U	0.00060 U	0.00062 U	0.00060 U	0.00062 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U
PCB-081	SW8270CSIM	--	--		--	0.00048 U	--	0.00047 U	0.00047 U	0.0042	0.00047 U	0.00048 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U
PCB-087	SW8270CSIM	--	--		--	0.00071 U	--	0.00068 U	0.00068 U	0.00071 U	0.00068 U	0.00071 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U
PCB-099	SW8270CSIM	--	--		--	0.00061 U	--	0.00059 U	0.00059 U	0.00061 U	0.00059 U	0.00061 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U
PCB-101	SW8270CSIM	--	--		--	0.00050 U	--	0.00048 U	0.00048 U	0.00050 U	0.00048 U	0.00050 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U

Table 4
Summer 2017 Water Quality Chemistry Results

Area				Cabrillo Beach CB-RW-	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Outer Harbor - LB	Outer Harbor - LB	San Pedro Bay	San Pedro Bay	San Pedro Bay	Los Angeles River
Location ID				11_201709 CB-RW-1011-G-M	IB-RW-12_201709 IB-RW-12-G-S-	IB-RW-12_201709 IB-RW-1012-G-B-	IB-RW-13_201709 IB-RW-13-G-S-	IB-RW-14_201709 IB-RW-14-G-S-	IB-RW-15_201709 IB-RW-15-G-S-	Outer Harbor - LB OB-RW- 16_201709 OB-RW-16-G-S-	Outer Harbor - LB OB-RW- 17_201709 OB-RW-17-G-S-	San Pedro Bay SP-RW- 18_201709 SP-RW-18-G-S-	San Pedro Bay SP-RW- 19_201709 SP-RW-19-G-S-	San Pedro Bay SP-RW- 20_201709 SP-RW-20-G-S-	LE-RW-21_201709 LE-RW-21-G-S-
Sample ID				20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905	20170905
Sample Date				9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017	9/5/2017
Start Depth				1.5 m	1 m	16.6 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m
Sample Type				N	N	FD	N	N	N	N	N	N	N	N	N
Matrix				WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
X				-118.28107	-118.23037	-118.23037	-118.21639	-118.23086	-118.19945	-118.22101	-118.18601	-118.18090	-118.13148	-118.15695	-118.19327
Y				33.71178	33.76605	33.76605	33.75374	33.74901	33.74215	33.73115	33.72763	33.75358	33.73665	33.72554	33.75621
	Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration												
PCB-105	SW8270CSIM	--	--	--	0.00047 U	--	0.00045 U	0.00045 U	0.00047 U	0.00045 U	0.00047 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U
PCB-110	SW8270CSIM	--	--	--	0.00034 U	--	0.00032 U	0.00032 U	0.00034 U	0.00032 U	0.00034 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U
PCB-114	SW8270CSIM	--	--	--	0.00047 U	--	0.00045 U	0.00045 U	0.00047 U	0.00045 U	0.00047 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U
PCB-118	SW8270CSIM	--	--	--	0.00050 U	--	0.00048 U	0.00048 U	0.00050 U	0.00048 U	0.00050 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U
PCB-119	SW8270CSIM	--	--	--	0.00017 U	--	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U
PCB-123	SW8270CSIM	--	--	--	0.00083 U	--	0.00080 U	0.00080 U	0.00083 U	0.00080 U	0.00083 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U
PCB-126	SW8270CSIM	--	--	--	0.00025 U	--	0.00024 U	0.00024 U	0.00025 U	0.00024 U	0.00025 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
PCB-128	SW8270CSIM	--	--	--	0.00043 U	--	0.00042 U	0.00042 U	0.00043 U	0.00042 U	0.00043 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U
PCB-132/153	SW8270CSIM	--	--	--	0.00069 U	--	0.00067 U	0.00067 U	0.00069 U	0.00067 U	0.00069 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U
PCB-138/158	SW8270CSIM	--	--	--	0.00060 U	--	0.00057 U	0.00057 U	0.00060 U	0.00057 U	0.00060 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U
PCB-149	SW8270CSIM	--	--	--	0.00023 U	--	0.00022 U	0.00022 U	0.00023 U	0.00022 U	0.00023 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U
PCB-151	SW8270CSIM	--	--	--	0.00040 U	--	0.00039 U	0.00039 U	0.00040 U	0.00039 U	0.00040 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U
PCB-156	SW8270CSIM	--	--	--	0.00040 U	--	0.00039 U	0.00039 U	0.00040 U	0.00039 U	0.00040 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U
PCB-157	SW8270CSIM	--	--	--	0.00041 U	--	0.00039 U	0.00039 U	0.00041 U	0.00039 U	0.00041 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U
PCB-167	SW8270CSIM	--	--	--	0.00081 U	--	0.00078 U	0.00078 U	0.00081 U	0.00078 U	0.00081 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U
PCB-168	SW8270CSIM	--	--	--	0.00052 U	--	0.00050 U	0.00050 U	0.00052 U	0.00050 U	0.00052 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
PCB-169	SW8270CSIM	--	--	--	0.00040 U	--	0.00039 U	0.00039 U	0.00040 U	0.00039 U	0.00040 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U
PCB-170	SW8270CSIM	--	--	--	0.00042 U	--	0.00041 U	0.00041 U	0.00042 U	0.00041 U	0.00042 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U
PCB-177	SW8270CSIM	--	--	--	0.00028 U	--	0.00027 U	0.00027 U	0.00028 U	0.00027 U	0.00028 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U
PCB-180	SW8270CSIM	--	--	--	0.00060 U	--	0.00058 U	0.00058 U	0.00060 U	0.00058 U	0.00060 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U
PCB-183	SW8270CSIM	--	--	--	0.00052 U	--	0.00050 U	0.00050 U	0.00052 U	0.00050 U	0.00052 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
PCB-187	SW8270CSIM	--	--	--	0.00043 U	--	0.00041 U	0.00041 U	0.00043 U	0.00041 U	0.00043 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U
PCB-189	SW8270CSIM	--	--	--	0.00049 U	--	0.00047 U	0.00047 U	0.00049 U	0.00047 U	0.00049 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U
PCB-194	SW8270CSIM	--	--	--	0.00025 U	--	0.00024 U	0.00024 U	0.00025 U	0.00024 U	0.00025 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
PCB-201	SW8270CSIM	--	--	--	0.00047 U	--	0.00045 U	0.00045 U	0.00047 U	0.00045 U	0.00047 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U
PCB-206	SW8270CSIM	--	--	--	0.00043 U	--	0.00041 U	0.00041 U	0.00043 U	0.00041 U	0.00043 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U
Total PCB Congener – Low Resolution (U = 0)					0.00017	0.03	--	0.000415 U	--	0.00040 U	0.00040 U	0.0042	0.00040 U	0.000415 U	0.00040 U

Table 4
Summer 2017 Water Quality Chemistry Results

Area				Los Angeles River Estuary	Los Angeles River Estuary	Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
Location ID				LE-RW-22_201709 LE-RW-22-G-S-	LE-RW-22_201709 LE-RW-1022-G-S-			
Sample ID				20170905	20170905			
Sample Date				9/5/2017	9/5/2017			
Start Depth				1 m	1 m			
Sample Type				N	FD			
Matrix				WO	WO			
X				-118.20215	-118.20215			
Y				33.76107	33.76107			
	Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration					
Conventional Parameters (mg/L)								
Total suspended solids (surface)	SM2540D	--	--	4.0	5.2	22	--	--
Total suspended solids (middle)*	SM2540D	--	--	--	--	20	--	--
Total suspended solids (bottom)*	SM2540D	--	--	--	--	20	--	--
Metals (µg/L)								
Cadmium	E1640	--	--	0.0282 J	0.0357	22	--	--
Chromium	E1640	--	--	0.24 J	0.248 J	22	--	--
Copper	E1640	--	--	1.43 J	1.73 J	22	--	--
Lead	E1640	--	--	0.383	0.540	22	--	--
Mercury	E1631E	--	--	0.00244	0.00166	22	--	--
Zinc	E1640	--	--	11.7 J	8.68 J	22	--	--
Metals, Dissolved (µg/L)								
Cadmium	E1640	--	9.3	0.0262 J	0.0321	22	0	0%
Chromium	E1640	--	50	0.164 U	0.164 U	22	0	0%
Copper	E1640	--	3.1	0.928 J	1.12 J	22	2	9%
Lead	E1640	--	8.1	0.0347 J	0.0429 J	22	0	0%
Mercury	E1631E	0.051	0.94	0.000113 U	0.000248 U	22	0	0%
Zinc	E1640	--	81	10.1	6.06	22	0	0%
Pesticides (µg/L)								
2,4'-DDD (o,p'-DDD)	SW8081A	--	--	0.00050 UJ	0.00050 UJ	22	--	--
2,4'-DDE (o,p'-DDE)	SW8081A	--	--	0.00050 UJ	0.00050 UJ	22	--	--
2,4'-DDT (o,p'-DDT)	SW8081A	--	--	0.0010 UJ	0.0010 UJ	22	--	--
4,4'-DDD (p,p'-DDD)	SW8081A	--	--	0.00050 UJ	0.00050 UJ	22	--	--
4,4'-DDE (p,p'-DDE)	SW8081A	--	--	0.00050 UJ	0.00050 UJ	22	--	--
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001	0.00050 UJ	0.00050 UJ	22	2	9%
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--	0.0017 UJ	0.0017 UJ	22	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081A	--	--	0.0017 UJ	0.0017 UJ	22	--	--
Dieldrin	SW8081A	0.00014	0.0019	0.00050 UJ	0.00050 UJ	22	0	0%
Nonachlor, cis-	SW8081A	--	--	0.0017 UJ	0.0017 UJ	22	--	--
Nonachlor, trans-	SW8081A	--	--	0.0017 UJ	0.0017 UJ	22	--	--
Oxychlordane	SW8081A	--	--	0.0017 UJ	0.0017 UJ	22	--	--
Toxaphene	SW8081A	--	0.0002	0.025 UJ	0.025 UJ	22	0	0%
Total Chlordane (U = 0)		0.00059	0.004	0.00085 UJ	0.00085 UJ	22	0	0%
Total DDx (U = 0)		0.00059	0.001	0.00050 UJ	0.00050 UJ	22	7	32%
PCB Congeners – Low Resolution (µg/L)								
PCB-018	SW8270CSIM	--	--	0.00044 U	0.00044 U	22	--	--
PCB-028	SW8270CSIM	--	--	0.00051 U	0.00051 U	22	--	--
PCB-037	SW8270CSIM	--	--	0.00029 U	0.00029 U	22	--	--
PCB-044	SW8270CSIM	--	--	0.00068 U	0.00068 U	22	--	--
PCB-049	SW8270CSIM	--	--	0.00051 U	0.00051 U	22	--	--
PCB-052	SW8270CSIM	--	--	0.00053 U	0.00053 U	22	--	--
PCB-066	SW8270CSIM	--	--	0.00039 U	0.00039 U	22	--	--
PCB-070	SW8270CSIM	--	--	0.00040 U	0.00040 U	22	--	--
PCB-074	SW8270CSIM	--	--	0.00047 U	0.00047 U	22	--	--
PCB-077	SW8270CSIM	--	--	0.00060 U	0.00060 U	22	--	--
PCB-081	SW8270CSIM	--	--	0.00047 U	0.00047 U	22	--	--
PCB-087	SW8270CSIM	--	--	0.00068 U	0.00068 U	22	--	--
PCB-099	SW8270CSIM	--	--	0.00059 U	0.00059 U	22	--	--
PCB-101	SW8270CSIM	--	--	0.00048 U	0.00048 U	22	--	--

Table 4
Summer 2017 Water Quality Chemistry Results

Area				Los Angeles River Estuary	Los Angeles River Estuary	Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
Location ID				LE-RW-22_201709 LE-RW-22-G-S-	LE-RW-22_201709 LE-RW-1022-G-S-			
Sample ID				20170905	20170905	Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
Sample Date				9/5/2017	9/5/2017			
Start Depth				1 m	1 m	Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
Sample Type				N	FD			
Matrix				WO	WO	Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
X				-118.20215	-118.20215			
Y				33.76107	33.76107	Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
	Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration			Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
PCB-105	SW8270CSIM	--	--	0.00045 U	0.00045 U	22	--	--
PCB-110	SW8270CSIM	--	--	0.00032 U	0.00032 U	22	--	--
PCB-114	SW8270CSIM	--	--	0.00045 U	0.00045 U	22	--	--
PCB-118	SW8270CSIM	--	--	0.00048 U	0.00048 U	22	--	--
PCB-119	SW8270CSIM	--	--	0.00017 U	0.00017 U	22	--	--
PCB-123	SW8270CSIM	--	--	0.00080 U	0.00080 U	22	--	--
PCB-126	SW8270CSIM	--	--	0.00024 U	0.00024 U	22	--	--
PCB-128	SW8270CSIM	--	--	0.00042 U	0.00042 U	22	--	--
PCB-132/153	SW8270CSIM	--	--	0.00067 U	0.00067 U	22	--	--
PCB-138/158	SW8270CSIM	--	--	0.00057 U	0.00057 U	22	--	--
PCB-149	SW8270CSIM	--	--	0.00022 U	0.00022 U	22	--	--
PCB-151	SW8270CSIM	--	--	0.00039 U	0.00039 U	22	--	--
PCB-156	SW8270CSIM	--	--	0.00039 U	0.00039 U	22	--	--
PCB-157	SW8270CSIM	--	--	0.00039 U	0.00039 U	22	--	--
PCB-167	SW8270CSIM	--	--	0.00078 U	0.00078 U	22	--	--
PCB-168	SW8270CSIM	--	--	0.00050 U	0.00050 U	22	--	--
PCB-169	SW8270CSIM	--	--	0.00039 U	0.00039 U	22	--	--
PCB-170	SW8270CSIM	--	--	0.00041 U	0.00041 U	22	--	--
PCB-177	SW8270CSIM	--	--	0.00027 U	0.00027 U	22	--	--
PCB-180	SW8270CSIM	--	--	0.00058 U	0.00058 U	22	--	--
PCB-183	SW8270CSIM	--	--	0.00050 U	0.00050 U	22	--	--
PCB-187	SW8270CSIM	--	--	0.00041 U	0.00041 U	22	--	--
PCB-189	SW8270CSIM	--	--	0.00047 U	0.00047 U	22	--	--
PCB-194	SW8270CSIM	--	--	0.00024 U	0.00024 U	22	--	--
PCB-201	SW8270CSIM	--	--	0.00045 U	0.00045 U	22	--	--
PCB-206	SW8270CSIM	--	--	0.00041 U	0.00041 U	22	--	--
Total PCB Congener – Low Resolution (U = 0)		0.00017	0.03	0.00040 U	0.00040 U	22	1	5%

Table 4
Summer 2017 Water Quality Chemistry Results

Notes:

* The total suspended solid results for samples collected from mid-depth and bottom depth are respectively labeled as "-M-" and "-B-" preceding the sample ID date. They are not direct results of the surface sample IDs indicated in the column headers in this spreadsheet.

1. Number analyzed and WQ exceedance counts do not include samples that were analyzed for field or laboratory QC purposes (e.g., field duplicates). WQ exceedance counts do not include non-detect results above the screening levels.

Horizontal coordinate datum is GCS North American Datum 1983 latitude/longitude.

All undetect results are reported at the method detection limit.

Totals (U=0) are calculated as the sum of all detected results. If all results are not detected, half of the highest reporting limit value is reported as the sum.

Total chlordane is the sum of alpha-chlordane, beta-chlordane, gamma-chlordane, cis-nonachlor, trans-nonachlor, and oxychlordane.

Total DDx is the sum of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT 2,4'-DDD, 2,4'-DDE, and 2,4'-DDT, if measured.

Total PCB congeners is the sum of all PCB congeners listed in this table.

USEPA Stage 2A data validation was completed by Anchor QEA.

Detected concentration is greater than California Toxics Rule Criteria for Protection of Human Health Organisms Only

Detected concentration is greater than California Toxics Rule Saltwater Continuous Concentration screening level

Italics: non-detected concentration is above one or more identified screening levels

Bold: detected result

--: results not reported or not applicable

µg/L: microgram per liter

FD: field duplicate

J: estimated value

m: meter

mg/L: milligram per liter

N: normal environmental sample

PCB: polychlorinated biphenyl

U: compound analyzed but not detected above detection limit

UJ: compound analyzed but not detected above estimated detection limit

USEPA: U.S. Environmental Protection Agency

WO: ocean water matrix

WQ: water quality

Table 5
Fall 2017 Water Quality Field Data

Station ID	Sample ID	Latitude	Longitude	Date	Time	Depth (m)	DO	pH	Salinity (ppt)	Temperature (°C)	Sample Collected (Y/N)	Description of Sample			
												Floating Material	Odor	Sheen	Color
CS-RW-01	CS-RW-01-G-S-20180110	33.77483	-118.24551	1/10/2018	10:55	1.0	6.2	7.5	7.7	15.4	Y	N/A	N/A	N/A	Brown
	CS-RW-01-G-M-20180110				10:57	3.0	6.8	7.5	26.3	15.6	Y	N/A	N/A	N/A	Brown
	CS-RW-01-G-B-20180110				10:59	6.0	5.8	7.5	30.1	15.7	Y	N/A	N/A	N/A	Brown
IA-RW-02	IA-RW-02-G-S-20180110	33.76288	-118.25484	1/10/2018	11:30	1.0	6.8	7.7	19.9	15.9	Y	N/A	N/A	N/A	Brown
	IA-RW-02-G-M-20180110				11:32	9.0	6.4	7.5	28.6	15.8	Y	N/A	N/A	N/A	Brown
	IA-RW-02-G-B-20180110				11:35	18.0	6.2	7.5	28.8	15.6	Y	N/A	N/A	N/A	Brown
IA-RW-03	IA-RW-03-G-S-20180110	33.76236	-118.27409	1/10/2018	12:20	1.0	6.8	7.6	25.5	15.8	Y	N/A	N/A	N/A	Brown
	IA-RW-03-G-M-20180110				12:22	8.5	6.5	7.6	28.6	15.7	Y	N/A	N/A	N/A	Brown
	IA-RW-03-G-B-20180110				12:24	17.0	6.3	7.6	29.2	15.6	Y	N/A	N/A	N/A	Clear
IA-RW-04	IA-RW-04-G-S-20180110	33.75188	-118.27103	1/10/2018	13:10	1.0	6.5	7.7	23.5	16.0	Y	N/A	N/A	N/A	Brown
	IA-RW-04-G-M-20180110				13:12	9.0	6.3	7.7	28.2	15.7	Y	N/A	N/A	N/A	Brown
	IA-RW-04-G-B-20180110				13:14	18.0	6.3	7.7	28.7	15.7	Y	N/A	N/A	N/A	Clear
IA-RW-05	IA-RW-05-G-S-20180110	33.73283	-118.24939	1/10/2018	14:35	1.0	7.5	8.0	28.6	16.2	Y	N/A	N/A	N/A	Clear
	IA-RW-05-G-M-20180110				14:37	8.5	7.2	7.9	30.0	16.0	Y	N/A	N/A	N/A	Clear
	IA-RW-05-G-B-20180110				14:39	17.0	7.0	7.9	30.2	15.9	Y	N/A	N/A	N/A	Clear
IA-RW-06	IA-RW-06-G-S-20180110	33.72565	-118.27148	1/10/2018	13:40	1.0	7.1	7.7	27.9	15.9	Y	N/A	N/A	N/A	Clear
	IA-RW-06-G-M-20180110				13:42	8.5	6.9	7.8	30.5	15.9	Y	N/A	N/A	N/A	Clear
	IA-RW-06-G-B-20180110				13:44	17.0	6.8	7.9	30.8	15.9	Y	N/A	N/A	N/A	Clear
FH-RW-07	FH-RW-07-G-S-20180110	33.73585	-118.26731	1/10/2018	14:10	1.0	6.9	7.9	29.6	16.3	Y	N/A	N/A	N/A	Clear
	FH-RW-07-G-M-20180110				14:12	3.5	6.6	7.9	29.9	16.2	Y	N/A	N/A	N/A	Clear
	FH-RW-07-G-B-20180110				14:14	7.0	6.1	7.8	30.0	16.2	Y	N/A	N/A	N/A	Clear
OA-RW-08	OA-RW-08-G-S-20180110	33.71204	-118.24323	1/10/2018	10:15	1.0	8.2	8.7	30.1	15.8	Y	N/A	N/A	N/A	Clear
	OA-RW-08-G-M-20180110				10:20	12.5	7.9	8.0	33.4	16.1	Y	N/A	N/A	N/A	Clear
	OA-RW-08-G-B-20180110				10:25	24.0	7.6	8.1	33.5	16.0	Y	N/A	N/A	N/A	Clear
OA-RW-09	OA-RW-09-G-S-20180110	33.71415	-118.26340	1/10/2018	9:35	1.0	8.0	7.9	30.9	15.5	Y	N/A	N/A	N/A	Clear
	OA-RW-09-G-M-20180110				9:40	2.7	7.8	7.9	32.9	15.6	Y	N/A	N/A	N/A	Clear
	OA-RW-09-G-B-20180110				9:45	5.2	7.6	7.9	33.4	15.8	Y	N/A	N/A	N/A	Clear
CM-RW-10	CM-RW-10-G-S-20180110	33.71943	-118.27911	1/10/2018	15:15	1.0	7.4	8.0	27.4	16.4	Y	N/A	N/A	N/A	Clear
	CM-RW-10-G-M-20180110				15:17	5.0	7.2	7.9	30.1	15.8	Y	N/A	N/A	N/A	Clear
	CM-RW-10-G-B-20180110				15:19	10.0	6.7	7.9	30.7	16.0	Y	N/A	N/A	N/A	Clear
CB-RW-11	CB-RW-11-G-S-20180110	33.71178	-118.28111	1/10/2018	15:45	1.0	7.4	8.0	29.4	15.8	Y	N/A	N/A	N/A	Clear
	CB-RW-11-G-M-20180110				15:47	1.5	7.3	8.0	29.7	15.8	Y	N/A	N/A	N/A	Clear
	CB-RW-11-G-B-20180110				15:49	3.0	7.2	7.9	30.1	15.8	Y	N/A	N/A	N/A	Clear
IB-RW-12	IB-RW-12-G-S-20180110	33.76847	-118.22892	1/10/2018	9:50	1.0	6.4	7.6	32.9	15.9	Y	N/A	N/A	N/A	Brown
	IB-RW-12-G-M-20180110				9:52	8.5	6.5	7.6	33.2	16.0	Y	N/A	N/A	N/A	Brown
	IB-RW-12-G-B-20180110				9:55	17.0	6.5	7.6	38.6	16.0	Y	N/A	N/A	N/A	Brown
IB-RW-13	IB-RW-13-G-S-20180110	33.75382	-118.21625	1/10/2018	15:20	1.0	8.1	8.1	30.5	16.5	Y	N/A	N/A	N/A	Clear
	IB-RW-13-G-M-20180110				15:25	12.0	7.8	8.1	33.4	16.1	Y	N/A	N/A	N/A	Clear
	IB-RW-13-G-B-20180110				15:30	23.5	7.7	8.0	33.5	16.0	Y	N/A	N/A	N/A	Clear
IB-RW-14	IB-RW-14-G-S-20180110	33.74918	-118.23072	1/10/2018	16:00	1.0	9.1	8.1	32.5	16.3	Y	N/A	N/A	N/A	Clear
	IB-RW-14-G-M-20180110				16:05	7.8	8.3	8.1	33.3	15.9	Y	N/A	N/A	N/A	Clear
	IB-RW-14-G-B-20180110				16:10	14.4	8.0	8.1	33.4	16.0	Y	N/A	N/A	N/A	Clear
IB-RW-15	IB-RW-15-G-S-20180110	33.74216	-118.19949	1/10/2018	14:05	1.0	8.2	7.9	31.5	16.3	Y	N/A	N/A	N/A	Clear
	IB-RW-15-G-M-20180110				14:10	9.0	7.8	7.9	33.2	16.1	Y	N/A	N/A	N/A	Clear
	IB-RW-15-G-B-20180110				14:12	17.0	7.8	7.9	33.2	16.1	Y	N/A	N/A	N/A	Clear
OB-RW-16	OB-RW-16-G-S-20180110	33.73146	-118.22132	1/10/2018	11:40	1.0	8.2	8.1	31.4	15.9	Y	N/A	N/A	N/A	Cloudy
	OB-RW-16-G-M-20180110				11:45	9.0	7.8	8.1	33.4	16.1	Y	N/A	N/A	N/A	Brown
	OB-RW-16-G-B-20180110				11:50	17.0	7.6	8.1	33.5	16.1	Y	N/A	N/A	N/A	Brown
OB-RW-17	OB-RW-17-G-S-20180110	33.72793	-118.18603	1/10/2018	13:25	1.0	8.8	7.9	31.3	16.2	Y	N/A	N/A	N/A	Clear
	OB-RW-17-G-M-20180110				13:30	12.2	8.1	7.9	33.4	16.2	Y	N/A	N/A	N/A	Clear
	OB-RW-17-G-B-20180110				13:32	23.4	7.8	7.9	33.4	16.2	Y	N/A	N/A	N/A	Clear

Table 5
Fall 2017 Water Quality Field Data

Station ID	Sample ID	Latitude	Longitude	Date	Time	Depth (m)	DO	pH	Salinity (ppt)	Temperature (°C)	Sample Collected (Y/N)	Description of Sample			
												Floating Material	Odor	Sheen	Color
SP-RW-18	SP-RW-18-G-S-20180110	33.75842	-118.17999	1/10/2018	12:30	1.0	7.6	8.1	30.9	16.3	Y	N/A	N/A	N/A	Clear
	SP-RW-18-G-M-20180110				12:35	5.0	7.8	8.1	33.2	16.3	Y	N/A	N/A	N/A	Clear
	SP-RW-18-G-B-20180110				12:40	9.0	7.7	8.1	33.3	16.3	Y	N/A	N/A	N/A	Clear
SP-RW-19	SP-RW-19-G-S-20180110	33.73670	-118.13148	1/10/2018	11:50	1.0	9.4	7.9	27.5	16.0	Y	N/A	N/A	N/A	Clear
	SP-RW-19-G-M-20180110				11:52	4.4	8.4	8.0	33.3	16.4	Y	N/A	N/A	N/A	Clear
	SP-RW-19-G-B-20180110				11:54	7.8	8.4	8.0	33.4	16.3	Y	N/A	N/A	N/A	Clear
SP-RW-20	SP-RW-20-G-S-20180110	33.72543	-118.15737	1/10/2018	12:50	1.0	8.6	7.9	31.0	15.9	Y	N/A	N/A	N/A	Clear
	SP-RW-20-G-M-20180110				12:54	8.0	8.4	8.0	33.3	16.3	Y	N/A	N/A	N/A	Clear
	SP-RW-20-G-B-20180110				12:56	15.0	7.6	7.9	33.4	16.2	Y	N/A	N/A	N/A	Clear
LE-RW-21	LE-RW-21-G-S-20180110	33.75647	-118.19336	1/10/2018	13:05	1.0	7.4	8.0	26.5	15.6	Y	N/A	N/A	N/A	Brown
	LE-RW-21-G-M-20180110				Too shallow to sample										
	LE-RW-21-G-B-2016122														
LE-RW-22	LE-RW-22-G-S-20180110	33.76101	-118.20200	1/10/2018	13:40	1.0	7.7	8.0	22.9	15.3	Y	N/A			Brown
	LE-RW-22-G-M-20180110				Too shallow to sample										
	LE-RW-22-G-B-20180110														

Notes:
DO: dissolved oxygen
m: meter
N/A: not applicable
ppt: parts per thousand

Table 6
Fall 2017 Water Quality Chemistry Results

Area				Consolidated Slip	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Fish Harbor	Outer Harbor - LA OA-RW-	Outer Harbor - LA OA-RW-	Outer Harbor - LA OA-RW-	Cabrillo Marina
Location ID				CS-RW-	02 201801 IA-RW-02-G-S-	03 201801 IA-RW-03-G-S-	04 201801 IA-RW-04-G-S-	05 201801 IA-RW-05-G-S-	06 201801 IA-RW-06-G-S-	FH-RW-	08 201801 OA-RW-08-G-S-	09 201801 OA-RW-09-G-S-	09 201801 OA-RW-1009-G-	CM-RW-
Sample ID				01 201801 CS-RW-01-G-S-	02 201801 IA-RW-02-G-S-	03 201801 IA-RW-03-G-S-	04 201801 IA-RW-04-G-S-	05 201801 IA-RW-05-G-S-	06 201801 IA-RW-06-G-S-	07 201801 FH-RW-07-G-S-	08 201801 OA-RW-08-G-S-	09 201801 OA-RW-09-G-S-	09 201801 OA-RW-1009-G-	10 201801 CM-RW-10-G-S-
Sample Date				20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	B-20180110 1/10/2018	20180110 1/10/2018
Start Depth				1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	5.2 m	1 m
Sample Type				N	N	N	N	N	N	N	N	N	FD	N
Matrix				WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
X				-118.24551	-118.25484	-118.27409	-118.27103	-118.24939	-118.27148	-118.26731	-118.24323	-118.2634	-118.2634	-118.27911
Y				33.77483	33.76288	33.76236	33.75188	33.73283	33.72565	33.73585	33.71204	33.71415	33.71415	33.71943
		Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration										
Conventional Parameters (mg/L)														
Total suspended solids (surface)	SM2540D	--	--	18	8.8	5.0	7.4	2.6	2.5	1.6	5.4	3.6	--	2.5
Total suspended solids (middle)*	SM2540D	--	--	12	1.3	2.9	2.5	2.0	1.5	1.4	1.1	1.7	--	1.7
Total suspended solids (bottom)*	SM2540D	--	--	4.7	2.0	3.0	0.83 U	0.83 U	6.1	3.2	1.4	0.83 U	1.7	20
Metals (µg/L)														
Cadmium	E1640	--	--	0.127	0.113	0.121	0.113	0.0480	0.0893	0.0720	0.0670	0.0556	--	0.0608
Chromium	E1640	--	--	2.08	0.985	0.586	0.980	0.452 J	0.553	0.449 J	0.673	0.441 J	--	0.677
Copper	E1640	--	--	17.9	9.53	6.32	11.2	1.98	4.93	6.98	2.38	1.77	--	3.41
Lead	E1640	--	--	4.40	1.73	0.552	1.39	0.214	0.387	0.298	0.793	0.337	--	0.348
Mercury	E1631E	--	--	0.00175	0.00167	0.000896	0.00153	0.000217 J	0.000724	0.000166 J	0.0012	0.000562	--	0.000235 J
Zinc	E1640	--	--	75.0	44.4	30.3	39.4	5.94	21.7	18.8	10.6	9.90	--	10.9
Metals, Dissolved (µg/L)														
Cadmium	E1640	--	9.3	0.113	0.106	0.119	0.105	0.0456	0.0868	0.0657	0.0618	0.0497	--	0.0648
Chromium	E1640	--	50	1.27 J	0.718 J	0.578 J	0.681 J	0.493 J	0.561 J	0.522 J	0.602 J	0.561 J	--	0.496 J
Copper	E1640	--	3.1	12.2	7.29	5.76	7.11	1.56	4.42	5.83	1.60	1.48	--	2.43
Lead	E1640	--	8.1	1.54 J	0.485 J	0.319 J	0.372 J	0.118 J	0.189 J	0.148 J	0.27 J	0.194 J	--	0.17 J
Mercury	E1631E	0.051	0.94	0.000875	0.000666	0.000774	0.000520	0.000113 U	0.000113 U	0.000113 U	0.000267 J	0.000113 U	--	0.000113 U
Zinc	E1640	--	81	63.2	42.0	32.0	36.9	5.43	21.6	18.3	9.30	8.70	--	10.8
Pesticides (µg/L)														
2,4'-DDD (o,p'-DDD)	SW8081A	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U
2,4'-DDE (o,p'-DDE)	SW8081A	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U
2,4'-DDT (o,p'-DDT)	SW8081A	--	--	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	--	0.0010 U
4,4'-DDD (p,p'-DDD)	SW8081A	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U
4,4'-DDE (p,p'-DDE)	SW8081A	--	--	0.0086	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U
Chlordane, beta- (Chlordane, trans-)	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U
Dieldrin	SW8081A	0.00014	0.0019	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U
Nonachlor, cis-	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U
Nonachlor, trans-	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U
Oxychlordane	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U
Toxaphene	SW8081A	--	0.0002	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	0.025 U
Total Chlordane (U = 0)	--	0.00059	0.004	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	--	0.00085 U
Total DDx (U = 0)	--	0.00059	0.001	0.0086	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U
PCB Congeners – Low Resolution (µg/L)														
PCB-018	SW8270CSIM	--	--	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00047 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	--	0.00044 U
PCB-028	SW8270CSIM	--	--	0.00050 U	0.00051 U	0.00051 U	0.00051 U	0.00054 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	--	0.00050 U
PCB-037	SW8270CSIM	--	--	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00031 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	--	0.00029 U
PCB-044	SW8270CSIM	--	--	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00073 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	--	0.00068 U
PCB-049	SW8270CSIM	--	--	0.00050 U	0.00051 U	0.00051 U	0.00051 U	0.00054 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	--	0.00050 U
PCB-052	SW8270CSIM	--	--	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00057 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	--	0.00053 U
PCB-066	SW8270CSIM	--	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00041 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	--	0.00038 U
PCB-070	SW8270CSIM	--	--	0.00039 U	0.00040 U	0.00040 U	0.00040 U	0.00042 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	--	0.00039 U
PCB-074	SW8270CSIM	--	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00050 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	--	0.00046 U
PCB-077	SW8270CSIM	--	--	0.00059 U	0.00060 U	0.00060 U	0.00060 U	0.00063 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	--	0.00059 U

Table 6
Fall 2017 Water Quality Chemistry Results

Area				Consolidated Slip	Inner Harbor -	Inner Harbor -	Inner Harbor -	Inner Harbor -	Inner Harbor -	Fish Harbor	Outer Harbor -	Outer Harbor -	Outer Harbor -	Cabrillo Marina
Location ID				CS-RW-01 201801	LA IA-RW-02 201801	LA IA-RW-03 201801	LA IA-RW-04 201801	LA IA-RW-05 201801	LA IA-RW-06 201801	FH-RW-07 201801	LA OA-RW-08 201801	LA OA-RW-09 201801	LA OA-RW-09 201801	CM-RW-10 201801
Sample ID				CS-RW-01-G-S-20180110	IA-RW-02-G-S-20180110	IA-RW-03-G-S-20180110	IA-RW-04-G-S-20180110	IA-RW-05-G-S-20180110	IA-RW-06-G-S-20180110	FH-RW-07-G-S-20180110	OA-RW-08-G-S-20180110	OA-RW-09-G-S-20180110	OA-RW-1009-G-B-20180110	CM-RW-10-G-S-20180110
Sample Date				1/10/2018	1/10/2018	1/10/2018	1/10/2018	1/10/2018	1/10/2018	1/10/2018	1/10/2018	1/10/2018	1/10/2018	1/10/2018
Start Depth				1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	5.2 m	1 m
Sample Type				N	N	N	N	N	N	N	N	N	FD	N
Matrix				WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
X				-118.24551	-118.25484	-118.27409	-118.27103	-118.24939	-118.27148	-118.26731	-118.24323	-118.2634	-118.2634	-118.27911
Y				33.77483	33.76288	33.76236	33.75188	33.73283	33.72565	33.73585	33.71204	33.71415	33.71415	33.71943
		Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration											
	Method													
Conventional Parameters (mg/L)														
PCB-081	SW8270CSIM	--	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00049 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	--	0.00046 U
PCB-087	SW8270CSIM	--	--	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00072 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	--	0.00068 U
PCB-099	SW8270CSIM	--	--	0.00058 U	0.00059 U	0.00059 U	0.00059 U	0.00062 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	--	0.00058 U
PCB-101	SW8270CSIM	--	--	0.00047 U	0.00048 U	0.00048 U	0.00048 U	0.00051 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	--	0.00047 U
PCB-105	SW8270CSIM	--	--	0.00044 U	0.00045 U	0.00045 U	0.00045 U	0.00048 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	--	0.00044 U
PCB-110	SW8270CSIM	--	--	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00034 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	--	0.00032 U
PCB-114	SW8270CSIM	--	--	0.00044 U	0.00045 U	0.00045 U	0.00045 U	0.00048 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	--	0.00044 U
PCB-118	SW8270CSIM	--	--	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00051 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	--	0.00048 U
PCB-119	SW8270CSIM	--	--	0.00016 U	0.00017 U	0.00017 U	0.00017 U	0.00018 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	--	0.00016 U
PCB-123	SW8270CSIM	--	--	0.00079 U	0.00080 U	0.00080 U	0.00080 U	0.00085 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	--	0.00079 U
PCB-126	SW8270CSIM	--	--	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00026 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	--	0.00024 U
PCB-128	SW8270CSIM	--	--	0.00041 U	0.00042 U	0.00042 U	0.00042 U	0.00044 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	--	0.00041 U
PCB-132/153	SW8270CSIM	--	--	0.00066 U	0.00067 U	0.00067 U	0.00067 U	0.00071 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	--	0.00066 U
PCB-138/158	SW8270CSIM	--	--	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00061 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	--	0.00057 U
PCB-149	SW8270CSIM	--	--	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00024 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	--	0.00022 U
PCB-151	SW8270CSIM	--	--	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00041 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	--	0.00039 U
PCB-156	SW8270CSIM	--	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00041 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	--	0.00038 U
PCB-157	SW8270CSIM	--	--	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00041 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	--	0.00039 U
PCB-167	SW8270CSIM	--	--	0.00077 U	0.00078 U	0.00078 U	0.00078 U	0.00082 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	--	0.00077 U
PCB-168	SW8270CSIM	--	--	0.00049 U	0.00050 U	0.00050 U	0.00050 U	0.00053 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00049 U
PCB-169	SW8270CSIM	--	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00041 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	--	0.00038 U
PCB-170	SW8270CSIM	--	--	0.00040 U	0.00041 U	0.00041 U	0.00041 U	0.00043 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	--	0.00040 U
PCB-177	SW8270CSIM	--	--	0.00026 U	0.00027 U	0.00027 U	0.00027 U	0.00028 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	--	0.00026 U
PCB-180	SW8270CSIM	--	--	0.00057 U	0.00058 U	0.00058 U	0.00058 U	0.00061 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	--	0.00057 U
PCB-183	SW8270CSIM	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00053 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U
PCB-187	SW8270CSIM	--	--	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00044 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	--	0.00041 U
PCB-189	SW8270CSIM	--	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00050 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	--	0.00046 U
PCB-194	SW8270CSIM	--	--	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00026 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	--	0.00024 U
PCB-201	SW8270CSIM	--	--	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00048 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	--	0.00045 U
PCB-206	SW8270CSIM	--	--	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00044 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	--	0.00041 U
Total PCB Congener – Low Resolution (U = 0)		--	0.00017	0.03	0.000395 U	0.00040 U	0.00040 U	0.00040 U	0.000425 U	0.00040 U	0.00040 U	0.00040 U	--	0.000395 U

Table 6
Fall 2017 Water Quality Chemistry Results

Area				Cabrillo Marina	Cabrillo Beach	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Outer Harbor - LB	Outer Harbor - LB	San Pedro Bay	San Pedro Bay
Location ID				CM-RW-10 201801	CB-RW-11 201801	IB-RW-12 201801	IB-RW-13 201801	IB-RW-14 201801	IB-RW-14 201801	IB-RW-15 201801	OB-RW-16 201801	OB-RW-17 201801	SP-RW-18 201801	SP-RW-19 201801
Sample ID				CM-RW-1010-G-	CB-RW-11-G-S-	IB-RW-12-G-S-	IB-RW-13-G-S-	IB-RW-14-G-S-	IB-RW-1014-G-S-	IB-RW-15-G-S-	OB-RW-16-G-S-	OB-RW-17-G-S-	SP-RW-18-G-S-	SP-RW-19-G-S-
Sample Date				M-20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018
Start Depth				5 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m
Sample Type				FD	N	N	N	N	N	N	N	N	N	N
Matrix				WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
X				-118.27911	-118.28111	-118.22892	-118.21625	-118.23072	-118.25484	-118.19949	-118.22132	-118.18603	-118.17999	-118.13148
Y				33.71943	33.71178	33.76847	33.75382	33.74918	33.76288	33.74216	33.73146	33.72793	33.75842	33.7367
		Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration										
Conventional Parameters (mg/L)														
Total suspended solids (surface)	SM2540D	--	--	--	3.2	3.1	3.2	1.8	2.4	3.3	6.6	7.9	7.7	40
Total suspended solids (middle)*	SM2540D	--	--	2.1	2.5	2.5	0.83 U	0.83 U	--	1.5	0.83 U	3.0	2.2	5.4
Total suspended solids (bottom)*	SM2540D	--	--	--	2.4	2.6	1.6	0.83 U	--	2.9	1.4	3.0	2.1	4.3
Metals (µg/L)														
Cadmium	E1640	--	--	--	0.0662	0.0857	0.0623	0.0457	0.0475	0.0658	0.0647	0.0764	0.0692	0.0919
Chromium	E1640	--	--	--	0.456 J	0.662	0.581	0.398 J	0.401 J	0.444 J	0.583	0.705	0.716	0.704
Copper	E1640	--	--	--	3.46	40.7	2.57	1.42	1.50	2.82	2.14	3.89	3.37	4.62
Lead	E1640	--	--	--	0.236	0.397	0.388	0.146	0.155	0.695	0.607	1.16	0.939	1.76
Mercury	E1631E	--	--	--	0.000458 J	0.00156	0.000119 J	0.000113 U	0.00142	0.000514	0.000856	0.00336	0.000625	0.000113 U
Zinc	E1640	--	--	--	12.0	86.7	12.8	8.05	7.46	10.7	11.0	14.5	15.3	17.3
Metals, Dissolved (µg/L)														
Cadmium	E1640	--	9.3	--	0.0633	0.0814	0.0604	0.0454	0.0459	0.0592	0.0600	0.0696	0.0973	0.0781
Chromium	E1640	--	50	--	0.561 J	0.505 J	0.353 J	0.355 J	0.341 J	0.486 J	0.604 J	0.598	0.734 J	0.701
Copper	E1640	--	3.1	--	6.74	10.7	1.90	1.20	1.27	1.67	1.76	2.38	3.41	2.88
Lead	E1640	--	8.1	--	0.194 J	0.201 J	0.184 J	0.111 J	0.106 J	0.301	0.300 J	0.519	0.402 J	0.744
Mercury	E1631E	0.051	0.94	--	0.000113 U	0.000113 U	0.000113 U	0.000113 U	0.000113 U	0.000113 U	0.000113 U	0.000263 J	0.000113 U	0.000113 U
Zinc	E1640	--	81	--	10.7	54.4	11.0	6.74	6.51	6.70	10.0	12.3	16.0	13.6
Pesticides (µg/L)														
2,4'-DDD (o,p'-DDD)	SW8081A	--	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
2,4'-DDE (o,p'-DDE)	SW8081A	--	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
2,4'-DDT (o,p'-DDT)	SW8081A	--	--	--	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
4,4'-DDD (p,p'-DDD)	SW8081A	--	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
4,4'-DDE (p,p'-DDE)	SW8081A	--	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00075 J	0.00099 J	0.00050 U	0.0026
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001	--	0.00050 U	0.00050 U	0.0027	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U
Chlordane, beta- (Chlordane, trans-)	SW8081A	--	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U
Dieldrin	SW8081A	0.00014	0.0019	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Nonachlor, cis-	SW8081A	--	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U
Nonachlor, trans-	SW8081A	--	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U
Oxychlordane	SW8081A	--	--	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U
Toxaphene	SW8081A	--	0.0002	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Total Chlordane (U = 0)	--	0.00059	0.004	--	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U
Total DDx (U = 0)	--	0.00059	0.001	--	0.00050 U	0.00050 U	0.0027	0.00050 U	0.00050 U	0.00050 U	0.00075 J	0.00099 J	0.00050 U	0.0026
PCB Congeners – Low Resolution (µg/L)														
PCB-018	SW8270CSIM	--	--	--	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U
PCB-028	SW8270CSIM	--	--	--	0.00050 U	0.00050 U	0.00051 U	0.00051 U	0.00051 U	0.00050 U	0.00051 U	0.00050 U	0.00051 U	0.00051 U
PCB-037	SW8270CSIM	--	--	--	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U
PCB-044	SW8270CSIM	--	--	--	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U
PCB-049	SW8270CSIM	--	--	--	0.00050 U	0.00050 U	0.00051 U	0.00051 U	0.00051 U	0.00050 U	0.00051 U	0.00050 U	0.00051 U	0.00051 U
PCB-052	SW8270CSIM	--	--	--	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U
PCB-066	SW8270CSIM	--	--	--	0.00038 U	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00038 U	0.00039 U	0.00038 U	0.00039 U	0.00039 U
PCB-070	SW8270CSIM	--	--	--	0.00039 U	0.00039 U	0.00040 U	0.00040 U	0.00040 U	0.00039 U	0.00040 U	0.00039 U	0.00040 U	0.00040 U
PCB-074	SW8270CSIM	--	--	--	0.00046 U	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00046 U	0.00047 U	0.00046 U	0.00047 U	0.00047 U
PCB-077	SW8270CSIM	--	--	--	0.00059 U	0.00059 U	0.00060 U	0.00060 U	0.00060 U	0.00059 U	0.00060 U	0.00059 U	0.00060 U	0.00060 U

Table 6
Fall 2017 Water Quality Chemistry Results

Area				Cabrillo Marina	Cabrillo Beach	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Inner Harbor - LB	Outer Harbor - LB	Outer Harbor - LB	San Pedro Bay	San Pedro Bay
Location ID				CM-RW-10	CB-RW-11	IB-RW-12	IB-RW-13	IB-RW-14	IB-RW-14	IB-RW-15	OB-RW-16	OB-RW-17	SP-RW-18	SP-RW-19
Sample ID				CM-RW-1010-G-	CB-RW-11-G-S-	IB-RW-12-G-S-	IB-RW-13-G-S-	IB-RW-14-G-S-	IB-RW-1014-G-S-	IB-RW-15-G-S-	OB-RW-16-G-S-	OB-RW-17-G-S-	SP-RW-18-G-S-	SP-RW-19-G-S-
Sample Date				M-20180110	20180110	20180110	20180110	20180110	20180110	20180110	20180110	20180110	20180110	20180110
Start Depth				5 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m
Sample Type				FD	N	N	N	N	N	N	N	N	N	N
Matrix				WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
X				-118.27911	-118.28111	-118.22892	-118.21625	-118.23072	-118.25484	-118.19949	-118.22132	-118.18603	-118.17999	-118.13148
Y				33.71943	33.71178	33.76847	33.75382	33.74918	33.76288	33.74216	33.73146	33.72793	33.75842	33.7367
		Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration										
Conventional Parameters (mg/L)														
PCB-081	SW8270CSIM	--	--	--	0.00046 U	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00046 U	0.00047 U	0.00046 U	0.00047 U	0.00047 U
PCB-087	SW8270CSIM	--	--	--	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U
PCB-099	SW8270CSIM	--	--	--	0.00058 U	0.00058 U	0.00059 U	0.00059 U	0.00059 U	0.00058 U	0.00059 U	0.00058 U	0.00059 U	0.00059 U
PCB-101	SW8270CSIM	--	--	--	0.00047 U	0.00047 U	0.00048 U	0.00048 U	0.00048 U	0.00047 U	0.00048 U	0.00047 U	0.00048 U	0.00048 U
PCB-105	SW8270CSIM	--	--	--	0.00044 U	0.00044 U	0.00045 U	0.00045 U	0.00045 U	0.00044 U	0.00045 U	0.00044 U	0.00045 U	0.00045 U
PCB-110	SW8270CSIM	--	--	--	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U
PCB-114	SW8270CSIM	--	--	--	0.00044 U	0.00044 U	0.00045 U	0.00045 U	0.00045 U	0.00044 U	0.00045 U	0.00044 U	0.00045 U	0.00045 U
PCB-118	SW8270CSIM	--	--	--	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U
PCB-119	SW8270CSIM	--	--	--	0.00016 U	0.00016 U	0.00017 U	0.00017 U	0.00017 U	0.00016 U	0.00017 U	0.00016 U	0.00017 U	0.00017 U
PCB-123	SW8270CSIM	--	--	--	0.00079 U	0.00079 U	0.00080 U	0.00080 U	0.00080 U	0.00079 U	0.00080 U	0.00079 U	0.00080 U	0.00080 U
PCB-126	SW8270CSIM	--	--	--	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
PCB-128	SW8270CSIM	--	--	--	0.00041 U	0.00041 U	0.00042 U	0.00042 U	0.00042 U	0.00041 U	0.00042 U	0.00041 U	0.00042 U	0.00042 U
PCB-132/153	SW8270CSIM	--	--	--	0.00066 U	0.00066 U	0.00067 U	0.00067 U	0.00067 U	0.00066 U	0.00067 U	0.00066 U	0.00067 U	0.00067 U
PCB-138/158	SW8270CSIM	--	--	--	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U
PCB-149	SW8270CSIM	--	--	--	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U
PCB-151	SW8270CSIM	--	--	--	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U
PCB-156	SW8270CSIM	--	--	--	0.00038 U	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00038 U	0.00039 U	0.00038 U	0.00039 U	0.00039 U
PCB-157	SW8270CSIM	--	--	--	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U
PCB-167	SW8270CSIM	--	--	--	0.00077 U	0.00077 U	0.00078 U	0.00078 U	0.00078 U	0.00077 U	0.00078 U	0.00077 U	0.00078 U	0.00078 U
PCB-168	SW8270CSIM	--	--	--	0.00049 U	0.00049 U	0.00050 U	0.00050 U	0.00050 U	0.00049 U	0.00050 U	0.00049 U	0.00050 U	0.00050 U
PCB-169	SW8270CSIM	--	--	--	0.00038 U	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00038 U	0.00039 U	0.00038 U	0.00039 U	0.00039 U
PCB-170	SW8270CSIM	--	--	--	0.00040 U	0.00040 U	0.00041 U	0.00041 U	0.00041 U	0.00040 U	0.00041 U	0.00040 U	0.00041 U	0.00041 U
PCB-177	SW8270CSIM	--	--	--	0.00026 U	0.00026 U	0.00027 U	0.00027 U	0.00027 U	0.00026 U	0.00027 U	0.00026 U	0.00027 U	0.00027 U
PCB-180	SW8270CSIM	--	--	--	0.00057 U	0.00057 U	0.00058 U	0.00058 U	0.00058 U	0.00057 U	0.00058 U	0.00057 U	0.00058 U	0.00058 U
PCB-183	SW8270CSIM	--	--	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
PCB-187	SW8270CSIM	--	--	--	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U
PCB-189	SW8270CSIM	--	--	--	0.00046 U	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00046 U	0.00047 U	0.00046 U	0.00047 U	0.00047 U
PCB-194	SW8270CSIM	--	--	--	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U
PCB-201	SW8270CSIM	--	--	--	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U
PCB-206	SW8270CSIM	--	--	--	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U
Total PCB Congener – Low Resolution (U = 0)	--	0.00017	0.03	--	0.000395 U	0.000395 U	0.00040 U	0.00040 U	0.00040 U	0.000395 U	0.00040 U	0.000395 U	0.00040 U	0.00040 U

Table 6
Fall 2017 Water Quality Chemistry Results

Area				San Pedro Bay	Los Angeles River Estuarv	Los Angeles River Estuarv	Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
Location ID				SP-RW-	LE-RW-	LE-RW-			
Sample ID				20 201801 SP-RW-20-G-S-	21 201801 LE-RW-21-G-S-	22 201801 LE-RW-22-G-S-			
Sample Date				20180110 1/10/2018	20180110 1/10/2018	20180110 1/10/2018			
Start Depth				1 m	1 m	1 m			
Sample Type				N	N	N			
Matrix				WO	WO	WO			
X				-118.15737	-118.19336	-118.202			
Y				33.72543	33.75647	33.76101			
	Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration						
Conventional Parameters (mg/L)									
Total suspended solids (surface)	SM2540D	--	--	4.2	24	51	22	--	--
Total suspended solids (middle)*	SM2540D	--	--	1.5	--	--	20	--	--
Total suspended solids (bottom)*	SM2540D	--	--	4.6	--	--	20	--	--
Metals (µg/L)									
Cadmium	E1640	--	--	0.0528	0.126	0.176	22	--	--
Chromium	E1640	--	--	0.471 J	1.39	2.42	22	--	--
Copper	E1640	--	--	1.99	6.13	9.65	22	--	--
Lead	E1640	--	--	0.588	2.08	3.97	22	--	--
Mercury	E1631E	--	--	0.000113 U	0.00121	0.000780	22	--	--
Zinc	E1640	--	--	7.83	22.7	26.6	22	--	--
Metals, Dissolved (µg/L)									
Cadmium	E1640	--	9.3	0.0450	0.107	0.140	22	0	0%
Chromium	E1640	--	50	0.463 J	0.692 J	0.682 J	22	0	0%
Copper	E1640	--	3.1	1.23	2.62	3.68	22	10	45%
Lead	E1640	--	8.1	0.249	0.301 J	0.569 J	22	0	0%
Mercury	E1631E	0.051	0.94	0.000113 U	0.000933	0.000193 J	22	0	0%
Zinc	E1640	--	81	7.28	17.2	14.5	22	0	0%
Pesticides (µg/L)									
2,4'-DDD (o,p'-DDD)	SW8081A	--	--	0.00050 U	0.00050 U	0.00050 U	22	--	--
2,4'-DDE (o,p'-DDE)	SW8081A	--	--	0.00050 U	0.00050 U	0.00050 U	22	--	--
2,4'-DDT (o,p'-DDT)	SW8081A	--	--	0.0010 U	0.0010 U	0.0010 U	22	--	--
4,4'-DDD (p,p'-DDD)	SW8081A	--	--	0.00050 U	0.00050 U	0.00050 U	22	--	--
4,4'-DDE (p,p'-DDE)	SW8081A	--	--	0.00050 U	0.0011 J	0.0026	22	--	--
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001	0.00050 U	0.00050 U	0.00050 U	22	1	5%
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	22	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	22	--	--
Dieldrin	SW8081A	0.00014	0.0019	0.00050 U	0.00050 U	0.00050 U	22	0	0%
Nonachlor, cis-	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	22	--	--
Nonachlor, trans-	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	22	--	--
Oxychlordane	SW8081A	--	--	0.0017 U	0.0017 U	0.0017 U	22	--	--
Toxaphene	SW8081A	--	0.0002	0.025 U	0.025 U	0.025 U	22	--	--
Total Chlordane (U = 0)	--	0.00059	0.004	0.00085 U	0.00085 U	0.00085 U	22	0	0%
Total DDx (U = 0)	--	0.00059	0.001	0.00050 U	0.0011 J	0.0026	22	7	32%
PCB Congeners – Low Resolution (µg/L)									
PCB-018	SW8270CSIM	--	--	0.00044 U	0.00045 U	0.00044 U	22	--	--
PCB-028	SW8270CSIM	--	--	0.00051 U	0.00051 U	0.00051 U	22	--	--
PCB-037	SW8270CSIM	--	--	0.00029 U	0.00029 U	0.00029 U	22	--	--
PCB-044	SW8270CSIM	--	--	0.00068 U	0.00069 U	0.00068 U	22	--	--
PCB-049	SW8270CSIM	--	--	0.00051 U	0.00051 U	0.00051 U	22	--	--
PCB-052	SW8270CSIM	--	--	0.00053 U	0.00054 U	0.00053 U	22	--	--
PCB-066	SW8270CSIM	--	--	0.00039 U	0.00039 U	0.00039 U	22	--	--
PCB-070	SW8270CSIM	--	--	0.00040 U	0.00040 U	0.00040 U	22	--	--
PCB-074	SW8270CSIM	--	--	0.00047 U	0.00047 U	0.00047 U	22	--	--
PCB-077	SW8270CSIM	--	--	0.00060 U	0.00060 U	0.00060 U	22	--	--

Table 6
Fall 2017 Water Quality Chemistry Results

				Area	San Pedro Bay	Los Angeles	Los Angeles			
				Location ID	SP-RW-	River Estuarv	River Estuarv			
				Sample ID	20 201801	LE-RW-	LE-RW-			
				Sample Date	SP-RW-20-G-S-	21 201801	22 201801			
				Start Depth	20180110	LE-RW-21-G-S-	LE-RW-22-G-S-			
				Sample Type	1/10/2018	20180110	20180110			
				Matrix	1 m	1/10/2018	1/10/2018			
				X	N	N	N			
Y	WO	WO	WO							
				-118.15737	-118.19336	-118.202				
				33.72543	33.75647	33.76101				
		Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration					Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
Conventional Parameters (mg/L)										
PCB-081	SW8270CSIM	--	--	0.00047 U	0.00047 U	0.00047 U	22	--	--	
PCB-087	SW8270CSIM	--	--	0.00068 U	0.00069 U	0.00068 U	22	--	--	
PCB-099	SW8270CSIM	--	--	0.00059 U	0.00059 U	0.00059 U	22	--	--	
PCB-101	SW8270CSIM	--	--	0.00048 U	0.00048 U	0.00048 U	22	--	--	
PCB-105	SW8270CSIM	--	--	0.00045 U	0.00045 U	0.00045 U	22	--	--	
PCB-110	SW8270CSIM	--	--	0.00032 U	0.00033 U	0.00032 U	22	--	--	
PCB-114	SW8270CSIM	--	--	0.00045 U	0.00045 U	0.00045 U	22	--	--	
PCB-118	SW8270CSIM	--	--	0.00048 U	0.00048 U	0.00048 U	22	--	--	
PCB-119	SW8270CSIM	--	--	0.00017 U	0.00017 U	0.00017 U	22	--	--	
PCB-123	SW8270CSIM	--	--	0.00080 U	0.00081 U	0.00080 U	22	--	--	
PCB-126	SW8270CSIM	--	--	0.00024 U	0.00025 U	0.00024 U	22	--	--	
PCB-128	SW8270CSIM	--	--	0.00042 U	0.00042 U	0.00042 U	22	--	--	
PCB-132/153	SW8270CSIM	--	--	0.00067 U	0.00067 U	0.00067 U	22	--	--	
PCB-138/158	SW8270CSIM	--	--	0.00057 U	0.00058 U	0.00057 U	22	--	--	
PCB-149	SW8270CSIM	--	--	0.00022 U	0.00023 U	0.00022 U	22	--	--	
PCB-151	SW8270CSIM	--	--	0.00039 U	0.00039 U	0.00039 U	22	--	--	
PCB-156	SW8270CSIM	--	--	0.00039 U	0.00039 U	0.00039 U	22	--	--	
PCB-157	SW8270CSIM	--	--	0.00039 U	0.00039 U	0.00039 U	22	--	--	
PCB-167	SW8270CSIM	--	--	0.00078 U	0.00078 U	0.00078 U	22	--	--	
PCB-168	SW8270CSIM	--	--	0.00050 U	0.00050 U	0.00050 U	22	--	--	
PCB-169	SW8270CSIM	--	--	0.00039 U	0.00039 U	0.00039 U	22	--	--	
PCB-170	SW8270CSIM	--	--	0.00041 U	0.00041 U	0.00041 U	22	--	--	
PCB-177	SW8270CSIM	--	--	0.00027 U	0.00027 U	0.00027 U	22	--	--	
PCB-180	SW8270CSIM	--	--	0.00058 U	0.00058 U	0.00058 U	22	--	--	
PCB-183	SW8270CSIM	--	--	0.00050 U	0.00051 U	0.00050 U	22	--	--	
PCB-187	SW8270CSIM	--	--	0.00041 U	0.00042 U	0.00041 U	22	--	--	
PCB-189	SW8270CSIM	--	--	0.00047 U	0.00047 U	0.00047 U	22	--	--	
PCB-194	SW8270CSIM	--	--	0.00024 U	0.00024 U	0.00024 U	22	--	--	
PCB-201	SW8270CSIM	--	--	0.00045 U	0.00045 U	0.00045 U	22	--	--	
PCB-206	SW8270CSIM	--	--	0.00041 U	0.00042 U	0.00041 U	22	--	--	
Total PCB Congener – Low Resolution (U = 0)	--	0.00017	0.03	0.00040 U	0.000405 U	0.00040 U	22	0	0%	

Table 6
Fall 2017 Water Quality Chemistry Results

Notes:

* The total suspended solid results for samples collected from mid-depth and bottom depth are respectively labeled as "-M-" and "-B-" preceding the sample ID date. They are not direct results of the surface sample IDs indicated in the column headers in this spreadsheet.

1. Number analyzed and WQ exceedance counts do not include samples that were analyzed for field or laboratory quality control purposes (e.g., field duplicates). WQ exceedance counts do not include non-detect results above the screening levels.

Horizontal coordinate datum is GCS North American Datum 1983 latitude/longitude.

All undetect results are reported at the method detection limit.

Totals (U=0) are calculated as the sum of all detected results. If all results are not detected, half of the highest reporting limit value is reported as the sum.

Total chlordane is the sum of alpha-chlordane, beta-chlordane, gamma-chlordane, cis-nonachlor, trans-nonachlor, and oxychlordane.

Total DDX is the sum of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT 2,4'-DDD, 2,4'-DDE, and 2,4'-DDT, if measured.

Total PCB congeners is the sum of all PCB congeners listed in this table.

USEPA Stage 2A data validation was completed by Anchor QEA.

- Detected concentration is greater than California Toxics Rule Criteria for Protection of Human Health Organisms Only
- Detected concentration is greater than California Toxics Rule Saltwater Continuous Concentration screening level

Italics: Non-detected concentration is above one or more identified screening levels

Bold: detected result

--: results not reported or not applicable

µg/L: microgram per liter

FD: field duplicate

J: estimated value

m: meter

mg/L: milligram per liter

N: normal environmental sample

PCB: polychlorinated biphenyl

U: compound analyzed but not detected above detection limit

USEPA: U.S. Environmental Protection Agency

WO: ocean water matrix

WQ: water quality

Table 7
Winter 2018 Water Quality Field Data

Station ID	Sample ID	Latitude	Longitude	Date	Time	Depth (m)	DO	pH	Salinity (ppt)	Temperature (°C)	Sample Collected (Y/N)	Description of Sample			
												Floating Material	Odor	Sheen	Color
CS-RW-01	CS-RW-01-G-S-20180227	33.77483	-118.24549	2/27/2018	10:30	1.0	7.0	7.7	31.7	14.1	Y	Floating particulates	N/A	N/A	Clear
	CS-RW-01-G-M-20180227				10:32	3.5	7.0	7.7	31.1	14.1	Y	Floating particulates	N/A	N/A	Clear
	CS-RW-01-G-B-20180227				10:34	6.0	7.0	7.7	31.0	14.1	Y	Floating particulates	N/A	N/A	Clear
IA-RW-02	IA-RW-02-G-S-20180227	33.76307	-118.25482	2/27/2018	11:00	1.0	7.5	7.8	31.0	14.5	Y	N/A	N/A	N/A	Clear
	IA-RW-02-G-M-20180227				11:10	8.5	7.4	7.8	31.1	14.0	Y	N/A	N/A	N/A	Clear
	IA-RW-02-G-B-20180227				11:12	16.0	7.0	7.8	31.1	13.4	Y	N/A	N/A	N/A	Clear
IA-RW-03	IA-RW-03-G-S-20180227	33.76208	-118.27421	2/27/2018	11:30	1.0	7.6	7.8	30.9	14.5	Y	N/A	N/A	N/A	Clear
	IA-RW-03-G-M-20180227				11:32	8.5	7.4	7.8	30.9	13.9	Y	N/A	N/A	N/A	Clear
	IA-RW-03-G-B-20180227				11:34	16.0	7.0	7.7	31.0	13.6	Y	N/A	N/A	N/A	Clear
IA-RW-04	IA-RW-04-G-S-20180227	33.75187	-118.27129	2/27/2018	11:50	1.0	7.6	7.8	30.9	14.1	Y	N/A	N/A	N/A	Clear
	IA-RW-04-G-M-20180227				12:00	9.2	7.5	7.8	30.9	13.8	Y	N/A	N/A	N/A	Clear
	IA-RW-04-G-B-20180227				12:05	17.4	7.2	7.8	30.9	13.5	Y	N/A	N/A	N/A	Clear
IA-RW-05	IA-RW-05-G-S-20180227	33.73240	-118.25137	2/27/2018	13:30	1.0	8.3	7.9	31.4	14.3	Y	N/A	N/A	N/A	Clear
	IA-RW-05-G-M-20180227				13:35	8.0	8.0	7.9	31.3	13.7	Y	N/A	N/A	N/A	Clear
	IA-RW-05-G-B-20180227				13:40	15.5	6.5	7.8	31.0	12.2	Y	N/A	N/A	N/A	Clear
IA-RW-06	IA-RW-06-G-S-20180227	33.72552	-118.27158	2/27/2018	12:20	1.0	7.5	7.8	31.3	13.8	Y	N/A	N/A	N/A	Clear
	IA-RW-06-G-M-20180227				12:25	8.5	7.4	7.8	31.1	13.3	Y	N/A	N/A	N/A	Clear
	IA-RW-06-G-B-20180227				12:30	16.0	6.7	7.8	31.9	12.5	Y	N/A	N/A	N/A	Clear
FH-RW-07	FH-RW-07-G-S-20180227	33.73568	-118.26727	2/27/2018	13:00	1.0	7.5	7.8	31.1	14.3	Y	N/A	N/A	N/A	Clear
	FH-RW-07-G-M-20180227				13:05	3.0	7.5	7.8	31.2	14.0	Y	N/A	N/A	N/A	Clear
	FH-RW-07-G-B-20180227				13:10	5.0	7.2	7.8	31.3	13.8	Y	N/A	N/A	N/A	Clear
OA-RW-08	OA-RW-08-G-S-20180227	33.71456	-118.24237	2/27/2018	13:55	1.0	8.5	7.9	31.0	13.7	Y	N/A	N/A	N/A	Clear
	OA-RW-08-G-M-20180227				14:00	11.0	7.7	7.8	31.1	12.9	Y	N/A	N/A	N/A	Clear
	OA-RW-08-G-B-20180227				14:05	22.5	6.6	7.8	30.9	12.3	Y	N/A	N/A	N/A	Clear
OA-RW-09	OA-RW-09-G-S-20180227	33.71211	-118.26355	2/27/2018	14:25	1.0	7.7	7.8	31.0	13.7	Y	N/A	N/A	N/A	Clear
	OA-RW-09-G-M-20180227				14:30	2.5	7.7	7.8	31.9	13.5	Y	N/A	N/A	N/A	Clear
	OA-RW-09-G-B-20180227				14:35	3.8	7.7	7.8	30.8	13.2	Y	N/A	N/A	N/A	Clear
CM-RW-10	CM-RW-10-G-S-20180227	33.71935	-118.27910	2/27/2018	15:00	1.0	7.7	7.8	31.0	14.2	Y	N/A	N/A	N/A	Clear
	CM-RW-10-G-M-20180227				15:05	5.0	7.0	7.8	31.0	13.4	Y	N/A	N/A	N/A	Clear
	CM-RW-10-G-B-20180227				15:10	9.0	6.8	7.8	31.0	12.9	Y	N/A	N/A	N/A	Clear
CB-RW-11	CB-RW-11-G-S-20180227	33.71243	-118.28072	2/27/2018	15:15	1.0	8.1	7.9	31.2	13.7	Y	N/A	N/A	N/A	Clear
	CB-RW-11-G-M-20180227				15:17	1.5	8.1	7.9	31.2	13.7	Y	N/A	N/A	N/A	Clear
	CB-RW-11-G-B-20180227				15:22	2.0	8.1	7.9	31.3	13.7	Y	N/A	N/A	N/A	Clear
IB-RW-12	IB-RW-12-G-S-20180227	33.76838	-118.22847	2/27/2018	9:35	1.0	7.6	7.7	31.1	14.4	Y	N/A	N/A	N/A	Clear
	IB-RW-12-G-M-20180227				9:37	8.5	7.5	7.7	31.8	14.2	Y	N/A	N/A	N/A	Clear
	IB-RW-12-G-B-20180227				9:39	16.5	7.3	7.7	30.9	13.8	Y	N/A	N/A	N/A	Clear
IB-RW-13	IB-RW-13-G-S-20180227	33.75379	-118.21650	2/27/2018	9:23	1.0	7.3	7.7	34.0	14.2	Y	N/A	N/A	N/A	Clear
	IB-RW-13-G-M-20180227				9:25	12.0	7.0	7.8	34.0	13.8	Y	N/A	N/A	N/A	Clear
	IB-RW-13-G-B-20180227				9:27	24.0	6.7	7.7	34.1	13.0	Y	N/A	N/A	N/A	Clear
IB-RW-14	IB-RW-14-G-S-20180227	33.74896	-118.23087	2/27/2018	8:30	1.0	7.2	7.5	34.1	14.1	Y	N/A	N/A	N/A	Clear
	IB-RW-14-G-M-20180227				8:35	7.5	7.1	7.5	34.1	13.9	Y	N/A	N/A	N/A	Clear
	IB-RW-14-G-B-20180227				8:40	15.0	6.5	7.5	34.1	13.3	Y	N/A	N/A	N/A	Clear
IB-RW-15	IB-RW-15-G-S-20180227	33.74203	-118.19680	2/27/2018	9:55	1.0	7.1	7.8	34.0	13.4	Y	N/A	N/A	N/A	Clear
	IB-RW-15-G-M-20180227				9:57	8.5	7.0	7.8	34.0	13.7	Y	N/A	N/A	N/A	Clear
	IB-RW-15-G-B-20180227				9:59	17.5	7.0	7.8	34.1	13.4	Y	N/A	N/A	N/A	Clear
OB-RW-16	OB-RW-16-G-S-20180227	33.73140	-118.22097	2/27/2018	10:25	1.0	7.9	7.9	34.1	13.8	Y	N/A	N/A	N/A	Clear
	OB-RW-16-G-M-20180227				10:27	9.5	7.5	7.9	34.1	13.5	Y	N/A	N/A	N/A	Clear
	OB-RW-16-G-B-20180227				10:29	18.7	6.4	7.8	34.0	12.9	Y	N/A	N/A	N/A	Clear
OB-RW-17	OB-RW-17-G-S-20180227	33.73140	-118.22097	2/27/2018	10:25	1.0	8.2	8.0	33.8	13.7	Y	N/A	N/A	N/A	Clear
	OB-RW-17-G-M-20180227				10:27	11.0	7.8	7.9	34.1	13.6	Y	N/A	N/A	N/A	Clear
	OB-RW-17-G-B-20180227				10:29	22.0	6.6	7.8	34.1	12.5	Y	N/A	N/A	N/A	Clear

Table 7
Winter 2018 Water Quality Field Data

Station ID	Sample ID	Latitude	Longitude	Date	Time	Depth (m)	DO	pH	Salinity (ppt)	Temperature (°C)	Sample Collected (Y/N)	Description of Sample			
												Floating Material	Odor	Sheen	Color
SP-RW-18	SP-RW-18-G-S-20180227	33.75387	-118.18124	2/27/2018	11:37	1.0	7.6	7.9	30.9	14.3	Y	N/A	N/A	N/A	Brown, cloudy
	SP-RW-18-G-M-20180227				11:39	6.0	6.6	7.8	34.0	13.7	Y	N/A	N/A	N/A	Clear
	SP-RW-18-G-B-20180227				11:41	12.0	6.9	7.8	34.0	13.4	Y	N/A	N/A	N/A	Clear
SP-RW-19	SP-RW-19-G-S-20180227	33.73667	-118.13152	2/27/2018	14:30	1.0	7.2	7.8	33.8	14.7	Y	N/A	N/A	N/A	Clear
	SP-RW-19-G-M-20180227				14:32	3.5	8.6	7.7	34.0	13.9	Y	N/A	N/A	N/A	Clear
	SP-RW-19-G-B-20180227				14:34	7.0	8.2	7.7	34.0	13.7	Y	N/A	N/A	N/A	Clear
SP-RW-20	SP-RW-20-G-S-20180227	33.72546	-118.15729	2/27/2018	14:05	1.0	8.7	7.8	33.9	14.0	Y	N/A	N/A	N/A	Clear
	SP-RW-20-G-M-20180227				14:07	7.0	7.8	7.7	34.0	13.3	Y	N/A	N/A	N/A	Clear
	SP-RW-20-G-B-20180227				14:09	14.0	7.2	7.6	34.0	12.9	Y	N/A	N/A	N/A	Clear
LE-RW-21	LE-RW-21-G-S-20180227	33.75647	-118.19322	2/27/2018	12:46	0.8	5.8	7.7	22.8	14.9	Y	N/A	N/A	N/A	Brown, cloudy
	LE-RW-21-G-M-20180227				Too shallow						N	N/A	N/A	N/A	N/A
	LE-RW-21-G-B-2016122										N	N/A	N/A	N/A	N/A
LE-RW-22	LE-RW-22-G-S-20180227	33.76081	-118.20190	2/27/2018	12:15	1.0	5.8	7.7	20.1	15.2	Y	N/A	H2SO4	N/A	Brown, cloudy
	LE-RW-22-G-M-20180227				Too shallow						N	N/A	N/A	N/A	N/A
	LE-RW-22-G-B-20180227										N	N/A	N/A	N/A	N/A

Notes:
DO: dissolved oxygen
m: meter
N/A: not applicable
ppt: parts per thousand

Table 8
Winter 2018 Water Quality Chemistry Results

Area				Consolidated Slip CS-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Inner Harbor - LA IA-RW-	Fish Harbor FH-RW-	Outer Harbor - LA OA-RW-	Outer Harbor - LA OA-RW-	Outer Harbor - LA OA-RW-	Cabrillo Marina CM-RW-
Location ID				01_201802 CS-RW-01-G-S-	02_201802 IA-RW-02-G-S-	02_201802 IA-RW-1002-G-S-	03_201802 IA-RW-03-G-S-	04_201802 IA-RW-04-G-S-	05_201802 IA-RW-05-G-S-	05_201802 IA-RW-1005-G-	06_201802 IA-RW-06-G-S-	07_201802 FH-RW-07-G-S-	08_201802 OA-RW-08-G-S-	09_201802 OA-RW-09-G-S-	09_201802 OA-RW-1009-G-	10_201802 CM-RW-10-G-S-	
Sample ID				20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	
Sample Date				2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	
Depth				1 m	1 m	1 m	1 m	1 m	1 m	8 m	1 m	1 m	1 m	1 m	2.5 m	1 m	
Sample Type				N	N	FD	N	N	N	FD	N	N	N	N	FD	N	
Matrix				WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	
X				-118.24549	-118.25482	-118.25482	-118.27421	-118.27129	-118.25137	-118.25137	-118.27158	-118.26727	-118.24237	-118.26355	-118.26355	-118.27910	
Y				33.77483	33.76307	33.76307	33.76208	33.75187	33.73240	33.73240	33.72552	33.73568	33.71456	33.71211	33.71211	33.71935	
	Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration														
Conventional Parameters (mg/L)																	
Total suspended solids (surface)	SM2540D	--	--	3.4	0.83 U	0.83 U	0.83 U	0.83 U	2.1	--	0.83 U	2.0	1.8	0.83 U	--	2.6	
Total suspended solids (middle)*	SM2540D	--	--	2.2	1.3	--	3.0	1.0	1.0	0.83 U	0.83 U	0.90 J	1.6	0.83 U	1.7	2.3	
Total suspended solids (bottom)*	SM2540D	--	--	2.6	0.83 U	--	2.5	0.83 U	2.1	--	0.90 J	0.83 U	0.83 U	2.8	--	2.1	
Metals (µg/L)																	
Cadmium	E1640	--	--	0.0848	0.0641	--	0.0649	0.0603	0.0550	--	0.0604	0.0698	0.0507	0.0586	--	0.0689	
Chromium	E1640	--	--	0.553 J	0.389 J	--	0.410 J	0.504 J	0.439 J	--	0.425 J	0.398 J	0.409 J	0.499 J	--	0.487 J	
Copper	E1640	--	--	2.64	3.47	--	3.62	4.78	3.57	--	3.47	4.08	2.35	3.64	--	5.41	
Lead	E1640	--	--	0.502	0.0753 U	--	0.0647 U	0.0793 U	0.0656 U	--	0.0486 U	0.140	0.0330 U	0.0349 U	--	0.0393 U	
Mercury	E1631E	--	--	0.000366 J	0.00222	--	0.00106	0.000528	0.000694	--	0.000532	0.00183	0.000866	0.00164	--	0.000475 J	
Zinc	E1640	--	--	15.5 J	9.35 J	--	6.72 J	4.91 J	2.49 J	--	4.93 J	18.5 J	1.98 J	3.92 J	--	17.7 J	
Metals, Dissolved (µg/L)																	
Cadmium	E1640	--	9.3	0.0716	0.0606	--	0.0558	0.0636	0.0482	--	0.0552	0.0631	0.0426	0.0510	--	0.0614	
Chromium	E1640	--	50	0.377 J	0.397 J	--	0.400 J	0.538	0.369 J	--	0.391 J	0.381 J	0.421 J	0.399 J	--	0.411 J	
Copper	E1640	--	3.1	1.76	2.32	--	2.07	2.35	1.71	--	1.68	3.17	2.46	1.89	--	5.05	
Lead	E1640	--	8.1	0.136	0.0874	--	0.0807	0.0730 U	0.0642 U	--	0.0557 U	0.0983	0.0527 U	0.0522 U	--	0.0472 U	
Mercury	E1631E	0.051	0.94	0.000135 J	0.000267 J	--	0.000309 J	0.000407 J	0.000120 J	--	0.000296 J	0.000113 U	0.000405 J	0.000872	--	0.000362 J	
Zinc	E1640	--	81	12.5	8.12	--	6.00	4.62	1.90	--	4.25	10.1	2.37	3.48	--	18.1	
Pesticides (µg/L)																	
2,4'-DDD (o,p'-DDD)	SW8081A	--	--	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	
2,4'-DDE (o,p'-DDE)	SW8081A	--	--	0.0019	0.0024	--	0.0021	0.0018	0.0029	--	0.00050 U	0.0018	0.0042	0.0017	--	0.0020	
2,4'-DDT (o,p'-DDT)	SW8081A	--	--	0.0010 U	0.0010 U	--	0.0010 U	0.0010 U	0.0010 U	--	0.0010 U	0.0010 U	0.0010 U	0.0010 U	--	0.0010 U	
4,4'-DDD (p,p'-DDD)	SW8081A	--	--	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	
4,4'-DDE (p,p'-DDE)	SW8081A	--	--	0.00090 J	0.00079 J	--	0.00050 U	0.00087 J	0.00091 J	--	0.00050 U	0.0017	0.00050 U	0.00050 U	--	0.00050 U	
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	
Chlordane, gamma- (Chlordane, trans-)	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	
Dieldrin	SW8081A	0.00014	0.0019	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	
Nonachlor, cis-	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	
Nonachlor, trans-	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	
Oxychlordane	SW8081A	--	--	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	--	0.0017 U	
Toxaphene	SW8081A	--	0.0002	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	--	0.025 U	0.025 U	0.025 U	0.025 U	--	0.025 U	
Total Chlordane (U = 0)	--	0.00059	0.004	0.00085 U	0.00085 U	--	0.00085 U	0.00085 U	0.00085 U	--	0.00085 U	0.00085 U	0.00085 U	0.00085 U	--	0.00085 U	
Total DDx (U = 0)	--	0.00059	0.001	0.0028 J	0.0032 J	--	0.0021	0.0027 J	0.0038 J	--	0.00050 U	0.0035	0.0042	0.0017	--	0.0020	
PCB Congeners – Low Resolution (µg/L)																	
PCB-018	SW8270CSIM	--	--	0.00044 U	0.00045 U	--	0.00046 U	0.00044 U	0.00044 U	--	0.00044 U	0.00045 U	0.00044 U	0.00044 U	--	0.00044 U	
PCB-028	SW8270CSIM	--	--	0.00051 U	0.00052 U	--	0.00053 U	0.00051 U	0.00051 U	--	0.00050 U	0.00051 U	0.00051 U	0.00051 U	--	0.00051 U	
PCB-037	SW8270CSIM	--	--	0.00029 U	0.00029 U	--	0.00030 U	0.00029 U	0.00029 U	--	0.00029 U	0.00029 U	0.00029 U	0.00029 U	--	0.00029 U	
PCB-044	SW8270CSIM	--	--	0.00068 U	0.00070 U	--	0.00071 U	0.00068 U	0.00068 U	--	0.00068 U	0.00069 U	0.00068 U	0.00068 U	--	0.00068 U	
PCB-049	SW8270CSIM	--	--	0.00051 U	0.00052 U	--	0.00053 U	0.00051 U	0.00051 U	--	0.00050 U	0.00051 U	0.00051 U	0.00051 U	--	0.00051 U	
PCB-052	SW8270CSIM	--	--	0.00053 U	0.00055 U	--	0.00056 U	0.00053 U	0.00053 U	--	0.00053 U	0.00054 U	0.00053 U	0.00053 U	--	0.00053 U	
PCB-066	SW8270CSIM	--	--	0.00039 U	0.00039 U	--	0.00040 U	0.00039 U	0.00039 U	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	--	0.00039 U	
PCB-070	SW8270CSIM	--	--	0.00040 U	0.00040 U	--	0.00041 U	0.00040 U	0.00040 U	--	0.00039 U	0.00040 U	0.00040 U	0.00040 U	--	0.00040 U	
PCB-074	SW8270CSIM	--	--	0.00047 U	0.00048 U	--	0.00049 U	0.00047 U	0.00047 U	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	--	0.00047 U	
PCB-077	SW8270CSIM	--	--	0.00060 U	0.00061 U	--	0.00062 U	0.00060 U	0.00060 U	--	0.00059 U	0.00060 U	0.00060 U	0.00060 U	--	0.00060 U	
PCB-081	SW8270CSIM	--	--	0.00047 U	0.00047 U	--	0.00048 U	0.00047 U	0.00047 U	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	--	0.00047 U	
PCB-087	SW8270CSIM	--	--	0.00068 U	0.00070 U	--	0.00071 U	0.00068 U	0.00068 U	--	0.00068 U	0.00069 U	0.00068 U	0.00068 U	--	0.00068 U	
PCB-099	SW8270CSIM	--	--	0.00059 U	0.00060 U	--	0.00061 U	0.00059 U	0.00059 U	--	0.00058 U	0.00059 U	0.00059 U	0.00059 U	--	0.00059 U	
PCB-101	SW8270CSIM	--	--	0.00048 U	0.00049 U	--	0.00050 U	0.00048 U	0.00048 U	--	0.00047 U	0.00048 U	0.00048 U	0.00048 U	--	0.00048 U	

Table 8
Winter 2018 Water Quality Chemistry Results

				Area	Consolidated	Inner Harbor -	Inner Harbor -	Inner Harbor -	Inner Harbor -	Inner Harbor -	Inner Harbor -	Inner Harbor -	Inner Harbor -	Outer Harbor -	Outer Harbor -	Outer Harbor -	Cabrillo Marina
				Location ID	Slip CS-RW-	LA IA-RW-	LA IA-RW-	LA IA-RW-	LA IA-RW-	LA IA-RW-	LA IA-RW-	LA IA-RW-	Fish Harbor FH-RW-	LA OA-RW-	LA OA-RW-	LA OA-RW-	CM-RW-
				Sample ID	01_201802 CS-RW-01-G-S-	02_201802 IA-RW-02-G-S-	02_201802 IA-RW-1002-G-S-	03_201802 IA-RW-03-G-S-	04_201802 IA-RW-04-G-S-	05_201802 IA-RW-05-G-S-	05_201802 IA-RW-1005-G-	06_201802 IA-RW-06-G-S-	07_201802 FH-RW-07-G-S-	08_201802 OA-RW-08-G-S-	09_201802 OA-RW-09-G-S-	09_201802 OA-RW-1009-G-	10_201802 CM-RW-10-G-S-
				Sample Date	20180227	20180227	20180227	20180227	20180227	20180227	M-20180227	20180227	20180227	20180227	20180227	M-20180227	20180227
				Depth	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018
				Sample Type	1 m	1 m	1 m	1 m	1 m	1 m	8 m	1 m	1 m	1 m	1 m	2.5 m	1 m
				Matrix	N	N	FD	N	N	N	FD	N	N	N	FD	N	
				X	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
				Y	-118.24549	-118.25482	-118.25482	-118.27421	-118.27129	-118.25137	-118.25137	-118.27158	-118.26727	-118.24237	-118.26355	-118.26355	-118.27910
					33.77483	33.76307	33.76307	33.76208	33.75187	33.73240	33.73240	33.72552	33.73568	33.71456	33.71211	33.71211	33.71935
		Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration														
	Method																
PCB-105	SW8270CSIM	--	--	0.00045 U	0.00046 U	--	0.00047 U	0.00045 U	0.00045 U	--	0.00044 U	0.00045 U	0.00045 U	0.00045 U	--	0.00045 U	
PCB-110	SW8270CSIM	--	--	0.00032 U	0.00033 U	--	0.00034 U	0.00032 U	0.00032 U	--	0.00032 U	0.00033 U	0.00032 U	0.00032 U	--	0.00032 U	
PCB-114	SW8270CSIM	--	--	0.00045 U	0.00046 U	--	0.00047 U	0.00045 U	0.00045 U	--	0.00044 U	0.00045 U	0.00045 U	0.00045 U	--	0.00045 U	
PCB-118	SW8270CSIM	--	--	0.00048 U	0.00049 U	--	0.00050 U	0.00048 U	0.00048 U	--	0.00048 U	0.00048 U	0.00048 U	0.00048 U	--	0.00048 U	
PCB-119	SW8270CSIM	--	--	0.00017 U	0.00017 U	--	0.00017 U	0.00017 U	0.00017 U	--	0.00016 U	0.00017 U	0.00017 U	0.00017 U	--	0.00017 U	
PCB-123	SW8270CSIM	--	--	0.00080 U	0.00082 U	--	0.00083 U	0.00080 U	0.00080 U	--	0.00079 U	0.00081 U	0.00080 U	0.00080 U	--	0.00080 U	
PCB-126	SW8270CSIM	--	--	0.00024 U	0.00025 U	--	0.00025 U	0.00024 U	0.00024 U	--	0.00024 U	0.00025 U	0.00024 U	0.00024 U	--	0.00024 U	
PCB-128	SW8270CSIM	--	--	0.00042 U	0.00042 U	--	0.00043 U	0.00042 U	0.00042 U	--	0.00041 U	0.00042 U	0.00042 U	0.00042 U	--	0.00042 U	
PCB-132/153	SW8270CSIM	--	--	0.00067 U	0.00068 U	--	0.00069 U	0.00067 U	0.00067 U	--	0.00066 U	0.00067 U	0.00067 U	0.00067 U	--	0.00067 U	
PCB-138/158	SW8270CSIM	--	--	0.00057 U	0.00058 U	--	0.00060 U	0.00057 U	0.00057 U	--	0.00057 U	0.00058 U	0.00057 U	0.00057 U	--	0.00057 U	
PCB-149	SW8270CSIM	--	--	0.00022 U	0.00023 U	--	0.00023 U	0.00022 U	0.00022 U	--	0.00022 U	0.00023 U	0.00022 U	0.00022 U	--	0.00022 U	
PCB-151	SW8270CSIM	--	--	0.00039 U	0.00040 U	--	0.00040 U	0.00039 U	0.00039 U	--	0.00039 U	0.00039 U	0.00039 U	0.00039 U	--	0.00039 U	
PCB-156	SW8270CSIM	--	--	0.00039 U	0.00039 U	--	0.00040 U	0.00039 U	0.00039 U	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	--	0.00039 U	
PCB-157	SW8270CSIM	--	--	0.00039 U	0.00040 U	--	0.00041 U	0.00039 U	0.00039 U	--	0.00039 U	0.00039 U	0.00039 U	0.00039 U	--	0.00039 U	
PCB-167	SW8270CSIM	--	--	0.00078 U	0.00079 U	--	0.00081 U	0.00078 U	0.00078 U	--	0.00077 U	0.00078 U	0.00078 U	0.00078 U	--	0.00078 U	
PCB-168	SW8270CSIM	--	--	0.00050 U	0.00051 U	--	0.00052 U	0.00050 U	0.00050 U	--	0.00049 U	0.00050 U	0.00050 U	0.00050 U	--	0.00050 U	
PCB-169	SW8270CSIM	--	--	0.00039 U	0.00040 U	--	0.00040 U	0.00039 U	0.00039 U	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	--	0.00039 U	
PCB-170	SW8270CSIM	--	--	0.00041 U	0.00041 U	--	0.00042 U	0.00041 U	0.00041 U	--	0.00040 U	0.00041 U	0.00041 U	0.00041 U	--	0.00041 U	
PCB-177	SW8270CSIM	--	--	0.00027 U	0.00027 U	--	0.00028 U	0.00027 U	0.00027 U	--	0.00026 U	0.00027 U	0.00027 U	0.00027 U	--	0.00027 U	
PCB-180	SW8270CSIM	--	--	0.00058 U	0.00059 U	--	0.00060 U	0.00058 U	0.00058 U	--	0.00057 U	0.00058 U	0.00058 U	0.00058 U	--	0.00058 U	
PCB-183	SW8270CSIM	--	--	0.00050 U	0.00051 U	--	0.00052 U	0.00050 U	0.00050 U	--	0.00050 U	0.00051 U	0.00050 U	0.00050 U	--	0.00050 U	
PCB-187	SW8270CSIM	--	--	0.00041 U	0.00042 U	--	0.00043 U	0.00041 U	0.00041 U	--	0.00041 U	0.00042 U	0.00041 U	0.00041 U	--	0.00041 U	
PCB-189	SW8270CSIM	--	--	0.00047 U	0.00048 U	--	0.00049 U	0.00047 U	0.00047 U	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	--	0.00047 U	
PCB-194	SW8270CSIM	--	--	0.00024 U	0.00025 U	--	0.00025 U	0.00024 U	0.00024 U	--	0.00024 U	0.00024 U	0.00024 U	0.00024 U	--	0.00024 U	
PCB-201	SW8270CSIM	--	--	0.00045 U	0.00046 U	--	0.00047 U	0.00045 U	0.00045 U	--	0.00045 U	0.00045 U	0.00045 U	0.00045 U	--	0.00045 U	
PCB-206	SW8270CSIM	--	--	0.00041 U	0.00042 U	--	0.00043 U	0.00041 U	0.00041 U	--	0.00041 U	0.00042 U	0.00041 U	0.00041 U	--	0.00041 U	
Total PCB Congener – Low Resolution (U = 0)				--	0.00017	0.03	0.00040 U	0.00041 U	--	0.000415 U	0.00040 U	0.00040 U	--	0.000395 U	0.000405 U	0.00040 U	0.00040 U

Table 8
Winter 2018 Water Quality Chemistry Results

				Area	Cabrillo Beach CB-RW-	Cabrillo Beach CB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Outer Harbor - LB OB-RW-	Outer Harbor - LB OB-RW-	San Pedro Bay SP-RW-	San Pedro Bay SP-RW-	San Pedro Bay SP-RW-	Los Angeles River Estuary LE-RW-
				Location ID	11_201802 CB-RW-11-G-S-	11_201802 CB-RW-1011-G-	12_201802 IB-RW-12-G-S-	13_201802 IB-RW-13-G-S-	14_201802 IB-RW-14-G-S-	14_201802 IB-RW-1014-G-S-	15_201802 IB-RW-15-G-S-	16_201802 OB-RW-16-G-S-	17_201802 OB-RW-17-G-S-	18_201802 SP-RW-18-G-S-	19_201802 SP-RW-19-G-S-	20_201802 SP-RW-20-G-S-	21_201802 LE-RW-21-G-S-	
				Sample ID	20180227	M-20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	
				Sample Date	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	
				Depth	1 m	1.5 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	
				Sample Type	N	FD	N	N	N	N	N	N	N	N	N	N	N	
				Matrix	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	
				X	-118.28072	-118.28072	-118.22847	-118.21650	-118.23087	-118.23087	-118.19680	-118.22097	-118.22097	-118.18124	-118.13152	-118.15729	-118.19322	
				Y	33.71243	33.71243	33.76838	33.75379	33.74896	33.74896	33.74203	33.73140	33.73140	33.75387	33.73667	33.72546	33.75647	
		Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration															
	Method																	
Conventional Parameters (mg/L)																		
Total suspended solids (surface)	SM2540D	--	--		3.1	--	1.7	0.83 U	0.83 U	0.83 U	1.5	2.1	1.8	4.4	4.1	2.4	11	
Total suspended solids (middle)*	SM2540D	--	--		3.9	4.3	2.9	0.90 J	1.0	--	1.0	0.83 U	1.2	3.1	4.9	0.90 J	--	
Total suspended solids (bottom)*	SM2540D	--	--		4.2	--	2.4	0.83 U	1.8	--	3.2	4.8	3.4	5.4	2.5	1.3	--	
Metals (µg/L)																		
Cadmium	E1640	--	--		0.0692	--	0.0584	0.0429	0.0404	0.0409	0.0425	0.0433	0.0406	0.0678	0.0482	0.0440	0.120	
Chromium	E1640	--	--		0.580 J	--	0.608 J	0.400 J	0.427 J	0.484 J	0.480 J	0.438 J	0.399 J	0.575 J	0.440 J	0.442 J	1.09 J	
Copper	E1640	--	--		6.15	--	1.88	1.27 J	1.03 J	1.03 J	0.963 J	0.723 J	0.565 J	2.64 J	1.08 J	0.629 J	10.9 J	
Lead	E1640	--	--		0.127	--	0.110	0.102	0.163	0.148	0.0825	0.0946	0.0691 U	0.491	0.149	0.126	2.63	
Mercury	E1631E	--	--		0.000724	--	0.00145	0.000332 J	0.000113 U	0.000636	0.000514	0.000239 J	0.00230	0.00120	0.000196 J	0.000155 J	0.00424	
Zinc	E1640	--	--		5.18 J	--	6.69 J	6.71 J	2.99 J	2.41 J	2.58 J	1.40 J	1.02 J	13.1 J	2.28 J	1.23 J	57.7 J	
Metals, Dissolved (µg/L)																		
Cadmium	E1640	--	9.3		0.0605	--	0.0728	0.0523	0.0396	0.0482	0.0490	0.0484	0.0434	0.0668	0.0452	0.0425	0.107	
Chromium	E1640	--	50		0.400 J	--	0.299 J	0.210 J	0.372 J	0.286 J	0.250 J	0.164 J	0.355 J	0.460 J	0.378 J	0.372 J	0.718	
Copper	E1640	--	3.1		1.51	--	1.39	1.23	0.875	0.868	0.844	0.583	0.516	2.21	0.728	0.604	7.73	
Lead	E1640	--	8.1		0.0520 U	--	0.0305 U	0.134	0.0929	0.0772	0.0531 U	0.0559 U	0.0647 U	0.209	0.100	0.0893	0.442	
Mercury	E1631E	0.051	0.94		0.000113 U	--	0.00104	0.000113 U	0.000113 U	0.000466 J	0.000215 J	0.000143 J	0.000128 J	0.000156 J	0.000113 U	0.000113 U	0.00128	
Zinc	E1640	--	81		3.99	--	5.35	4.53	2.94	2.40	2.70	1.86	1.41	9.73	1.75	1.47	52.0	
Pesticides (µg/L)																		
2,4'-DDD (o,p'-DDD)	SW8081A	--	--		0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	
2,4'-DDE (o,p'-DDE)	SW8081A	--	--		0.0058	--	0.0032	0.0051	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	
2,4'-DDT (o,p'-DDT)	SW8081A	--	--		0.0010 U	--	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	
4,4'-DDD (p,p'-DDD)	SW8081A	--	--		0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	
4,4'-DDE (p,p'-DDE)	SW8081A	--	--		0.0013 J	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.0038	0.0028	0.00050 U	
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001		0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.0015	0.00088 J	0.00050 U	
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--		0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	
Chlordane, gamma- (Chlordane, trans-)	SW8081A	--	--		0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	
Dieldrin	SW8081A	0.00014	0.0019		0.00050 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	
Nonachlor, cis-	SW8081A	--	--		0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	
Nonachlor, trans-	SW8081A	--	--		0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	
Oxychlordane	SW8081A	--	--		0.0017 U	--	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	
Toxaphene	SW8081A	--	0.0002		0.025 U	--	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	
Total Chlordane (U = 0)	--	0.00059	0.004		0.00085 U	--	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	0.00085 U	
Total DDx (U = 0)	--	0.00059	0.001		0.0071 J	--	0.0032	0.0051	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.0053	0.0037 J	0.00050 U	
PCB Congeners – Low Resolution (µg/L)																		
PCB-018	SW8270CSIM	--	--		0.00046 U	--	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	0.00044 U	
PCB-028	SW8270CSIM	--	--		0.00053 U	--	0.00050 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	
PCB-037	SW8270CSIM	--	--		0.00030 U	--	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	0.00029 U	
PCB-044	SW8270CSIM	--	--		0.00067 U	--	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	
PCB-049	SW8270CSIM	--	--		0.00053 U	--	0.00050 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	0.00051 U	
PCB-052	SW8270CSIM	--	--		0.00056 U	--	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	0.00053 U	
PCB-066	SW8270CSIM	--	--		0.00040 U	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	
PCB-070	SW8270CSIM	--	--		0.00041 U	--	0.00039 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	
PCB-074	SW8270CSIM	--	--		0.00049 U	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	
PCB-077	SW8270CSIM	--	--		0.00062 U	--	0.00059 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	0.00060 U	
PCB-081	SW8270CSIM	--	--		0.00048 U	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	
PCB-087	SW8270CSIM	--	--		0.00071 U	--	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	
PCB-099	SW8270CSIM	--	--		0.00061 U	--	0.00058 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	
PCB-101	SW8270CSIM	--	--		0.00050 U	--	0.00047 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	

Table 8
Winter 2018 Water Quality Chemistry Results

				Area	Cabrillo Beach CB-RW-	Cabrillo Beach CB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Inner Harbor - LB IB-RW-	Outer Harbor - LB OB-RW-	Outer Harbor - LB OB-RW-	San Pedro Bay SP-RW-	San Pedro Bay SP-RW-	San Pedro Bay SP-RW-	Los Angeles River Estuary LE-RW-
				Location ID	11_201802 CB-RW-11-G-S-	11_201802 CB-RW-1011-G-	12_201802 IB-RW-12-G-S-	13_201802 IB-RW-13-G-S-	14_201802 IB-RW-14-G-S-	14_201802 IB-RW-1014-G-S-	15_201802 IB-RW-15-G-S-	16_201802 OB-RW-16-G-S-	17_201802 OB-RW-17-G-S-	18_201802 SP-RW-18-G-S-	19_201802 SP-RW-19-G-S-	20_201802 SP-RW-20-G-S-	21_201802 LE-RW-21-G-S-	
				Sample ID	20180227	M-20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	20180227	
				Sample Date	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	2/27/2018	
				Depth	1 m	1.5 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	1 m	
				Sample Type	N	FD	N	N	N	FD	N	N	N	N	N	N	N	
				Matrix	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	
				X	-118.28072	-118.28072	-118.22847	-118.21650	-118.23087	-118.23087	-118.19680	-118.22097	-118.22097	-118.18124	-118.13152	-118.15729	-118.19322	
				Y	33.71243	33.71243	33.76838	33.75379	33.74896	33.74896	33.74203	33.73140	33.73140	33.75387	33.73667	33.72546	33.75647	
		Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration															
PCB-105	SW8270CSIM	--	--	0.00047 U	--	0.00044 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	
PCB-110	SW8270CSIM	--	--	0.00034 U	--	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	0.00032 U	
PCB-114	SW8270CSIM	--	--	0.00047 U	--	0.00044 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	
PCB-118	SW8270CSIM	--	--	0.00050 U	--	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	0.00048 U	
PCB-119	SW8270CSIM	--	--	0.00017 U	--	0.00016 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	0.00017 U	
PCB-123	SW8270CSIM	--	--	0.00083 U	--	0.00079 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	
PCB-126	SW8270CSIM	--	--	0.00025 U	--	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	
PCB-128	SW8270CSIM	--	--	0.00043 U	--	0.00041 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	0.00042 U	
PCB-132/153	SW8270CSIM	--	--	0.00069 U	--	0.00066 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	0.00067 U	
PCB-138/158	SW8270CSIM	--	--	0.00060 U	--	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	0.00057 U	
PCB-149	SW8270CSIM	--	--	0.00023 U	--	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	0.00022 U	
PCB-151	SW8270CSIM	--	--	0.00040 U	--	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	
PCB-156	SW8270CSIM	--	--	0.00040 U	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	
PCB-157	SW8270CSIM	--	--	0.00041 U	--	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	
PCB-167	SW8270CSIM	--	--	0.00081 U	--	0.00077 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	0.00078 U	
PCB-168	SW8270CSIM	--	--	0.00052 U	--	0.00049 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	
PCB-169	SW8270CSIM	--	--	0.00040 U	--	0.00038 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	0.00039 U	
PCB-170	SW8270CSIM	--	--	0.00042 U	--	0.00040 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	
PCB-177	SW8270CSIM	--	--	0.00028 U	--	0.00026 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	0.00027 U	
PCB-180	SW8270CSIM	--	--	0.00060 U	--	0.00057 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	0.00058 U	
PCB-183	SW8270CSIM	--	--	0.00052 U	--	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	
PCB-187	SW8270CSIM	--	--	0.00043 U	--	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	
PCB-189	SW8270CSIM	--	--	0.00049 U	--	0.00046 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U	
PCB-194	SW8270CSIM	--	--	0.00025 U	--	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	0.00024 U	
PCB-201	SW8270CSIM	--	--	0.00047 U	--	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	0.00045 U	
PCB-206	SW8270CSIM	--	--	0.00043 U	--	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	
Total PCB Congener – Low Resolution (U = 0)				--	0.00017	0.03	0.000415 U	--	0.000395 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	0.00040 U	

Table 8
Winter 2018 Water Quality Chemistry Results

Area Location ID Sample ID Sample Date Depth Sample Type Matrix X Y				Los Angeles River Estuary LE-RW- 22_201802 LE-RW-22-G-S- 20180227 2/27/2018 1 m N WO -118.20190 33.76081	Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
	Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration				
Conventional Parameters (mg/L)							
Total suspended solids (surface)	SM2540D	--	--	17	22	--	--
Total suspended solids (middle)*	SM2540D	--	--	--	20	--	--
Total suspended solids (bottom)*	SM2540D	--	--	--	20	--	--
Metals (µg/L)							
Cadmium	E1640	--	--	0.129	22	--	--
Chromium	E1640	--	--	1.02 J	22	--	--
Copper	E1640	--	--	11.7 J	22	--	--
Lead	E1640	--	--	2.54	22	--	--
Mercury	E1631E	--	--	0.00527	22	--	--
Zinc	E1640	--	--	63.2 J	22	--	--
Metals, Dissolved (µg/L)							
Cadmium	E1640	--	9.3	0.111	22		0%
Chromium	E1640	--	50	0.729	22		0%
Copper	E1640	--	3.1	8.42	22	4	18%
Lead	E1640	--	8.1	0.490	22		0%
Mercury	E1631E	0.051	0.94	0.00149	22		0%
Zinc	E1640	--	81	57.0	22		0%
Pesticides (µg/L)							
2,4'-DDD (o,p'-DDD)	SW8081A	--	--	0.00050 U	22	--	--
2,4'-DDE (o,p'-DDE)	SW8081A	--	--	0.00050 U	22	--	--
2,4'-DDT (o,p'-DDT)	SW8081A	--	--	0.0010 U	22	--	--
4,4'-DDD (p,p'-DDD)	SW8081A	--	--	0.00050 U	22	--	--
4,4'-DDE (p,p'-DDE)	SW8081A	--	--	0.00050 U	22	--	--
4,4'-DDT (p,p'-DDT)	SW8081A	0.00059	0.001	0.00050 U	22	2	9%
Chlordane, alpha- (Chlordane, cis-)	SW8081A	--	--	0.0017 U	22	--	--
Chlordane, gamma- (Chlordane, trans-)	SW8081A	--	--	0.0017 U	22	--	--
Dieldrin	SW8081A	0.00014	0.0019	0.00050 U	22		0%
Nonachlor, cis-	SW8081A	--	--	0.0017 U	22	--	--
Nonachlor, trans-	SW8081A	--	--	0.0017 U	22	--	--
Oxychlordane	SW8081A	--	--	0.0017 U	22	--	--
Toxaphene	SW8081A	--	0.0002	0.025 U	22	--	--
Total Chlordane (U = 0)	--	0.00059	0.004	0.00085 U	22	0	0%
Total DDx (U = 0)	--	0.00059	0.001	0.00050 U	22	14	64%
PCB Congeners – Low Resolution (µg/L)							
PCB-018	SW8270CSIM	--	--	0.00044 U	22	--	--
PCB-028	SW8270CSIM	--	--	0.00051 U	22	--	--
PCB-037	SW8270CSIM	--	--	0.00029 U	22	--	--
PCB-044	SW8270CSIM	--	--	0.00068 U	22	--	--
PCB-049	SW8270CSIM	--	--	0.00051 U	22	--	--
PCB-052	SW8270CSIM	--	--	0.00053 U	22	--	--
PCB-066	SW8270CSIM	--	--	0.00039 U	22	--	--
PCB-070	SW8270CSIM	--	--	0.00040 U	22	--	--
PCB-074	SW8270CSIM	--	--	0.00047 U	22	--	--
PCB-077	SW8270CSIM	--	--	0.00060 U	22	--	--
PCB-081	SW8270CSIM	--	--	0.00047 U	22	--	--
PCB-087	SW8270CSIM	--	--	0.00068 U	22	--	--
PCB-099	SW8270CSIM	--	--	0.00059 U	22	--	--
PCB-101	SW8270CSIM	--	--	0.00048 U	22	--	--

Table 8
Winter 2018 Water Quality Chemistry Results

Area Location ID Sample ID Sample Date Depth Sample Type Matrix X Y					Number Analyzed ¹	WQ Exceedances ¹	Percentage of Exceedance ¹
	Method	Criteria for Protection of Human Health Organisms Only	California Toxics Rule Saltwater Continuous Concentration	Los Angeles River Estuary LE-RW- 22_201802 LE-RW-22-G-S- 20180227 2/27/2018 1 m N WO -118.20190 33.76081			
PCB-105	SW8270CSIM	--	--	0.00045 U	22	--	--
PCB-110	SW8270CSIM	--	--	0.00032 U	22	--	--
PCB-114	SW8270CSIM	--	--	0.00045 U	22	--	--
PCB-118	SW8270CSIM	--	--	0.00048 U	22	--	--
PCB-119	SW8270CSIM	--	--	0.00017 U	22	--	--
PCB-123	SW8270CSIM	--	--	0.00080 U	22	--	--
PCB-126	SW8270CSIM	--	--	0.00024 U	22	--	--
PCB-128	SW8270CSIM	--	--	0.00042 U	22	--	--
PCB-132/153	SW8270CSIM	--	--	0.00067 U	22	--	--
PCB-138/158	SW8270CSIM	--	--	0.00057 U	22	--	--
PCB-149	SW8270CSIM	--	--	0.00022 U	22	--	--
PCB-151	SW8270CSIM	--	--	0.00039 U	22	--	--
PCB-156	SW8270CSIM	--	--	0.00039 U	22	--	--
PCB-157	SW8270CSIM	--	--	0.00039 U	22	--	--
PCB-167	SW8270CSIM	--	--	0.00078 U	22	--	--
PCB-168	SW8270CSIM	--	--	0.00050 U	22	--	--
PCB-169	SW8270CSIM	--	--	0.00039 U	22	--	--
PCB-170	SW8270CSIM	--	--	0.00041 U	22	--	--
PCB-177	SW8270CSIM	--	--	0.00027 U	22	--	--
PCB-180	SW8270CSIM	--	--	0.00058 U	22	--	--
PCB-183	SW8270CSIM	--	--	0.00050 U	22	--	--
PCB-187	SW8270CSIM	--	--	0.00041 U	22	--	--
PCB-189	SW8270CSIM	--	--	0.00047 U	22	--	--
PCB-194	SW8270CSIM	--	--	0.00024 U	22	--	--
PCB-201	SW8270CSIM	--	--	0.00045 U	22	--	--
PCB-206	SW8270CSIM	--	--	0.00041 U	22	--	--
Total PCB Congener – Low Resolution (U = 0)	--	0.00017	0.03	0.00040 U	22	0	0%

Table 8
Winter 2018 Water Quality Chemistry Results

Notes:

* The total suspended solid results for samples collected from mid-depth and bottom depth are respectively labeled as "-M-" and "-B-" preceding the sample ID date. They are not direct results of the surface sample IDs indicated in the column headers in this spreadsheet.

1. Number analyzed and WQ exceedance counts do not include samples that were analyzed for field or laboratory quality control purposes (e.g., field duplicates). WQ exceedance counts do not include non-detect results above the screening levels.

Horizontal coordinate datum is GCS North American Datum 1983 latitude/longitude.

All undetect results are reported at the method detection limit.

Gamma chlordane and trans-chlordane are synonymous and refer to CAS RN 5103-74-2.

Totals (U=0) are calculated as the sum of all detected results. If all results are not detected, half of the highest reporting limit value is reported as the sum.

Total chlordane is the sum of alpha-chlordane, beta-chlordane, gamma-chlordane, cis-nonachlor, trans-nonachlor, and oxychlordane.

Total DDx is the sum of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT 2,4'-DDD, 2,4'-DDE, and 2,4'-DDT, if measured.

Total PCB congeners is the sum of all PCB congeners listed in this table.

USEPA Stage 2A data validation was completed by Anchor QEA.

Detected concentration is greater than California Toxics Rule Criteria for Protection of Human Health Organisms Only

Detected concentration is greater than California Toxics Rule Saltwater Continuous Concentration screening level

Italics: non-detected concentration is above one or more identified screening levels

Bold: detected result

--: results not reported or not applicable

µg/L: microgram per liter

FD: field duplicate

J: estimated value

m: meter

mg/L: milligram per liter

N: normal environmental sample

PCB: polychlorinated biphenyl

U: compound analyzed but not detected above detection limit

USEPA: U.S. Environmental Protection Agency

WO: ocean water matrix

WQ: water quality

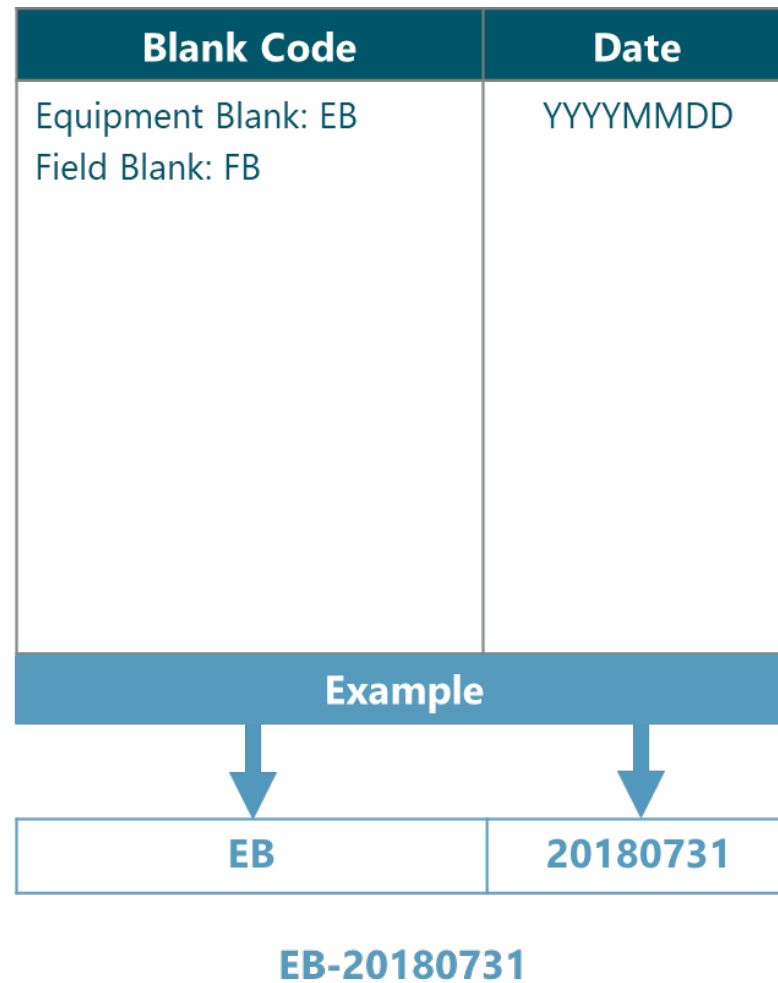
Figures

Waterbody Code	Media Code	Station Number	Sample Depth	Date
Outer Harbor LA: OA Outer Harbor LB: OB Inner Harbor-LA: IA Consolidated Slip: CS Fish Harbor: FH Cabrillo Marina: CM Cabrillo Beach: CB San Pedro Bay: SP Dominguez Channel: DC Cabrillo Pier: CP	Receiving Water: RW Surface Sediment: SS Field Blank: FB	01, 02, etc.	Water: Surface: S Mid-depth: M Bottom: B Sediment: 0-15 cm, 15-60 cm, etc.	YYYYMMDD
Example				
OA	SS	09	0-5	20180731
OA-SS-09-0-5-20180731				

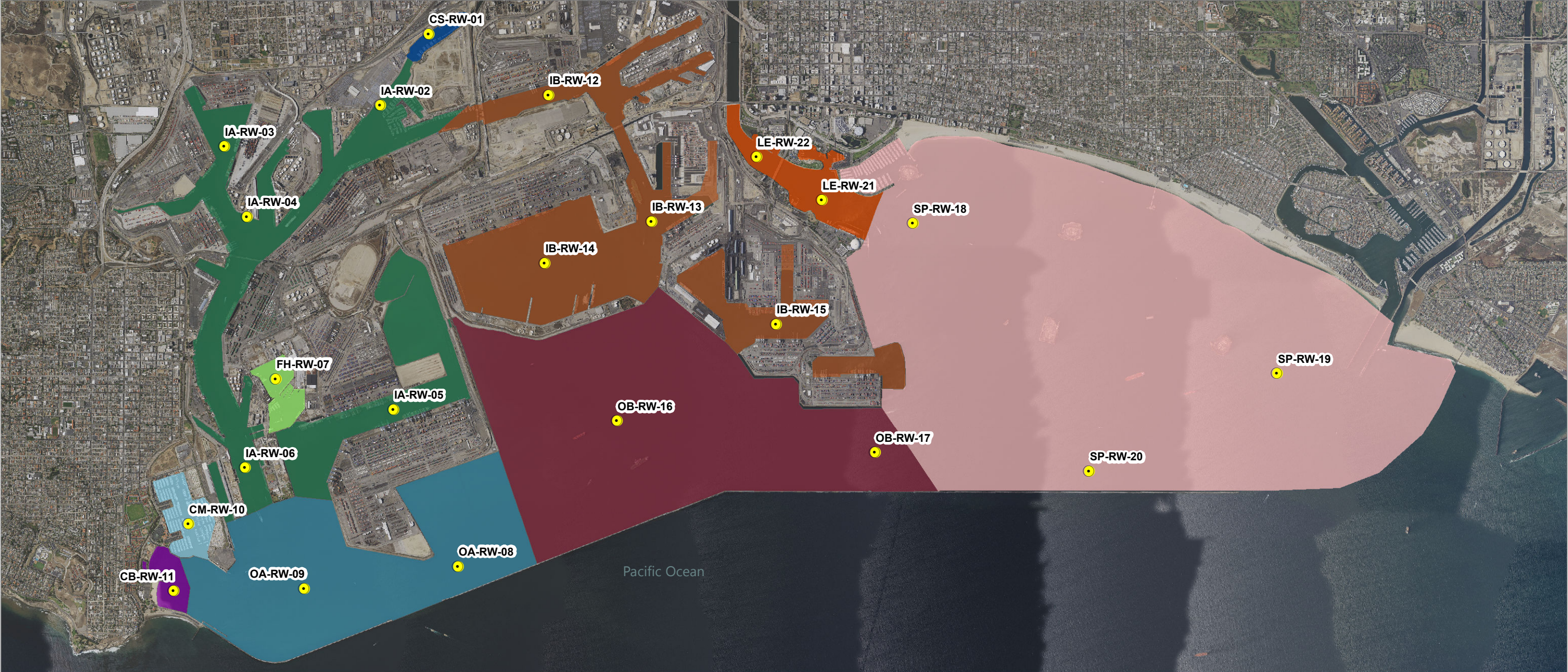
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Waterbody Code	Media Code	10	Station Number	Sample Depth	Date
Outer Harbor LA: OA Outer Harbor LB: OB Inner Harbor-LA: IA Consolidated Slip: CS Fish Harbor: FH Cabrillo Marina: CM Cabrillo Beach: CB San Pedro Bay: SP Dominguez Channel: DC Cabrillo Pier: CP	Receiving Water: RW Surface Sediment: SS Fish Fillet skin off (muscle): FF Whole Body: WO	Indicates Field Duplicate	01, 02, etc.	Water: Surface: S Mid-depth: M Bottom: B Sediment: 0-15 cm, 15-60 cm, etc.	YYYYMMDD
Example					
OA	RW	10	09	S	20180731
OA-RW-1009-S-20180731					

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● Summer 2017

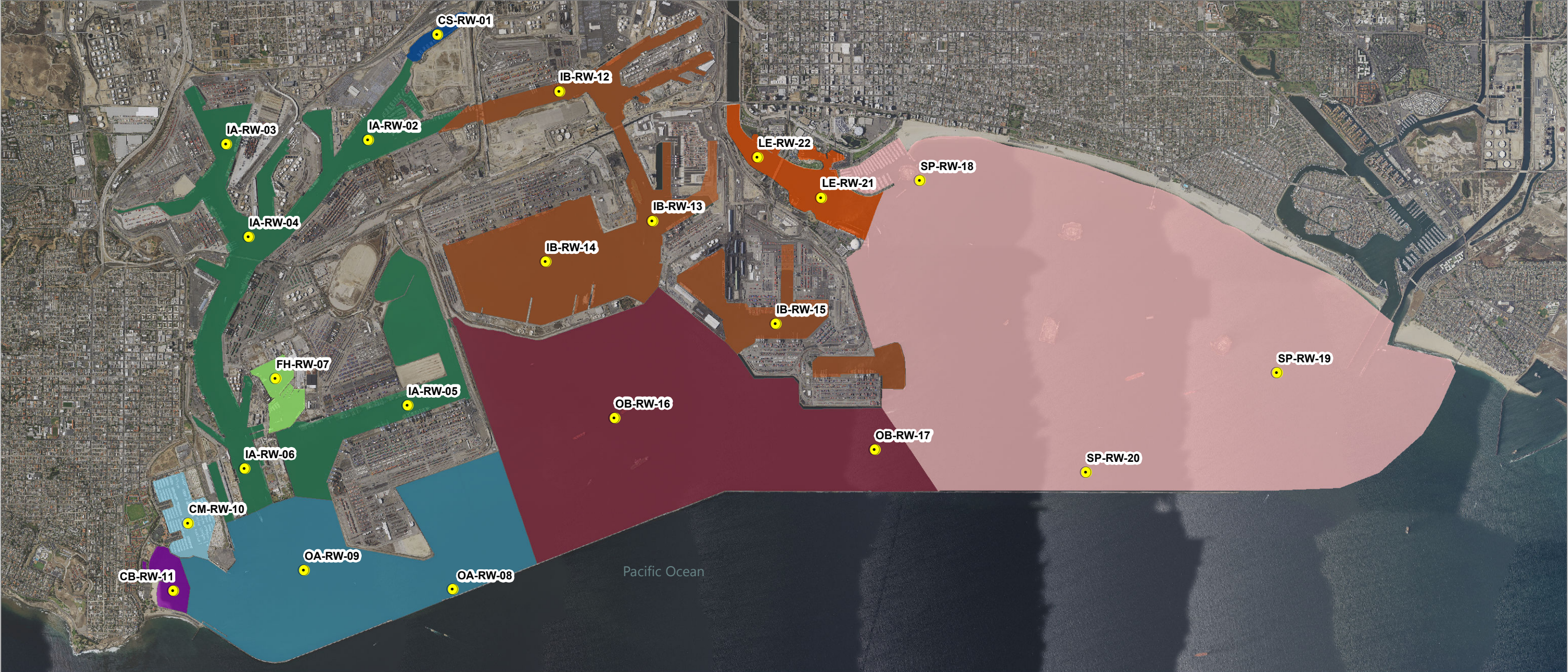
TMDL Waterbodies

East San Pedro Bay	Los Angeles Inner Harbor
Los Angeles Harbor - Fish Harbor	Los Angeles Outer Harbor (inside breakwater)
Los Angeles Harbor - Cabrillo Marina	Los Angeles River Estuary (Queensway Bay)
Los Angeles Harbor - Consolidated Slip	Long Beach Inner Harbor
Los Angeles Harbor - Inner Cabrillo Beach Area	Long Beach Outer Harbor (inside breakwater)

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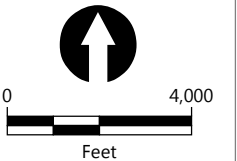


Figure 4
TMDL Compliance Monitoring Receiving Water Locations – Summer 2017
2017/18 Annual Report
Greater Los Angeles and Long Beach Harbor Waters



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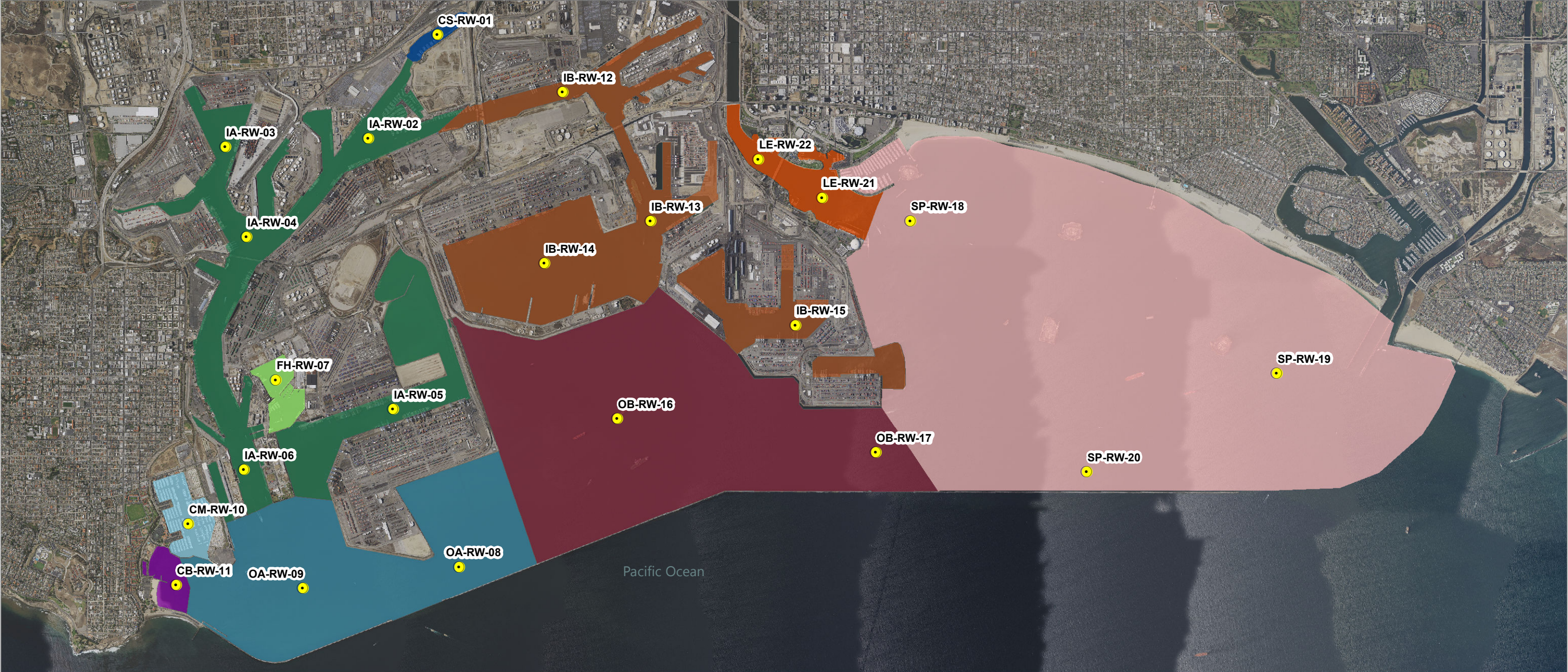
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|-------------|--|--|
| ● Fall 2017 | TMDL Waterbodies | ■ Los Angeles Inner Harbor |
| | ■ East San Pedro Bay | ■ Los Angeles Outer Harbor (inside breakwater) |
| | ■ Los Angeles Harbor - Fish Harbor | ■ Los Angeles River Estuary (Queensway Bay) |
| | ■ Los Angeles Harbor - Cabrillo Marina | ■ Long Beach Inner Harbor |
| | ■ Los Angeles Harbor - Consolidated Slip | ■ Long Beach Outer Harbor (inside breakwater) |
| | ■ Los Angeles Harbor - Inner Cabrillo Beach Area | |



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Figure 5
TMDL Compliance Monitoring Receiving Water Locations – Fall 2017
2017/18 Annual Report
Greater Los Angeles and Long Beach Harbor Waters



LEGEND:

● Winter 2018

TMDL Waterbodies

East San Pedro Bay	Los Angeles Inner Harbor
Los Angeles Harbor - Fish Harbor	Los Angeles Outer Harbor (inside breakwater)
Los Angeles Harbor - Cabrillo Marina	Los Angeles River Estuary (Queensway Bay)
Los Angeles Harbor - Consolidated Slip	Long Beach Inner Harbor
Los Angeles Harbor - Inner Cabrillo Beach Area	Long Beach Outer Harbor (inside breakwater)

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Figure 6
TMDL Compliance Monitoring Receiving Water Locations – Winter 2018
2017/18 Annual Report
Greater Los Angeles and Long Beach Harbor Waters

Appendix A

National Weather Service Observation Reports



02

US Dept of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
California Nevada River Forecast Center
3310 El Camino Avenue, Room 227
Sacramento, CA 95821-6373

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DW3849 Rancho Palos Verdes, CA. D3849 (APRSWXNET/CWOP)

Elev: 722 ft.; Lat/Lon: 33.79080/-118.38010

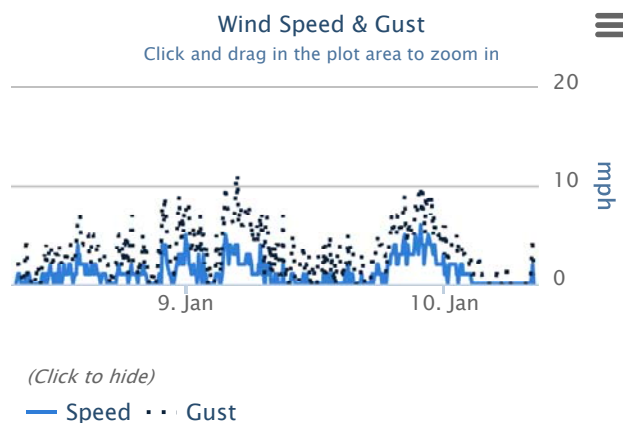
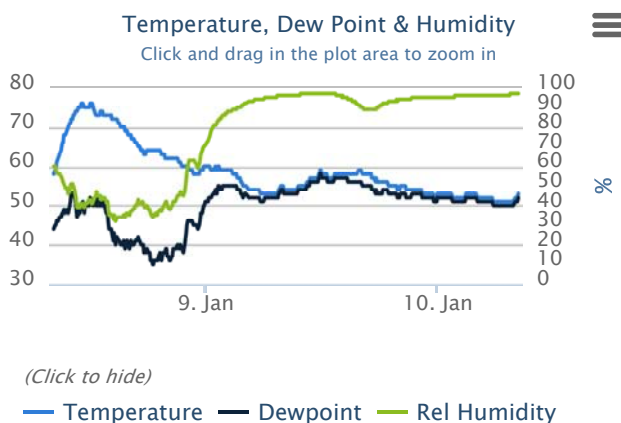
Current Time: Jan 10 8:19 am PST

[Get Yearly Precip Total](#)[Get Water Year Precip Total](#)

← swipe

Current Weather Hazards For This Area:[Beach Hazards Statement](#)

← swipe



Date (PST)	Temp (F)	Dew (F)	Relative PointHumidity (%)	Wind Direction	Wind Speed (MPH)	Station Pressure (inches)	Sea Level Pressure (mb)	Altimeter Setting (inches)	Solar Radiation (W/m ²)	Solar Pct of psbl	24 Hour Precip Since Mid.	Precip (inches)
10 Jan 8:11 am	53	52	97		CALM	29.31	1019.1	30.09	33	19%	0.04	0.03
10 Jan 8:05 am	52	51	97	SW	2G4	29.31	1019.2	30.09	37	25%	0.04	0.03
10 Jan 8:02 am	52	51	97	SW	1G4	29.31	1019.2	30.09	37	27%	0.04	0.03
10 Jan 7:53 am	52	51	97		CALM	29.30	1018.8	30.08	44	45%	0.04	0.03
10 Jan 7:39 am	51	50	97		CALM	29.31	1019.2	30.09	11	31%	0.03	0.02
10 Jan 7:35 am	51	50	97		CALM	29.30	1018.9	30.08	11	65%	0.03	0.02
10 Jan 7:30 am	51	50	97		CALM	29.31	1019.2	30.09	11	--	0.03	0.02
10 Jan 7:26 am	51	50	97		CALM	29.30	1018.9	30.08	12	--	0.02	0.01
10 Jan 7:21 am	51	50	97		CALM	29.30	1018.9	30.08	16	--	0.02	0.01
10 Jan 7:17 am	51	50	96		CALM	29.29	1018.6	30.07	14	--	0.02	0.01
10 Jan 7:12 am	51	50	96		CALM	29.30	1018.9	30.08	13	--	0.02	0.01

10 Jan 7:08 am	51	50	96		CALM	29.29	1018.6	30.07	11	--	0.02	0.01
10 Jan 7:03 am	51	50	96		CALM	29.29	1018.6	30.07	1	--	0.02	0.01
10 Jan 6:59 am	51	50	96		CALM	29.29	1018.6	30.07	0	--	0.02	0.01
10 Jan 6:54 am	51	50	96		CALM	29.30	1018.9	30.08	0	--	0.03	0.01
10 Jan 6:50 am	51	50	96		CALM	29.29	1018.6	30.07	0	--	0.03	0.01
10 Jan 6:44 am	51	50	96		CALM	29.30	1018.9	30.08	0	--	0.05	0.01
10 Jan 6:36 am	51	50	96		CALM	29.30	1018.9	30.08	0	--	0.05	0.01
10 Jan 6:32 am	51	50	96		CALM	29.29	1018.6	30.07	0	--	0.05	0.01
10 Jan 6:27 am	51	50	96		CALM	29.30	1018.9	30.08	0	--	0.05	0.01
10 Jan 6:23 am	51	50	96		CALM	29.29	1018.6	30.07	0	--	0.05	0.01
10 Jan 6:14 am	51	50	96		CALM	29.29	1018.6	30.07	0	--	0.08	0.01
10 Jan 6:08 am	51	50	96		CALM	29.29	1018.6	30.07	0	--	0.09	0.01
10 Jan 6:05 am	51	50	96		CALM	29.28	1018.2	30.06	0	--	0.10	0.01
10 Jan 5:51 am	51	50	96		CALM	29.29	1018.6	30.07	0	--	0.17	0.01
10 Jan 5:47 am	51	50	96		CALM	29.28	1018.2	30.06	0	--	0.19	0.01
10 Jan 5:42 am	51	50	96		CALM	29.29	1018.6	30.07	0	--	0.21	0.01
10 Jan 5:38 am	51	50	96		CALM	29.28	1018.2	30.06	0	--	0.23	0.01
10 Jan 5:29 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.24	0.01
10 Jan 5:20 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.26	0.01
10 Jan 5:11 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.29	0.01
10 Jan 5:06 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.29	0.01
10 Jan 5:02 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.31	0.01
10 Jan 4:53 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.35	0.01
10 Jan 4:48 am	52	51	96		CALM	29.29	1018.5	30.07	0	--	0.43	0.01
10 Jan 4:44 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.49	0.01
10 Jan 4:39 am	52	51	96		CALM	29.29	1018.5	30.07	0	--	0.54	0.01
10 Jan 4:35 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.58	0.01
10 Jan 4:30 am	52	51	96		CALM	29.29	1018.5	30.07	0	--	0.63	0.01
10 Jan 4:26 am	52	51	96		CALM	29.28	1018.2	30.06	0	--	0.65	0.01
10 Jan 4:21 am	52	51	96		CALM	29.29	1018.5	30.07	0	--	0.67	0.01
10 Jan 4:17 am	52	51	96		CALM	29.29	1018.5	30.07	0	--	0.70	0.01
10 Jan 4:08 am	52	51	96		CALM	29.29	1018.5	30.07	0	--	0.74	0.01
10 Jan 4:03 am	52	51	96		CALM	29.30	1018.8	30.08	0	--	0.75	0.01
10 Jan 3:59 am	52	51	96		CALM	29.29	1018.5	30.07	0	--	0.77	0.01
10 Jan 3:50 am	53	52	96		CALM	29.29	1018.5	30.07	0	--	0.83	0.01
10 Jan 3:41 am	53	52	96		CALM	29.30	1018.8	30.08	0	--	0.85	0.01
10 Jan 3:32 am	53	52	96		CALM	29.30	1018.8	30.08	0	--	0.87	0.01
10 Jan 3:23 am	53	52	96		CALM	29.31	1019.1	30.09	0	--	0.90	0.01
10 Jan 3:18 am	53	52	96		CALM	29.32	1019.5	30.10	0	--	0.94	0.01
10 Jan 3:14 am	53	52	96		CALM	29.31	1019.1	30.09	0	--	0.97	0.01
10 Jan 3:08 am	53	52	96		CALM	29.32	1019.5	30.10	0	--	1.03	0.01
10 Jan 2:56 am	53	52	96		CALM	29.31	1019.1	30.09	0	--	1.07	0.01
10 Jan 2:51 am	53	52	96		CALM	29.32	1019.5	30.10	0	--	1.09	0.01
10 Jan 2:47 am	53	52	96		CALM	29.31	1019.1	30.09	0	--	1.09	0.01
10 Jan 2:41 am	52	51	96		CALM	29.32	1019.5	30.10	0	--	1.10	0.01
10 Jan 2:38 am	52	51	96		CALM	29.32	1019.5	30.10	0	--	1.10	0.01
10 Jan 2:33 am	52	51	96		CALM	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 2:29 am	52	51	96		CALM	29.31	1019.2	30.09	0	--	1.11	0.01
10 Jan 2:20 am	52	51	96	SW	1G3	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 2:11 am	52	51	96	SW	1	29.31	1019.2	30.09	0	--	1.11	0.01
10 Jan 2:06 am	52	51	96	SW	1	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 2:02 am	52	51	96	SW	1	29.31	1019.2	30.09	0	--	1.11	0.01

10 Jan 1:57 am	52	51	96	SW	1	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 1:53 am	52	51	96	SW	1	29.31	1019.2	30.09	0	--	1.11	0.01
10 Jan 1:48 am	52	51	96	SW	1G3	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 1:44 am	52	51	96	SW	1G3	29.31	1019.2	30.09	0	--	1.11	0.01
10 Jan 1:39 am	52	51	96	SW	1G4	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 1:35 am	52	51	95	SW	2G4	29.31	1019.2	30.09	0	--	1.11	0.01
10 Jan 1:29 am	52	51	95	SW	1G3	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 1:26 am	52	51	95	SW	2G3	29.31	1019.2	30.09	0	--	1.11	0.01
10 Jan 1:17 am	53	52	95	SW	1G3	29.31	1019.1	30.09	0	--	1.11	0.01
10 Jan 1:12 am	53	52	95		CALM	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 1:08 am	53	52	95	SW	1G3	29.31	1019.1	30.09	0	--	1.11	0.01
10 Jan 1:03 am	53	52	95	SW	1G5	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 12:59 am	53	52	95	SW	2G4	29.32	1019.5	30.10	0	--	1.11	0.01
10 Jan 12:50 am	53	52	95	SW	2G4	29.33	1019.8	30.11	0	--	1.11	0.01
10 Jan 12:36 am	53	52	95	SW	2G4	29.33	1019.8	30.11	0	--	1.10	0.00
10 Jan 12:32 am	53	52	95	SW	2G4	29.33	1019.8	30.11	0	--	1.10	0.00
10 Jan 12:23 am	53	52	95	SW	2G4	29.32	1019.5	30.10	0	--	1.10	0.00
10 Jan 12:14 am	53	52	95		CALM	29.32	1019.5	30.10	0	--	1.10	0.00
09 Jan 11:59 pm	53	52	95	SW	2G6	29.33	1019.8	30.11	0	--	1.10	0.00
09 Jan 11:56 pm	53	52	95	SW	1G3	29.32	1019.5	30.10	0	--	1.10	1.10
09 Jan 11:50 pm	53	52	95	SW	3G6	29.33	1019.8	30.11	0	--	1.10	0.00
09 Jan 11:47 pm	52	51	95	SW	2G5	29.33	1019.9	30.11	0	--	1.10	1.10
09 Jan 11:38 pm	52	51	95	SW	2G5	29.33	1019.9	30.11	0	--	1.10	1.10
09 Jan 11:29 pm	52	51	95	SW	2G4	29.33	1019.9	30.11	0	--	1.10	1.10
09 Jan 11:24 pm	53	52	95	SW	2G5	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 11:20 pm	53	52	95	SW	2G5	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 11:15 pm	53	52	95	SW	2G6	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 11:11 pm	53	52	95	SW	2G6	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 11:06 pm	53	52	95	WSW	3G6	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 11:02 pm	53	52	95	WSW	4G5	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 10:57 pm	53	52	95	SW	4G7	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 10:53 pm	53	52	95	WSW	3G5	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 10:44 pm	53	52	95	SW	4G9	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 10:39 pm	53	52	95	SW	4G7	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 10:26 pm	53	52	95	SW	5G9	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 10:17 pm	53	52	95	SW	4G8	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 10:12 pm	54	53	95	SW	4G9	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 10:08 pm	54	53	95	SW	3G5	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 10:02 pm	54	53	95	SW	2G7	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 9:59 pm	54	53	95	SW	4G7	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 9:54 pm	54	53	95	SW	4G10	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 9:50 pm	54	53	95	SW	4G7	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 9:44 pm	54	53	95	SW	6G10	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 9:32 pm	54	53	95	SW	3G9	29.33	1019.8	30.11	0	--	1.10	1.10
09 Jan 9:23 pm	54	53	95	SW	4G7	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 9:14 pm	54	53	95	SW	5G8	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 9:05 pm	54	52	94	SW	3G5	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 8:56 pm	54	52	94	SW	3G6	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 8:47 pm	54	52	94	SW	3G5	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 8:41 pm	54	52	94	SW	3G6	29.36	1020.8	30.14	0	--	1.10	1.10
09 Jan 8:38 pm	54	52	94	SW	3G5	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 8:33 pm	55	53	94	SW	4G6	29.36	1020.7	30.14	0	--	1.10	1.10

09 Jan 8:29 pm	55	53	94	SW	2G4	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 8:24 pm	55	53	94	SW	2G6	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 8:20 pm	55	53	94	SW	4G6	29.34	1020.0	30.12	0	--	1.10	1.10
09 Jan 8:15 pm	55	53	94	SW	5G9	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 8:05 pm	55	53	94	WSW	4G7	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 8:02 pm	55	53	94	SW	3G7	29.34	1020.0	30.12	0	--	1.10	1.10
09 Jan 7:57 pm	54	52	94	SW	3G6	29.35	1020.4	30.13	0	--	1.10	1.10
09 Jan 7:53 pm	54	52	94	SW	3G5	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 7:44 pm	54	52	93	SW	3G6	29.34	1020.1	30.12	0	--	1.10	1.10
09 Jan 7:39 pm	55	53	94	SW	2G7	29.34	1020.0	30.12	0	--	1.10	1.10
09 Jan 7:35 pm	55	53	93	SW	3G7	29.34	1020.0	30.12	0	--	1.10	1.10
09 Jan 7:30 pm	55	53	93	WSW	2G5	29.34	1020.0	30.12	0	--	1.10	1.10
09 Jan 7:26 pm	55	53	93	SW	4G5	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 7:17 pm	55	53	93	SW	4G6	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 7:08 pm	55	53	93	SW	3G5	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 7:03 pm	55	53	93	SW	3G7	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 6:59 pm	55	53	93	WSW	3G6	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 6:54 pm	55	53	93	WSW	2G4	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 6:50 pm	55	53	93	WSW	2G4	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 6:41 pm	56	54	92	WSW	2G3	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 6:32 pm	56	54	92		CALM	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 6:27 pm	56	54	92		CALM	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 6:23 pm	56	54	92	WSW	1G3	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 6:18 pm	56	54	92		CALM	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 6:14 pm	56	54	92	WSW	1G3	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 6:09 pm	56	53	91		CALM	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 6:05 pm	56	53	91	WSW	1G4	29.31	1019.0	30.09	0	--	1.10	1.10
09 Jan 5:56 pm	56	53	91	WSW	1G4	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 5:47 pm	56	53	90	WSW	2G5	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 5:42 pm	56	53	90	WSW	2G4	29.33	1019.7	30.11	0	--	1.10	1.10
09 Jan 5:38 pm	56	53	90	WSW	1G4	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 5:33 pm	57	54	89	WSW	1G3	29.33	1019.6	30.11	0	--	1.10	1.10
09 Jan 5:29 pm	56	53	89	WSW	1	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 5:20 pm	57	54	89		CALM	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 5:15 pm	57	54	89	WSW	1G3	29.33	1019.6	30.11	0	--	1.10	1.10
09 Jan 5:05 pm	57	54	89		CALM	29.32	1019.3	30.10	0	--	1.10	1.10
09 Jan 5:02 pm	58	55	89		CALM	29.32	1019.2	30.10	0	--	1.10	1.10
09 Jan 4:53 pm	58	55	89		CALM	29.32	1019.2	30.10	7	5%	1.10	1.10
09 Jan 4:48 pm	58	55	89		CALM	29.32	1019.2	30.10	15	9%	1.10	1.10
09 Jan 4:44 pm	58	55	89		CALM	29.31	1018.9	30.09	19	10%	1.10	1.10
09 Jan 4:35 pm	58	55	89		CALM	29.31	1018.9	30.09	28	13%	1.10	1.10
09 Jan 4:26 pm	58	55	89		CALM	29.30	1018.5	30.08	35	14%	1.10	1.10
09 Jan 4:21 pm	58	55	89		CALM	29.30	1018.5	30.08	44	16%	1.10	1.10
09 Jan 4:17 pm	58	55	89	WSW	1G3	29.29	1018.2	30.07	46	16%	1.10	1.10
09 Jan 4:08 pm	58	55	90		CALM	29.30	1018.5	30.08	62	19%	1.10	1.10
09 Jan 3:59 pm	59	56	90		CALM	29.30	1018.5	30.08	74	20%	1.10	1.10
09 Jan 3:53 pm	59	56	91		CALM	29.31	1018.8	30.09	101	26%	1.10	1.10
09 Jan 3:50 pm	59	56	91		CALM	29.30	1018.5	30.08	104	26%	1.10	1.10
09 Jan 3:45 pm	59	56	91		CALM	29.30	1018.5	30.08	101	24%	1.10	1.10
09 Jan 3:32 pm	58	56	92		CALM	29.28	1017.9	30.06	134	29%	1.10	1.10
09 Jan 3:27 pm	58	56	92	WSW	1G4	29.30	1018.5	30.08	136	28%	1.10	1.10
09 Jan 3:23 pm	58	56	93	WSW	1G4	29.29	1018.2	30.07	120	24%	1.10	1.10

09 Jan 3:18 pm	58	56	93		CALM	29.31	1018.9	30.09	197	39%	1.10	1.10
09 Jan 3:14 pm	58	56	93	WSW	1G4	29.31	1018.9	30.09	179	34%	1.10	1.10
09 Jan 3:09 pm	58	56	93		CALM	29.31	1018.9	30.09	130	24%	1.10	1.10
09 Jan 3:05 pm	58	56	93	WSW	1	29.30	1018.5	30.08	121	22%	1.10	1.10
09 Jan 3:00 pm	58	56	94	WSW	2G5	29.31	1018.9	30.09	125	22%	1.10	1.10
09 Jan 2:56 pm	58	56	94	WSW	1G3	29.30	1018.5	30.08	128	22%	1.10	1.10
09 Jan 2:51 pm	58	56	94		CALM	29.29	1018.2	30.07	158	27%	1.10	1.10
09 Jan 2:47 pm	58	56	94	NNW	1	29.28	1017.9	30.06	141	23%	1.10	1.10
09 Jan 2:38 pm	58	56	94		CALM	29.29	1018.2	30.07	113	18%	1.10	1.10
09 Jan 2:33 pm	58	57	95		CALM	29.30	1018.5	30.08	117	18%	1.10	1.10
09 Jan 2:29 pm	58	57	95		CALM	29.30	1018.5	30.08	125	19%	1.10	1.10
09 Jan 2:20 pm	58	57	95		CALM	29.31	1018.9	30.09	130	19%	1.10	1.10
09 Jan 2:15 pm	58	57	95		CALM	29.32	1019.2	30.10	122	18%	1.10	1.10
09 Jan 2:11 pm	58	57	95		CALM	29.32	1019.2	30.10	123	18%	1.10	1.10
09 Jan 2:05 pm	58	57	96		CALM	29.32	1019.2	30.10	122	17%	1.10	1.10
09 Jan 2:02 pm	58	57	95		CALM	29.32	1019.2	30.10	121	17%	1.10	1.10
09 Jan 1:53 pm	58	57	96		CALM	29.32	1019.2	30.10	155	22%	1.10	1.10
09 Jan 1:48 pm	58	57	96		CALM	29.33	1019.6	30.11	157	22%	1.10	1.10
09 Jan 1:44 pm	58	57	96		CALM	29.32	1019.2	30.10	132	18%	1.10	1.10
09 Jan 1:39 pm	58	57	96		CALM	29.33	1019.6	30.11	138	19%	1.10	1.10
09 Jan 1:35 pm	58	57	96		CALM	29.32	1019.2	30.10	148	20%	1.10	1.10
09 Jan 1:30 pm	58	57	96	NNW	1G3	29.33	1019.6	30.11	194	26%	1.10	1.10
09 Jan 1:26 pm	58	57	96		CALM	29.32	1019.2	30.10	204	27%	1.10	1.10
09 Jan 1:21 pm	58	57	97		CALM	29.33	1019.6	30.11	196	26%	1.10	1.10
09 Jan 1:17 pm	58	57	97	NNW	1G4	29.33	1019.6	30.11	188	24%	1.10	1.10
09 Jan 1:08 pm	57	56	97		CALM	29.32	1019.3	30.10	248	32%	1.10	1.10
09 Jan 12:59 pm	57	56	97		CALM	29.32	1019.3	30.10	330	42%	1.10	1.10
09 Jan 12:54 pm	57	56	97	NNW	1G4	29.33	1019.6	30.11	197	25%	1.10	1.10
09 Jan 12:50 pm	57	56	97		CALM	29.32	1019.3	30.10	218	28%	1.10	1.10
09 Jan 12:44 pm	57	56	97	NNE	1G4	29.32	1019.3	30.10	228	29%	1.10	1.10
09 Jan 12:41 pm	57	56	97		CALM	29.31	1018.9	30.09	218	28%	1.10	1.10
09 Jan 12:32 pm	57	56	97		CALM	29.31	1018.9	30.09	311	39%	1.10	1.10
09 Jan 12:27 pm	58	57	97		CALM	29.32	1019.2	30.10	433	55%	1.10	1.10
09 Jan 12:23 pm	58	57	97		CALM	29.31	1018.9	30.09	698	88%	1.10	1.10
09 Jan 12:14 pm	58	57	97		CALM	29.32	1019.2	30.10	121	15%	1.10	1.10
09 Jan 12:09 pm	58	57	97		CALM	29.33	1019.6	30.11	339	43%	1.10	1.10
09 Jan 11:56 am	58	57	97		CALM	29.32	1019.2	30.10	420	54%	1.10	1.10
09 Jan 11:51 am	59	58	97		CALM	29.34	1019.8	30.12	186	24%	1.10	1.10
09 Jan 11:47 am	59	58	97		CALM	29.33	1019.5	30.11	144	19%	1.10	1.10
09 Jan 11:42 am	58	57	97		CALM	29.34	1019.9	30.12	597	77%	1.10	1.10
09 Jan 11:38 am	58	57	97		CALM	29.34	1019.9	30.12	566	74%	1.10	1.10
09 Jan 11:33 am	57	56	97		CALM	29.35	1020.3	30.13	178	23%	1.10	1.10
09 Jan 11:29 am	57	56	97		CALM	29.34	1019.9	30.12	169	22%	1.10	1.10
09 Jan 11:24 am	57	56	97		CALM	29.35	1020.3	30.13	154	21%	1.10	1.10
09 Jan 11:20 am	57	56	97		CALM	29.35	1020.3	30.13	146	20%	1.10	1.10
09 Jan 11:11 am	57	56	97	NE	1	29.34	1019.9	30.12	141	19%	1.10	1.10
09 Jan 11:02 am	57	56	97		CALM	29.35	1020.3	30.13	151	21%	1.10	1.10
09 Jan 10:53 am	57	56	97	NNE	1G4	29.35	1020.3	30.13	77	11%	1.10	1.10
09 Jan 10:44 am	57	56	97		CALM	29.35	1020.3	30.13	153	22%	1.10	1.10
09 Jan 10:39 am	56	55	97		CALM	29.36	1020.7	30.14	219	33%	1.10	1.10
09 Jan 10:35 am	56	55	97		CALM	29.36	1020.7	30.14	225	34%	1.10	1.10
09 Jan 10:26 am	56	55	97		CALM	29.35	1020.3	30.13	269	42%	1.10	1.10

09 Jan 10:17 am	55	54	97		CALM	29.35	1020.4	30.13	81	13%	1.10	1.10
09 Jan 10:08 am	55	54	97		CALM	29.35	1020.4	30.13	69	12%	1.10	1.10
09 Jan 9:59 am	55	54	97	ESE	1G4	29.34	1020.0	30.12	146	26%	1.10	1.10
09 Jan 9:54 am	55	54	97	ESE	1G5	29.35	1020.4	30.13	164	30%	1.10	1.10
09 Jan 9:50 am	55	54	97	ESE	1G4	29.34	1020.0	30.12	167	31%	1.10	1.10
09 Jan 9:45 am	55	54	97	SE	1	29.35	1020.4	30.13	127	24%	1.10	1.10
09 Jan 9:41 am	55	54	96		CALM	29.34	1020.0	30.12	95	18%	1.10	1.10
09 Jan 9:36 am	55	54	96		CALM	29.35	1020.4	30.13	89	18%	1.10	1.10
09 Jan 9:32 am	55	54	96		CALM	29.34	1020.0	30.12	105	22%	1.10	1.10
09 Jan 9:23 am	54	53	96		CALM	29.34	1020.1	30.12	93	20%	1.10	1.10
09 Jan 9:18 am	54	53	96		CALM	29.35	1020.4	30.13	145	33%	1.10	1.10
09 Jan 9:14 am	54	53	96		CALM	29.33	1019.8	30.11	134	32%	1.10	1.10
09 Jan 9:05 am	54	53	96		CALM	29.33	1019.8	30.11	74	19%	1.10	1.10
09 Jan 9:00 am	54	53	96	SE	2G7	29.33	1019.8	30.11	86	23%	1.10	1.10
09 Jan 8:56 am	54	53	96		CALM	29.32	1019.4	30.10	77	22%	1.10	1.10
09 Jan 8:51 am	54	53	96		CALM	29.33	1019.8	30.11	43	13%	1.10	1.10
09 Jan 8:47 am	54	53	96		CALM	29.33	1019.8	30.11	49	15%	1.10	1.10
09 Jan 8:42 am	54	53	96		CALM	29.33	1019.8	30.11	58	19%	1.10	1.10
09 Jan 8:33 am	54	53	96		CALM	29.33	1019.8	30.11	12	4%	1.09	1.09
09 Jan 8:29 am	54	53	96	S	1G4	29.31	1019.1	30.09	9	4%	1.09	1.09
09 Jan 8:24 am	54	53	96		CALM	29.33	1019.8	30.11	5	2%	1.09	1.09
09 Jan 8:20 am	54	53	96		CALM	29.32	1019.4	30.10	5	2%	1.09	1.09
09 Jan 8:15 am	54	53	96	SSW	1G4	29.33	1019.8	30.11	5	3%	1.09	1.09
09 Jan 8:11 am	54	53	96		CALM	29.33	1019.8	30.11	5	3%	1.09	1.09
09 Jan 8:02 am	54	53	96		CALM	29.32	1019.4	30.10	7	5%	1.09	1.09
09 Jan 7:57 am	55	54	96		CALM	29.33	1019.7	30.11	6	5%	1.09	1.09
09 Jan 7:53 am	55	54	96		CALM	29.32	1019.4	30.10	5	5%	1.09	1.09
09 Jan 7:48 am	55	54	96	SW	2G4	29.32	1019.4	30.10	0	--	1.09	1.09
09 Jan 7:44 am	55	54	96	SW	1	29.31	1019.0	30.09	0	--	1.09	1.09
09 Jan 7:35 am	54	53	96	S	1G6	29.31	1019.1	30.09	7	47%	1.09	1.09
09 Jan 7:30 am	54	53	96	SSE	1G7	29.31	1019.1	30.09	2	--	1.09	1.09
09 Jan 7:26 am	53	52	96	SSE	2G7	29.30	1018.8	30.08	0	--	1.09	1.09
09 Jan 7:21 am	53	52	96		CALM	29.31	1019.1	30.09	0	--	1.09	1.09
09 Jan 7:17 am	53	52	95		CALM	29.30	1018.8	30.08	0	--	1.09	1.09
09 Jan 7:08 am	53	52	95	SE	2G5	29.30	1018.8	30.08	0	--	1.09	1.09
09 Jan 7:03 am	53	52	95	SE	1G7	29.31	1019.1	30.09	0	--	1.09	1.09
09 Jan 6:59 am	53	52	95	SE	2G5	29.30	1018.8	30.08	0	--	1.08	1.08
09 Jan 6:54 am	53	52	95	SE	4G7	29.30	1018.8	30.08	0	--	1.08	1.08
09 Jan 6:50 am	53	52	95	SE	2G6	29.31	1019.1	30.09	0	--	1.07	1.07
09 Jan 6:45 am	53	52	95	SE	2G6	29.31	1019.1	30.09	0	--	1.06	1.06
09 Jan 6:41 am	53	52	95	SE	1G4	29.30	1018.8	30.08	0	--	1.06	1.06
09 Jan 6:36 am	53	52	95	SE	1G6	29.30	1018.8	30.08	0	--	1.06	1.06
09 Jan 6:32 am	53	52	95	SE	1G5	29.29	1018.5	30.07	0	--	1.06	1.06
09 Jan 6:27 am	53	52	95	SSE	1G5	29.29	1018.5	30.07	0	--	1.06	1.06
09 Jan 6:23 am	53	52	95	SSE	1G5	29.28	1018.1	30.06	0	--	1.05	1.05
09 Jan 6:14 am	53	52	95	ESE	1G4	29.28	1018.1	30.06	0	--	1.03	1.03
09 Jan 6:09 am	53	52	95	SSE	1G6	29.28	1018.1	30.06	0	--	1.02	1.02
09 Jan 6:05 am	53	52	95	SSE	2G5	29.27	1017.8	30.05	0	--	1.01	1.01
09 Jan 5:56 am	53	51	94	ESE	3G7	29.26	1017.4	30.04	0	--	0.96	0.96
09 Jan 5:51 am	53	51	94	SE	2G8	29.26	1017.4	30.04	0	--	0.94	0.94
09 Jan 5:47 am	53	51	94	ESE	3G7	29.25	1017.1	30.03	0	--	0.92	0.92
09 Jan 5:38 am	53	51	94	ESE	3G8	29.25	1017.1	30.03	0	--	0.88	0.88

09 Jan 5:29 am	54	52	94	ESE	2G7	29.25	1017.0	30.03	0	--	0.87	0.87
09 Jan 5:20 am	54	52	94	SE	2G6	29.28	1018.1	30.06	0	--	0.85	0.85
09 Jan 5:11 am	54	52	94	ESE	2G6	29.28	1018.1	30.06	0	--	0.82	0.82
09 Jan 5:06 am	54	52	94	ESE	2G8	29.29	1018.4	30.07	0	--	0.82	0.82
09 Jan 5:02 am	54	52	94	ESE	2G8	29.28	1018.1	30.06	0	--	0.80	0.80
09 Jan 4:53 am	54	52	93	SE	2G6	29.29	1018.4	30.07	0	--	0.74	0.74
09 Jan 4:48 am	54	52	93	ESE	4G11	29.29	1018.4	30.07	0	--	0.67	0.67
09 Jan 4:44 am	54	52	93	ESE	4G9	29.28	1018.1	30.06	0	--	0.62	0.62
09 Jan 4:39 am	54	52	93	SE	3G11	29.28	1018.1	30.06	0	--	0.57	0.57
09 Jan 4:35 am	54	52	93	ESE	4G8	29.27	1017.7	30.05	0	--	0.53	0.53
09 Jan 4:26 am	54	52	93	SE	3G6	29.27	1017.7	30.05	0	--	0.46	0.46
09 Jan 4:08 am	55	53	92	SSE	4G7	29.27	1017.7	30.05	0	--	0.37	0.37
09 Jan 3:59 am	55	53	92	SE	2G7	29.28	1018.0	30.06	0	--	0.34	0.34
09 Jan 3:50 am	55	52	91	SE	4G8	29.30	1018.7	30.08	0	--	0.28	0.28
09 Jan 3:41 am	56	53	91	ESE	5G10	29.28	1018.0	30.06	0	--	0.26	0.26
09 Jan 3:36 am	56	53	90	SE	4G8	29.30	1018.6	30.08	0	--	0.25	0.25
09 Jan 3:32 am	57	54	90	ESE	4G6	29.29	1018.2	30.07	0	--	0.24	0.24
09 Jan 3:27 am	57	54	90	SE	2G7	29.31	1018.9	30.09	0	--	0.22	0.22
09 Jan 3:23 am	57	54	90	SSE	1G4	29.31	1018.9	30.09	0	--	0.21	0.21
09 Jan 3:14 am	57	54	90		CALM	29.32	1019.3	30.10	0	--	0.14	0.14
09 Jan 3:09 am	58	55	89		CALM	29.33	1019.6	30.11	0	--	0.08	0.08
09 Jan 3:05 am	58	55	89	SE	1G4	29.32	1019.2	30.10	0	--	0.07	0.07
09 Jan 2:56 am	58	55	89	ESE	1	29.33	1019.6	30.11	0	--	0.03	0.03
09 Jan 2:51 am	58	55	89	S	1G5	29.31	1018.9	30.09	0	--	0.02	0.02
09 Jan 2:47 am	58	55	89	S	1	29.32	1019.2	30.10	0	--	0.02	0.02
09 Jan 2:38 am	59	55	88		CALM	29.32	1019.2	30.10	0	--	0.01	0.01
09 Jan 2:33 am	59	55	88		CALM	29.33	1019.5	30.11	0	--	0.00	0.00
09 Jan 2:29 am	59	55	88		CALM	29.33	1019.5	30.11	0	--	0.00	0.00
09 Jan 2:24 am	59	55	88		CALM	29.33	1019.5	30.11	0	--	0.00	0.00
09 Jan 2:20 am	59	55	88		CALM	29.33	1019.5	30.11	0	--	0.00	0.00
09 Jan 2:15 am	59	55	88		CALM	29.33	1019.5	30.11	0	--	0.00	0.00
09 Jan 2:11 am	59	55	87		CALM	29.33	1019.5	30.11	0	--	0.00	0.00
09 Jan 2:06 am	59	55	87		CALM	29.34	1019.8	30.12	0	--	0.00	0.00
09 Jan 2:02 am	59	55	87		CALM	29.33	1019.5	30.11	0	--	0.00	0.00
09 Jan 1:57 am	59	55	86		CALM	29.34	1019.8	30.12	0	--	0.00	0.00
09 Jan 1:53 am	59	55	86	SW	1G3	29.33	1019.5	30.11	0	--	0.00	0.00
09 Jan 1:44 am	59	55	86		CALM	29.34	1019.8	30.12	0	--	0.00	0.00
09 Jan 1:39 am	59	54	85	SW	3G5	29.36	1020.5	30.14	0	--	0.00	0.00
09 Jan 1:35 am	59	54	85	SSW	2G5	29.35	1020.2	30.13	0	--	0.00	0.00
09 Jan 1:30 am	59	54	84		CALM	29.34	1019.8	30.12	0	--	0.00	0.00
09 Jan 1:26 am	59	54	84	S	1G3	29.34	1019.8	30.12	0	--	0.00	0.00
09 Jan 1:21 am	60	55	84	S	1G7	29.35	1020.1	30.13	0	--	0.00	0.00
09 Jan 1:17 am	60	55	83	SSE	1G3	29.35	1020.1	30.13	0	--	0.00	0.00
09 Jan 1:12 am	59	54	83	SW	3G6	29.37	1020.9	30.15	0	--	0.00	0.00
09 Jan 1:08 am	59	53	82	WSW	1G3	29.36	1020.5	30.14	0	--	0.00	0.00
09 Jan 1:03 am	59	53	81		CALM	29.36	1020.5	30.14	0	--	0.00	0.00
09 Jan 12:59 am	60	54	81	NW	1G3	29.34	1019.8	30.12	0	--	0.00	0.00
09 Jan 12:50 am	59	53	81	S	1G4	29.34	1019.8	30.12	0	--	0.00	0.00
09 Jan 12:45 am	59	53	80	SSE	2G6	29.34	1019.8	30.12	0	--	0.00	0.00
09 Jan 12:32 am	59	52	78	SSW	1G3	29.32	1019.2	30.10	0	--	0.00	0.00
09 Jan 12:23 am	60	52	75	SW	2G5	29.32	1019.1	30.10	0	--	0.00	0.00
09 Jan 12:18 am	60	52	74	SSW	2G8	29.35	1020.1	30.13	0	--	0.00	0.00

09 Jan 12:14 am	60	51	73	SW	4G7	29.35	1020.1	30.13	0	--	0.00	0.00
09 Jan 12:05 am	60	51	72	SW	4G7	29.35	1020.1	30.13	0	--	0.00	0.00
09 Jan 12:00 am	60	51	71	SW	5G8	29.36	1020.5	30.14	0	--	0.00	0.00
08 Jan 11:56 pm	60	51	71	SW	3G8	29.35	1020.1	30.13	0	--	0.00	0.00
08 Jan 11:51 pm	60	50	70	SSW	2G7	29.36	1020.5	30.14	0	--	0.00	0.00
08 Jan 11:47 pm	60	50	70	SW	2G5	29.36	1020.5	30.14	0	--	0.00	0.00
08 Jan 11:42 pm	59	49	69	SSW	3G7	29.36	1020.5	30.14	0	--	0.00	0.00
08 Jan 11:38 pm	59	48	68	SW	2G4	29.35	1020.2	30.13	0	--	0.00	0.00
08 Jan 11:33 pm	59	48	67	SW	3G6	29.34	1019.8	30.12	0	--	0.00	0.00
08 Jan 11:29 pm	59	48	66	SW	3G6	29.32	1019.2	30.10	0	--	0.00	0.00
08 Jan 11:24 pm	59	46	63	SW	2G9	29.33	1019.5	30.11	0	--	0.00	0.00
08 Jan 11:20 pm	58	45	61	SW	3G8	29.34	1019.9	30.12	0	--	0.00	0.00
08 Jan 11:11 pm	58	44	59	SW	2G5	29.34	1019.9	30.12	0	--	0.00	0.00
08 Jan 11:02 pm	58	45	61	SW	1	29.33	1019.6	30.11	0	--	0.00	0.00
08 Jan 10:53 pm	58	45	62		CALM	29.31	1018.9	30.09	0	--	0.00	0.00
08 Jan 10:48 pm	58	45	63		CALM	29.33	1019.6	30.11	0	--	0.00	0.00
08 Jan 10:44 pm	58	45	63		CALM	29.32	1019.2	30.10	0	--	0.00	0.00
08 Jan 10:35 pm	59	46	63	SW	1	29.33	1019.5	30.11	0	--	0.00	0.00
08 Jan 10:30 pm	59	46	63	SW	1G4	29.33	1019.5	30.11	0	--	0.00	0.00
08 Jan 10:17 pm	59	46	63	WSW	2G5	29.32	1019.2	30.10	0	--	0.00	0.00
08 Jan 10:08 pm	60	46	60	SW	4G8	29.33	1019.4	30.11	0	--	0.00	0.00
08 Jan 10:03 pm	60	45	57	SW	4G9	29.33	1019.4	30.11	0	--	0.00	0.00
08 Jan 9:59 pm	60	43	53	WSW	3G6	29.33	1019.4	30.11	0	--	0.00	0.00
08 Jan 9:50 pm	60	40	47	WSW	4G8	29.32	1019.1	30.10	0	--	0.00	0.00
08 Jan 9:45 pm	60	39	46		CALM	29.32	1019.1	30.10	0	--	0.00	0.00
08 Jan 9:41 pm	60	38	45	SSW	1G3	29.31	1018.8	30.09	0	--	0.00	0.00
08 Jan 9:32 pm	60	39	46	SSW	1G4	29.31	1018.8	30.09	0	--	0.00	0.00
08 Jan 9:23 pm	61	40	47		CALM	29.31	1018.7	30.09	0	--	0.00	0.00
08 Jan 9:14 pm	61	39	45		CALM	29.29	1018.0	30.07	0	--	0.00	0.00
08 Jan 9:05 pm	62	40	45		CALM	29.29	1018.0	30.07	0	--	0.00	0.00
08 Jan 8:56 pm	62	39	43		CALM	29.28	1017.7	30.06	0	--	0.00	0.00
08 Jan 8:51 pm	62	39	42		CALM	29.29	1018.0	30.07	0	--	0.00	0.00
08 Jan 8:47 pm	62	39	42		CALM	29.28	1017.7	30.06	0	--	0.00	0.00
08 Jan 8:38 pm	62	39	42		CALM	29.30	1018.3	30.08	0	--	0.00	0.00
08 Jan 8:33 pm	62	37	40		CALM	29.31	1018.7	30.09	0	--	0.00	0.00
08 Jan 8:29 pm	62	37	40		CALM	29.31	1018.7	30.09	0	--	0.00	0.00
08 Jan 8:20 pm	62	36	38	S	1G4	29.31	1018.7	30.09	0	--	0.00	0.00
08 Jan 8:15 pm	62	36	38	SSE	1G4	29.31	1018.7	30.09	0	--	0.00	0.00
08 Jan 8:11 pm	62	37	39	S	1	29.31	1018.7	30.09	0	--	0.00	0.00
08 Jan 8:06 pm	62	37	39	S	2G5	29.31	1018.7	30.09	0	--	0.00	0.00
08 Jan 8:02 pm	62	37	40	S	2G5	29.30	1018.3	30.08	0	--	0.00	0.00
08 Jan 7:57 pm	62	39	42	SSE	1	29.30	1018.3	30.08	0	--	0.00	0.00
08 Jan 7:53 pm	62	39	42	SSE	1	29.29	1018.0	30.07	0	--	0.00	0.00
08 Jan 7:48 pm	62	38	41	SSE	1	29.29	1018.0	30.07	0	--	0.00	0.00
08 Jan 7:44 pm	63	38	40	SSE	1	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 7:39 pm	63	38	40	SSE	1	29.29	1017.9	30.07	0	--	0.00	0.00
08 Jan 7:35 pm	63	38	39		CALM	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 7:26 pm	63	36	37	SSE	1	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 7:17 pm	64	38	38	SSE	1	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 7:08 pm	64	37	37	SSE	1	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 7:03 pm	64	36	36	SSE	1G7	29.29	1017.9	30.07	0	--	0.00	0.00
08 Jan 6:59 pm	64	36	35	SSE	2G6	29.30	1018.2	30.08	0	--	0.00	0.00

08 Jan 6:50 pm	64	36	36	SSE	1G4	29.30	1018.2	30.08	0	--	0.00	0.00
08 Jan 6:41 pm	64	36	35		CALM	29.30	1018.2	30.08	0	--	0.00	0.00
08 Jan 6:36 pm	64	35	34	S	1G5	29.31	1018.6	30.09	0	--	0.00	0.00
08 Jan 6:32 pm	64	35	34	SSE	1	29.30	1018.2	30.08	0	--	0.00	0.00
08 Jan 6:27 pm	64	36	35	S	1G5	29.31	1018.6	30.09	0	--	0.00	0.00
08 Jan 6:23 pm	64	36	35	SSW	1G4	29.30	1018.2	30.08	0	--	0.00	0.00
08 Jan 6:18 pm	64	36	36	SSW	1G4	29.31	1018.6	30.09	0	--	0.00	0.00
08 Jan 6:14 pm	64	38	38	SSW	1	29.30	1018.2	30.08	0	--	0.00	0.00
08 Jan 6:09 pm	64	38	38	SSW	1G4	29.30	1018.2	30.08	0	--	0.00	0.00
08 Jan 6:05 pm	64	38	38	S	1	29.30	1018.2	30.08	0	--	0.00	0.00
08 Jan 5:56 pm	64	39	40	SSE	1	29.29	1017.9	30.07	0	--	0.00	0.00
08 Jan 5:47 pm	63	38	39	S	2G5	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 5:42 pm	63	38	39	SSW	1G5	29.29	1017.9	30.07	0	--	0.00	0.00
08 Jan 5:38 pm	63	38	40	SSW	1G3	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 5:33 pm	64	40	41		CALM	29.29	1017.9	30.07	0	--	0.00	0.00
08 Jan 5:29 pm	64	40	42		CALM	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 5:20 pm	64	40	41		CALM	29.28	1017.6	30.06	0	--	0.00	0.00
08 Jan 5:11 pm	65	41	41		CALM	29.28	1017.5	30.06	0	--	0.00	0.00
08 Jan 5:06 pm	65	41	42		CALM	29.29	1017.8	30.07	0	--	0.00	0.00
08 Jan 5:02 pm	65	42	43		CALM	29.29	1017.8	30.07	0	--	0.00	0.00
08 Jan 4:53 pm	66	41	40		CALM	29.29	1017.8	30.07	9	6%	0.00	0.00
08 Jan 4:48 pm	66	41	40		CALM	29.30	1018.1	30.08	13	8%	0.00	0.00
08 Jan 4:44 pm	66	41	40		CALM	29.29	1017.8	30.07	14	8%	0.00	0.00
08 Jan 4:35 pm	67	40	38	WSW	1G3	29.29	1017.7	30.07	23	11%	0.00	0.00
08 Jan 4:30 pm	67	40	38	WSW	1G3	29.30	1018.1	30.08	27	11%	0.00	0.00
08 Jan 4:26 pm	67	40	38	WSW	1	29.30	1018.1	30.08	30	12%	0.00	0.00
08 Jan 4:21 pm	67	40	37	WSW	1	29.31	1018.4	30.09	36	13%	0.00	0.00
08 Jan 4:17 pm	68	41	37	WSW	1	29.30	1018.0	30.08	39	13%	0.00	0.00
08 Jan 4:08 pm	68	39	35		CALM	29.30	1018.0	30.08	46	14%	0.00	0.00
08 Jan 3:59 pm	68	40	36	WSW	1G3	29.31	1018.4	30.09	56	16%	0.00	0.00
08 Jan 3:54 pm	69	41	36	WSW	1G4	29.31	1018.3	30.09	68	18%	0.00	0.00
08 Jan 3:50 pm	69	41	36	WSW	1G3	29.31	1018.3	30.09	74	19%	0.00	0.00
08 Jan 3:41 pm	69	39	34	WSW	2G4	29.31	1018.3	30.09	98	23%	0.00	0.00
08 Jan 3:36 pm	70	40	34	WSW	2G4	29.32	1018.6	30.10	116	26%	0.00	0.00
08 Jan 3:32 pm	70	41	35	WSW	1G4	29.31	1018.3	30.09	121	26%	0.00	0.00
08 Jan 3:27 pm	70	40	34	WSW	2G5	29.32	1018.6	30.10	117	25%	0.00	0.00
08 Jan 3:23 pm	70	40	34	WSW	2G5	29.31	1018.3	30.09	114	23%	0.00	0.00
08 Jan 3:18 pm	70	40	34	SW	2G5	29.32	1018.6	30.10	198	39%	0.00	0.00
08 Jan 3:14 pm	70	40	34	SW	1	29.31	1018.3	30.09	221	43%	0.00	0.00
08 Jan 3:05 pm	71	41	34	WSW	1G3	29.31	1018.2	30.09	135	25%	0.00	0.00
08 Jan 3:00 pm	71	41	34	SW	1G5	29.32	1018.6	30.10	158	28%	0.00	0.00
08 Jan 2:51 pm	72	42	34	SW	2G5	29.32	1018.5	30.10	212	36%	0.00	0.00
08 Jan 2:47 pm	72	41	33	SW	1G5	29.31	1018.2	30.09	207	35%	0.00	0.00
08 Jan 2:42 pm	72	40	32	SW	1G5	29.31	1018.2	30.09	352	58%	0.00	0.00
08 Jan 2:38 pm	72	41	33	SW	2G5	29.31	1018.2	30.09	346	56%	0.00	0.00
08 Jan 2:33 pm	72	43	35	SW	2G5	29.32	1018.5	30.10	360	57%	0.00	0.00
08 Jan 2:29 pm	72	41	33	SW	2G4	29.31	1018.2	30.09	343	53%	0.00	0.00
08 Jan 2:20 pm	72	43	35	SW	2G4	29.31	1018.2	30.09	114	17%	0.00	0.00
08 Jan 2:15 pm	73	44	35	WSW	2G7	29.32	1018.5	30.10	428	63%	0.00	0.00
08 Jan 2:11 pm	73	44	35	WSW	3G7	29.31	1018.1	30.09	429	63%	0.00	0.00
08 Jan 2:06 pm	73	44	36	WSW	2G7	29.32	1018.5	30.10	415	60%	0.00	0.00
08 Jan 2:02 pm	73	44	35	WSW	4G7	29.31	1018.1	30.09	392	56%	0.00	0.00

08 Jan 1:57 pm	73	46	38	SW	3G5	29.32	1018.5	30.10	376	53%	0.00	0.00
08 Jan 1:53 pm	73	48	42	WNW	1G4	29.31	1018.1	30.09	306	43%	0.00	0.00
08 Jan 1:44 pm	73	48	42	NNW	1	29.31	1018.1	30.09	404	55%	0.00	0.00
08 Jan 1:35 pm	73	50	44		CALM	29.31	1018.1	30.09	461	62%	0.00	0.00
08 Jan 1:30 pm	73	50	44	NNW	1G3	29.32	1018.5	30.10	403	54%	0.00	0.00
08 Jan 1:26 pm	73	50	44	NNW	1G3	29.31	1018.1	30.09	279	37%	0.00	0.00
08 Jan 1:21 pm	74	51	44	NNW	2G4	29.32	1018.4	30.10	381	50%	0.00	0.00
08 Jan 1:17 pm	74	50	43	NNW	2G4	29.32	1018.4	30.10	476	62%	0.00	0.00
08 Jan 1:12 pm	74	50	43	NNW	2G4	29.32	1018.4	30.10	471	61%	0.00	0.00
08 Jan 1:08 pm	74	51	45	NNW	1G3	29.32	1018.4	30.10	431	56%	0.00	0.00
08 Jan 1:03 pm	73	50	45	NNW	1G3	29.33	1018.8	30.11	507	65%	0.00	0.00
08 Jan 12:59 pm	73	50	45	NNW	1	29.32	1018.5	30.10	508	65%	0.00	0.00
08 Jan 12:50 pm	73	50	45	NNW	1G3	29.32	1018.5	30.10	526	67%	0.00	0.00
08 Jan 12:45 pm	73	52	47	NNW	2G3	29.33	1018.8	30.11	528	67%	0.00	0.00
08 Jan 12:41 pm	73	50	45	NNW	1G3	29.33	1018.8	30.11	522	66%	0.00	0.00
08 Jan 12:32 pm	74	51	44		CALM	29.33	1018.8	30.11	538	68%	0.00	0.00
08 Jan 12:23 pm	75	50	42		CALM	29.33	1018.7	30.11	547	69%	0.00	0.00
08 Jan 12:18 pm	76	51	41	N	2G4	29.34	1019.0	30.12	460	58%	0.01	0.00
08 Jan 12:14 pm	76	51	41	N	1G3	29.34	1019.0	30.12	169	21%	0.01	0.00
08 Jan 12:05 pm	76	52	43		CALM	29.34	1019.0	30.12	559	71%	0.01	0.00
08 Jan 12:00 pm	75	50	42	N	1G3	29.35	1019.4	30.13	570	73%	0.01	0.00
08 Jan 11:56 am	75	51	43	N	1G3	29.35	1019.4	30.13	580	74%	0.01	0.00
08 Jan 11:47 am	75	50	41		CALM	29.35	1019.4	30.13	469	61%	0.01	0.00
08 Jan 11:42 am	75	50	41	N	1G3	29.36	1019.7	30.14	548	71%	0.01	0.00
08 Jan 11:38 am	75	50	41	N	1	29.36	1019.7	30.14	541	71%	0.01	0.00
08 Jan 11:33 am	75	50	41	NNW	1G4	29.37	1020.1	30.15	558	74%	0.01	0.00
08 Jan 11:29 am	75	48	39	NNW	2G4	29.36	1019.7	30.14	550	73%	0.01	0.00
08 Jan 11:20 am	76	51	41	NNE	1G3	29.36	1019.7	30.14	450	61%	0.01	0.00
08 Jan 11:11 am	76	50	40		CALM	29.37	1020.0	30.15	494	68%	0.01	0.00
08 Jan 11:06 am	75	50	41	NNE	1G4	29.38	1020.4	30.16	518	72%	0.01	0.00
08 Jan 11:02 am	75	48	39		CALM	29.37	1020.1	30.15	519	73%	0.01	0.00
08 Jan 10:57 am	75	48	39		CALM	29.38	1020.4	30.16	470	67%	0.01	0.00
08 Jan 10:53 am	75	48	39	NE	1	29.38	1020.4	30.16	512	73%	0.01	0.00
08 Jan 10:44 am	74	47	39	ENE	1	29.38	1020.4	30.16	520	77%	0.01	0.00
08 Jan 10:35 am	74	51	45		CALM	29.38	1020.4	30.16	501	76%	0.01	0.00
08 Jan 10:26 am	73	53	49		CALM	29.38	1020.5	30.16	492	77%	0.01	0.00
08 Jan 10:21 am	73	53	50		CALM	29.40	1021.2	30.18	465	74%	0.01	0.00
08 Jan 10:17 am	72	53	51		CALM	29.39	1020.9	30.17	462	75%	0.01	0.00
08 Jan 10:08 am	72	53	51		CALM	29.39	1020.9	30.17	466	79%	0.01	0.00
08 Jan 10:03 am	71	51	50		CALM	29.39	1020.9	30.17	436	75%	0.01	0.00
08 Jan 9:59 am	71	50	47		CALM	29.39	1020.9	30.17	427	75%	0.01	0.00
08 Jan 9:50 am	70	48	46		CALM	29.38	1020.6	30.16	390	72%	0.01	0.00
08 Jan 9:41 am	69	49	49		CALM	29.38	1020.7	30.16	383	75%	0.01	0.00
08 Jan 9:32 am	68	48	49	SE	1	29.38	1020.7	30.16	276	57%	0.01	0.00
08 Jan 9:23 am	68	49	51		CALM	29.38	1020.7	30.16	172	38%	0.01	0.00
08 Jan 9:18 am	66	48	52		CALM	29.38	1020.8	30.16	416	96%	0.01	0.00
08 Jan 9:14 am	66	48	53	SE	1G4	29.37	1020.5	30.15	411	98%	0.01	0.00
08 Jan 9:05 am	64	47	55		CALM	29.37	1020.6	30.15	316	81%	0.01	0.00
08 Jan 8:56 am	63	47	56		CALM	29.37	1020.7	30.15	232	65%	0.01	0.00
08 Jan 8:47 am	62	46	56		CALM	29.36	1020.4	30.14	236	74%	0.01	0.00
08 Jan 8:38 am	61	46	57	SE	1	29.36	1020.4	30.14	197	69%	0.01	0.00
08 Jan 8:33 am	59	45	59	SE	1	29.36	1020.5	30.14	208	79%	0.01	0.00

08 Jan 8:29 am	59	45	60	SE	1	29.36	1020.5	30.14	190	77%	0.01	0.00
08 Jan 8:20 am	58	44	60		CALM	29.35	1020.2	30.13	144	68%	0.01	0.00



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National Weather Service
Salt Lake City, UT
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Miscellaneous Hydrologic Report
National Weather Service Los Angeles/Oxnard, CA
1002 AM PST Wed Feb 28 2018

Preliminary precipitation amounts in Los Angeles County for the
following time periods ending at 10 AM today... m = minutes h =
hours d = days

LA CO. (Metropolitan)	1H	3H	6H	12H	24H	48H	5D
Monte Nido FS	0.00	0.00	0.00	0.00	0.00	0.04	0.04
Big Rock Mesa	0.00	0.00	0.00	0.00	0.00	0.04	0.04
Bel Air	0.00	0.00	0.00	0.00	0.00	0.11	0.11
Culver City	0.00	0.00	0.00	0.00	0.00	0.11	0.11
Beverly Hills	0.00	0.00	0.00	0.00	0.01	0.13	0.13
Hollywood Rsvr	0.00	0.00	0.00	0.00	0.00	0.13	0.13
South Gate	0.00	0.00	0.00	0.00	0.01	0.38	0.38
Dominguez Water Co	0.00	0.00	0.00	0.00	0.11	0.36	0.36
La Habra Heights	0.00	0.00	0.00	0.00	0.11	0.43	0.43
Downtown Los Angeles	0.00	0.00	0.00	0.00	0.00	0.02	0.02

LA CO. (Valleys)	1H	3H	6H	12H	24H	48H	5D
Agoura	0.00	0.00	0.00	0.01	0.01	0.08	0.08
Chatsworth Rsvr	0.00	0.00	0.00	0.00	0.00	0.08	0.08
Canoga Park	0.00	0.00	0.00	0.00	0.00	0.08	0.08
Sepulveda Cyn @ Mulhl	0.00	0.00	0.00	0.00	0.00	0.12	0.12
Pacoima Dam	0.00	0.00	0.00	0.00	0.00	0.32	0.32
Hansen Dam	0.00	0.00	0.00	0.00	0.00	0.17	0.17
Newhall-Soledad Schl	0.00	0.00	0.00	0.00	0.00	0.08	0.08
Saugus	0.00	0.00	0.00	0.00	0.00	0.20	0.20
Del Valle	0.00	0.00	0.00	0.00	0.00	0.14	0.14

LA CO. (San Gab Val)	1H	3H	6H	12H	24H	48H	5D
L.A. City College	0.00	0.00	0.00	0.00	0.01	0.09	0.09
Eagle Rock Rsvr	0.00	0.00	0.00	0.00	0.00	0.13	0.13
Eaton Wash @ Loftus	0.00	0.00	0.00	0.00	0.00	0.29	0.29
San Gabriel R @ Vly	0.00	0.00	0.00	0.00	0.00	0.35	0.35
Eaton Dam	0.00	0.00	0.00	0.00	0.00	0.36	0.36
Walnut Ck S.B.	0.00	0.00	0.00	0.00	0.00	0.32	0.32
Puddingstone Div	0.00	0.00	0.00	0.00	0.00	0.40	0.40
Santa Fe Dam	0.00	0.00	0.00	0.00	0.00	0.31	0.31
Whittier Hills	0.00	0.00	0.00	0.00	0.02	0.33	0.33
Claremont	0.00	0.00	0.00	0.00	0.00	0.51	0.51

LA CO. (Mtns & Fthls)	1H	3H	6H	12H	24H	48H	5D
W Fk Heliport	0.00	0.00	0.00	0.00	0.00	0.43	0.43
Santa Anita Dam	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Gabriel Dam	0.00	0.00	0.00	0.00	0.04	0.55	0.55
Morris Dam	0.00	0.00	0.00	0.00	0.00	0.45	0.45
Big Dalton Dam	0.00	0.00	0.00	0.00	0.00	0.51	0.51
Crystal Lake	0.00	0.00	0.00	0.00	0.08	0.12	0.12
Opids Camp	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Sierra Madre Maint Yd	0.00	0.00	0.00	0.00	0.00	0.31	0.31
Tanbark	0.00	0.00	0.00	0.00	0.03	0.44	0.44
San Antonio Dam	0.00	0.00	0.00	0.00	0.00	0.54	0.54
Mill Ck	0.00	0.00	0.00	0.00	0.00	0.04	0.04
Chilao	0.00	0.01	0.01	0.01	0.03	0.10	0.10
Mt Baldy FS	0.00	0.00	0.00	0.00	0.00	0.47	0.47
Whitaker Peak	0.00	0.00	0.00	0.00	0.00	0.11	0.11
Warm Springs	0.00	0.00	0.00	0.00	0.09	0.41	0.41
Acton	0.00	1.51	1.51	1.51	1.51	1.51	1.51
Camp 9	0.00	0.00	0.00	0.00	0.00	0.19	0.19

LA CO. (Deserts)	1H	3H	6H	12H	24H	48H	5D
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Palmdale Water Dist	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lancaster	0.00	0.00	0.00	0.00	0.00	0.07	0.07

Notice...This report contains provisional data from automated gauges.
The accuracy of this data has not been verified.

Many of the included gage reports are courtesy of Los Angeles County
Department of Public Works, the Army Corps of Engineers, and Los
Angeles County Fire Department.

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These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

Climatological Report (Monthly)

545
CXUS46 KLOX 011555
CLMLAX

CLIMATE REPORT
NATIONAL WEATHER SERVICE LOS ANGELES/OXNARD CA
755 AM PST THU MAR 1 2018

.....

...THE LOS ANGELES INTL AIRPORT CA CLIMATE SUMMARY FOR THE MONTH OF FEBRUARY 2018...

CLIMATE NORMAL PERIOD 1981 TO 2010
CLIMATE RECORD PERIOD 1944 TO 2018

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR`S VALUE
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TEMPERATURE (F)

HIGHEST	81	02/07			
LOWEST	40	02/28			
AVG. MAXIMUM	67.4		64.3	3.1	
AVG. MINIMUM	49.5		50.0	-0.5	
MEAN	58.4		57.1	1.3	
DAYS MAX >= 90	0				
DAYS MAX <= 32	0				
DAYS MIN <= 32	0				
DAYS MIN <= 0	0				

PRECIPITATION (INCHES)

TOTALS	0.10R		3.25	-3.15	
DAILY AVG.	0.00		0.12	-0.12	
DAYS >= .01	1				
DAYS >= .10	1				
DAYS >= .50	0				
DAYS >= 1.00	0				
GREATEST					
24 HR. TOTAL	0.10	02/26 TO 02/26			

DEGREE_DAYS

HEATING TOTAL	183		225	-42	211
SINCE 7/1	449		929	-480	773
COOLING TOTAL	3		5	-2	0
SINCE 1/1	31		9	22	0

.....

WIND (MPH)

AVERAGE WIND SPEED		7.2			
HIGHEST WIND SPEED/DIRECTION		37/260	DATE	02/19	
HIGHEST GUST SPEED/DIRECTION		41/260	DATE	02/19	

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

AVERAGE SKY COVER	0.30
NUMBER OF DAYS FAIR	14
NUMBER OF DAYS PC	13
NUMBER OF DAYS CLOUDY	1

AVERAGE RH (PERCENT)	58
----------------------	----

WEATHER CONDITIONS. NUMBER OF DAYS WITH			
THUNDERSTORM	0	MIXED PRECIP	0
HEAVY RAIN	0	RAIN	0
LIGHT RAIN	4	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	0
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	7	FOG W/VIS <= 1/4 MILE	2
HAZE	9		

- INDICATES NEGATIVE NUMBERS.
R INDICATES RECORD WAS SET OR TIED.
MM INDICATES DATA IS MISSING.
T INDICATES TRACE AMOUNT.

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

Climatological Report (Monthly)

546
CXUS46 KLOX 011555
CLMLGB

CLIMATE REPORT
NATIONAL WEATHER SERVICE LOS ANGELES/OXNARD CA
755 AM PST THU MAR 1 2018

.....

...THE LONG BEACH AIRPORT CA CLIMATE SUMMARY FOR THE MONTH OF FEBRUARY 2018...

CLIMATE NORMAL PERIOD 1981 TO 2010
CLIMATE RECORD PERIOD 1958 TO 2018

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR`S VALUE
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.....

TEMPERATURE (F)

HIGHEST	87	02/08			
		02/07			
LOWEST	39	02/20			
AVG. MAXIMUM	69.8		67.2	2.6	
AVG. MINIMUM	48.7		48.0	0.7	
MEAN	59.2		57.6	1.6	
DAYS MAX >= 90	0				
DAYS MAX <= 32	0				
DAYS MIN <= 32	0				
DAYS MIN <= 0	0				

PRECIPITATION (INCHES)

TOTALS	0.29		3.09	-2.80	
DAILY AVG.	0.01				
DAYS >= .01	4				
DAYS >= .10	1				
DAYS >= .50	0				
DAYS >= 1.00	0				
GREATEST					
24 HR. TOTAL	0.21	02/26 TO 02/26			
STORM TOTAL	MM				
(MM/DD(HH))					

DEGREE_DAYS

HEATING TOTAL	167	212	-45	190
SINCE 7/1	424	891	-467	778
COOLING TOTAL	11	5	6	1
SINCE 1/1	40	8	32	1

.....

WIND (MPH)

AVERAGE WIND SPEED	4.8			
HIGHEST WIND SPEED/DIRECTION	30/MM	DATE	MM	
HIGHEST GUST SPEED/DIRECTION	36/MM	DATE	MM	

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM
AVERAGE SKY COVER 0.20
NUMBER OF DAYS FAIR 19
NUMBER OF DAYS PC 8
NUMBER OF DAYS CLOUDY 1

AVERAGE RH (PERCENT) 56

WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	0	MIXED PRECIP	0
HEAVY RAIN	0	RAIN	1
LIGHT RAIN	4	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	0
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	10	FOG W/VIS <= 1/4 MILE	5
HAZE	12		

- INDICATES NEGATIVE NUMBERS.
R INDICATES RECORD WAS SET OR TIED.
MM INDICATES DATA IS MISSING.
T INDICATES TRACE AMOUNT.

Appendix B

Water Sampling Field Forms

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 10:35		
Station ID: CS-RW-01		Latitude/Northing: 33.775438		Longitude/Easting: 118.246670		Water Depth (ft): SP			(m): 6.8		
Weather Conditions: SUNNY, BREEZE									Field Personnel: S. PETER		
Wind Speed and Direction (see Beaufort Scale): 1, N									Recorded By: S. PETER		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): BAIT FISH FEEDING, GULLS											
Description of In-water activities (e.g., recreational boating, active discharges): NA											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
10:46	4.1	S	6.22	7.80	31.73	22.40	Y	Clear No odor	TSS only	Full suite	CS-RW-01-G-S-20170905
10:52	4.3	M	7.90	7.86	33.13	20.53	Y	"	TSS only	Full suite	CS-RW-01-G-M-20170905
10:54	6.05	B	7.45	7.95	33.00	19.02	Y	"	TSS only	Full suite	CS-RW-01-G-B-20170905
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only		Full suite	
Comments (include photographs taken, if any): MS/MSD Hg METALS @ SURFACE											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 9/5/12		Time: 1115		
Station ID: 1A-RW-02		Latitude/Northing: 33.766832			Longitude/Easting: 118.253229			Water Depth (ft): (m): 17.5				
Weather Conditions: SUNNY, HOT, LIGHT BREEZE								Field Personnel: S. POTTER				
Wind Speed and Direction (see Beaufort Scale): 1								Recorded By: S. POTTER				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): GULLS												
Description of In-water activities (e.g., recreational boating, active discharges): LOADING SHIPS (~500m N)												
In Situ Field Parameters ¹ and Water Sample Collection												
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID	
1116	1	S	7.60	7.98	32.53	22.02	Y	clear no odor	TSS only	Full suite	1A-RW-02-G-S-20120905	
1122	8.8	M	7.61	7.97	32.81	20.04	Y	↓	TSS only	Full suite	1A-RW-02-G-M-20120905	
1125	17.1	B	6.75	7.95	32.95	18.84	Y	↓	TSS only	Full suite	1A-RW-02-G-B-20120905	
									TSS only	Full suite		
									TSS only	Full suite		
									TSS only	Full suite		
									TSS only	Full suite		
									TSS only	Full suite		
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS MIDDLE ONLY		TSS only	Full suite	
Comments (include photographs taken, if any):												

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 9/5/17		Time: 11:57	
Station ID: 1A-RW-03		Latitude/Northing: 33.762128			Longitude/Easting: 118.274369			Water Depth (ft): (m): 17.7			
Weather Conditions: SUNNY, HOT, LIGHT BREEZE								Field Personnel: S. POTTER, MTS			
Wind Speed and Direction (see Beaufort Scale): 1								Recorded By: S. Potter			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): GULLS											
Description of In-water activities (e.g., recreational boating, active discharges): LOADING SHIPS											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1200	1	S	7.73	7.91	32.41	21.55	Y		<input checked="" type="radio"/> TSS only <input checked="" type="radio"/> Full suite		1A-RW-03-G-S-20170905
1200	9	M	7.45	7.97	32.89	20.05	Y		<input checked="" type="radio"/> TSS only <input type="radio"/> Full suite		1A-RW-03-G-M-20170905
1205	17.1	B	7.01	7.85	33.21	19.50	Y		<input checked="" type="radio"/> TSS only <input type="radio"/> Full suite		1A-RW-03-G-B-20170905
									TSS only <input type="radio"/> Full suite		
									TSS only <input type="radio"/> Full suite		
									TSS only <input type="radio"/> Full suite		
									TSS only <input type="radio"/> Full suite		
QA/QC Samples Collected: Y <input checked="" type="radio"/> N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only <input type="radio"/> Full suite			
Comments (include photographs taken, if any): FLOATING TRASH. YES IN TRIPLICATE ON NEXT PG.											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02			
Station ID: 1A-RW-03		Time: 1200		Date: 9/5/17			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
1200	M	9	7.45	7.87	32.80	20.05	
1202	M	9	7.43	7.87	33.07	20.04	
1204	M	9	7.40	7.87	33.06	19.99	
Average		9	7.43	7.87	33.00	20.03	
Difference between max and min		0	0.05	0	0.19	0.06	
RPD		NA	0.67%	NA	0.58%	0.3%	
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²		Y	Y	Y	Y	Y	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest-smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.

Water Quality Sample Form

1225

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 12:25		
Station ID: 1A-RW-04		Latitude/Northing: 33.754156			Longitude/Easting: 118.271248			Water Depth (ft): (m): 18.8			
Weather Conditions: SUNNY, HOT								Field Personnel: S. POTTER, MTS			
Wind Speed and Direction (see Beaufort Scale):								Recorded By: S. POTTER			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): PELICAN											
Description of In-water activities (e.g., recreational boating, active discharges): PLEASURE BOAT IN TRANSIT											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
1230	1	S	7.72	7.92	32.25	21.09	Y	CLEAR, NOOD	<input checked="" type="radio"/> TSS only <input checked="" type="radio"/> Full suite	1A-RW-04-G-S-20170905	
1232	9.3	M	7.33	7.89	32.73	19.89	Y	↓	<input checked="" type="radio"/> TSS only <input checked="" type="radio"/> Full suite	1A-RW-04-G-M-20170905	
1234	18.4	B	6.91	7.88	32.94	19.43	Y	↓	<input checked="" type="radio"/> TSS only <input checked="" type="radio"/> Full suite	1A-RW-04-G-B-20170905	
									<input type="radio"/> TSS only <input type="radio"/> Full suite		
									<input type="radio"/> TSS only <input type="radio"/> Full suite		
									<input type="radio"/> TSS only <input type="radio"/> Full suite		
									<input type="radio"/> TSS only <input type="radio"/> Full suite		
QA/QC Samples Collected: Y <input checked="" type="radio"/> N <input type="radio"/>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							<input type="radio"/> TSS only <input type="radio"/> Full suite		
Comments (include photographs taken, if any): MS/MSD FOR PCB/OC PEST.											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1447		
Station ID: 1A-RW-05		Latitude/Northing: 33.732368		Longitude/Easting: 118.251318		Water Depth (ft): SP (m): 17.4					
Weather Conditions: SUNNY, HOT, SLIGHT BREEZE									Field Personnel: SPOTTER/MS		
Wind Speed and Direction (see Beaufort Scale): 1									Recorded By: SPOTTER		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): NA											
Description of In-water activities (e.g., recreational boating, active discharges): LOADING CARGO SHIPS											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1447	1	S	8.26	8.06	33.07	22.27	Y	CLEAR, GOOD	TSS only	Full suite	1A-RW-05-G-S-20170905
1449	9	M	7.33	8.08	32.84	19.25	Y		TSS only	Full suite	1A-RW-05-G-M-20170905
1451	16.9	B	6.84	8.04	33.14	15.43	Y	↓	TSS only	Full suite	1A-RW-05-G-B-20170905
								SOME VISIBLE PARTICULATE	TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): TRIPPLICATE IN SILENCE @ S											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02				
Station ID: 1A-RW-05		Time: 1441		Date: 9/5/17			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
1443	S	1	7.99	7.98	32.95	21.66	
1445	S	1	8.29	8.03	33.06	22.02	
1447	S	1	8.26	8.06	33.07	22.07	
Average		1	8.18	8.02	33.03	21.92	
Difference between max and min		0	0.3	0.08	0.12	0.41	
RPD		NA	3.6%	0.99%	0.36%	1.99%	
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²		Y	Y	Y	Y	Y	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest} - \text{smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 9/5/17		Time: 1:30	
Station ID: 1A-RW-06		Latitude/Northing: 33.725217750				Longitude/Easting: 118.274442		Water Depth (ft): SP (m): 17.4			
Weather Conditions: SUNNY, HOT, LIGHT BREEZE								Field Personnel: S. POTTER, MTS			
Wind Speed and Direction (see Beaufort Scale): 2								Recorded By: S. POTTER			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): GULL											
Description of In-water activities (e.g., recreational boating, active discharges): RECREATIONAL BOATING											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1335	1	S	7.98	7.99	32.33	21.28	Y	CLEAR, NO ODOR	TSS only	Full suite	1A-RW-06-G-S-20170905
1337	9.1	M	7.96	7.95	32.78	19.99	Y	↓	TSS only	Full suite	1A-RW-06-G-M-20170905
1339	16.5	B	7.48	7.92	32.91	17.42	Y	↓	TSS only	Full suite	1A-RW-06-G-B-20170905
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y (N)		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

- Notes:
- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
 - Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1400		
Station ID: FH-RW-07		Latitude/Northing: 33.735813			Longitude/Easting: 118.267283			Water Depth (ft): / (m): 6.6			
Weather Conditions: HOT, SUNNY, MILD BREEZE								Field Personnel: SPOTTER, MTS			
Wind Speed and Direction (see Beaufort Scale): 2								Recorded By: SPOTTER			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): GULLS											
Description of In-water activities (e.g., recreational boating, active discharges): REC BOAT IN TRANSIT											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1409	1	S	8.95	8.01	32.44	23.54	Y	CLEAR, NOODLE	TSS only	Full suite	FH-RW-07-G-S-20170905
1411	3	M	8.72	8.01	32.62	21.74	Y	↓	TSS only	Full suite	FH-RW-07-G-M-20170905
1413	5-9	B	7.64	7.96	32.97	20.70	Y		TSS only	Full suite	FH-RW-07-G-B-20170905
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1330		
Station ID: OA-RW-08		Latitude/Northing: 33.71463		Longitude/Easting: -118.24252		Water Depth (ft): 80.5 (m): SP					
Weather Conditions: Part Cloud						Field Personnel: CC/CC					
Wind Speed and Direction (see Beaufort Scale): 12-15 knots						Recorded By: CC					
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): none											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1330	1	S	8.0	8.2	50762	20.8	Y		TSS only	Full suite	OA-RW-08-G-S-20170905
1335	20.13	M	8.2	8.1	50782	20.5	Y	SP	TSS only	Full suite	OA-RW-08-G-M-20170905
1340	20	B	8.4	8.2	50736	20.3	Y		TSS only	Full suite	OA-RW-08-G-B-20170905
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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Mission Viejo, CA 92691
(949) 347-2780

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/7			Time: 1300		
Station ID: OA-RW-09		Latitude/Northing: 33 712004			Longitude/Easting: 718.26337			Water Depth (ft): 21.3 (m): 7			
Weather Conditions: Part Cloudy Windy								Field Personnel: CC/CC			
Wind Speed and Direction (see Beaufort Scale): 10-12 knts								Recorded By: CC			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): vessel buffer											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1300	1	S	8.0	8.2	51100	21.1	Y	/	<input checked="" type="radio"/> TSS only <input type="radio"/> Full suite	OA-RW-09-G-S-20170905	36.66
1303	3.5	M	8.1	8.2	50939	21.0	Y	/ SP	<input checked="" type="radio"/> TSS only <input type="radio"/> Full suite	OA-RW-09-G-M-20170905	36.61
1305	6	B	8.2	8.2	50891	20.9	Y	/	<input checked="" type="radio"/> TSS only <input type="radio"/> Full suite	OA-RW-09-G-B-20170905	36.67
									<input type="radio"/> TSS only <input type="radio"/> Full suite		
									<input type="radio"/> TSS only <input type="radio"/> Full suite		
									<input type="radio"/> TSS only <input type="radio"/> Full suite		
									<input type="radio"/> TSS only <input type="radio"/> Full suite		
QA/QC Samples Collected: Y <input checked="" type="radio"/> N <input type="radio"/>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							<input type="radio"/> TSS only <input type="radio"/> Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1539		
Station ID: CM-RW-10		Latitude/Northing: 33.719352		Longitude/Easting: 118 279069		Water Depth (ft): 50 (m): 10.6					
Weather Conditions: HOT, SUNNY, MILD BREEZE									Field Personnel: SPOTTER / MTS		
Wind Speed and Direction (see Beaufort Scale): 2									Recorded By: SPOTTER		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): 3-4 SEA LIONS											
Description of In-water activities (e.g., recreational boating, active discharges): NA											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1540	1	S	8.34	8.04	32.46	22.99	Y	CLEAR, NOOD	TSS only	Full suite	CM-RW-10-G-S-20170905
1542	5.1	M	7.36	8.03	32.84	20.25	Y	↓	TSS only	Full suite	CM-RW-10-G-M-20170905
1544	9.5	B	6.78	8.00	33.06	18.91	Y		TSS only	Full suite	CM-RW-10-G-B-20170905
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / <input checked="" type="radio"/> N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 9/5/17		Time: 1410	
Station ID: CB-RW-11		Latitude/Northing: 33.71775		Longitude/Easting: 118.281065		Water Depth (ft.): 30 (m): 3.0		Field Personnel: SPOTTER, WTS			
Weather Conditions: HOT, SUNNY, MEDIUM BREEZE								Recorded By: SPOTTER			
Wind Speed and Direction (see Beaufort Scale): 2								Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): NA			
Description of In-water activities (e.g., recreational boating, active discharges): NA											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1615	1	S	7.69	8.06	32.77	20.83	Y	CLEAR, NOOD	TSS only	Full suite	CB-RW-11-G-S-20170905
1617	1.5	M	6.97	8.06	33.00	20.81	Y		TSS only	Full suite	CB-RW-11-G-M-20170905
1619	2.8	B	6.87	8.05	33.36	20.44	Y	↓	TSS only	Full suite	CB-RW-11-G-B-20170905
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) TSS FOR MID						TSS only		Full suite	
Comments (include photographs taken, if any):											

- Notes:
- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
 - Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 9/5/17		Time: 9:36	
Station ID: 1B-12		Latitude/Northing: 33.766053		Longitude/Easting: 118.230367		Water Depth (ft):		(m): 17.5			
Weather Conditions: SUNNY, BREEZE								Field Personnel: S. POTTEN			
Wind Speed and Direction (see Beaufort Scale):								Recorded By: S. POTTEN			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): N/A											
Description of In-water activities (e.g., recreational boating, active discharges): LOADING SHIPS, TRASH											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
0939	1	S	7.94	7.96	33.23	21.37	Y	Clear No odor	TSS only	Full suite	1B-RW-12-G-S-20170905
0948	8.5	M	7.85	7.82	32.76	20.61	Y	"	TSS only	Full suite	1B-RW-12-G-M-20170905
0951	16.6	B	7.31	7.97	32.91	20.02	Y	"	TSS only	Full suite	1B-RW-12-G-B-20170905
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only		Full suite	
Comments (include photographs taken, if any): BOTTOM TSS ONLY											

- Notes:
- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
 - Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 0854			
Station ID: IB-RW-13		Latitude/Northing: 33.75374		Longitude/Easting: 118.21638		Water Depth (ft): 24.2			(m): 24.2			
Weather Conditions: clear & sunny								Field Personnel: CO, MA				
Wind Speed and Direction (see Beaufort Scale): 1-3 mph from W								Recorded By: C. Osuch				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none												
Description of In-water activities (e.g., recreational boating, active discharges): survey boat fire department boat, tug & cargo ship												
In Situ Field Parameters ¹ and Water Sample Collection												
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID		
0854	1	S	8.1	8.2	34.0	21.8	Y	clear, no particulates	TSS only <u>Full suite</u>	IB-RW-13-G-S-20170905		
0856	12.1	M	8.2	8.2	34.0	19.7	Y		TSS only <u>Full suite</u>	IB-RW-13-G-M-20170905		
0858	23.2	B	5.9	8.1	34.0	16.5	Y		TSS only <u>Full suite</u>	IB-RW-13-G-B-20170905		
									TSS only	Full suite		
									TSS only	Full suite		
									TSS only	Full suite		
									TSS only	Full suite		
QA/QC Samples Collected <u>Y</u> / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							MS/MSD metals/Hg		TSS only Full suite	
Comments (include photographs taken, if any): TriPLICATE measurements @ bottom												

- Notes:
- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
 - Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02			
Station ID: IB-RW-13		Time: 0858		Date: 9/5/17			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
0858	B	23.2	5.9	8.1	34.0	16.5	
0900	B	23.2	5.9	8.1	34.0	16.5	
0902	B	23.2	5.9	8.1	34.0	16.5	
Average		23.2	5.9	8.1	34.0	16.5	
Difference between max and min		0	0	0	0	0	
RPD		NA	NA	NA	NA	NA	
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²		Y	Y	Y	Y	Y	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest-smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 0927		
Station ID: IB-RW-14		Latitude/Northing: 33.74901		Longitude/Easting: 118.23086			Water Depth (ft): 150 (m): 16.4				
Weather Conditions: Partly cloudy									Field Personnel: CO, MA		
Wind Speed and Direction (see Beaufort Scale): 1-3 mph from W									Recorded By: C. Osuch		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): None											
Description of In-water activities (e.g., recreational boating, active discharges): None											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
0927	1	S	8.4	8.3	34.0	22.3	Y	Clear, no odor, sheen, or particulates	TSS only <u>Full suite</u>	IB-RW-14-G-S-20170905	
0930	8.2	M	8.3	8.3	34.0	20.4	Y		<u>TSS only</u> Full suite	IB-RW-14-G-M-20170905	
0932	15.4	B	6.7	8.2	34.0	18.6	Y		<u>TSS only</u> Full suite	IB-RW-14-G-B-20170905	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: Y <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

- Notes:
- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
 - Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 0957		
Station ID: IB-RW-15		Latitude/Northing: 33.74215		Longitude/Easting: 118.19945		Water Depth (ft): 158 (m): 19.1					
Weather Conditions: Partly cloudy						Field Personnel: CO, MA					
Wind Speed and Direction (see Beaufort Scale): 3-7 mph from W						Recorded By: C. Budh					
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): None											
Description of In-water activities (e.g., recreational boating, active discharges): None											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1000	1	S	7.9	8.3	33.9	22.6	Y	Clear, no odor, color, or particulate	TSS only	Full suite	IB-RW-15-G-S-20170905
1003	9.5	M	7.6	8.3	34.0	20.8	Y		TSS only	Full suite	IB-RW-15-G-M-20170905
1006	18.1	B	6.5	8.2	34.0	17.6	Y		TSS only	Full suite	IB-RW-15-G-B-20170905
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1025		
Station ID: OB-RW-16		Latitude/Northing: 33.73115		Longitude/Easting: 118.22101		Water Depth (ft): (m): 18.8			Field Personnel: CO, MA		
Weather Conditions: Partly cloudy									Recorded By: C. Osuch		
Wind Speed and Direction (see Beaufort Scale): 8-12 mph from W											
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): None											
Description of In-water activities (e.g., recreational boating, active discharges): None											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
1027	1	S	8.1	8.3	34.0	22.3	Y	clear, no odor, sharp	TSS only <u>Full suite</u>	OB-RW-16-G-S-20170905	
1030	9.4	M	8.1	8.3	34.0	20.5	Y	or particulates	<u>TSS only</u> Full suite	OB-RW-16-G-M-20170905	
1032	17.8	B	6.4	8.3	34.0	17.3	Y	↓	<u>TSS only</u> Full suite	OB-RW-16-G-B-20170905	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected <u>Y</u> /N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						<u>TSS only</u> Full suite			
Comments (include photographs taken, if any): slightly moved station due to anchored cargo ship. Approx 100' from target. 1st dup @ bottom											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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(949) 347-2780

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1400			
Station ID: OB-RW-17		Latitude/Northing: 33.72743		Longitude/Easting: -113.18601		Water Depth (ft): 78.9 (m): 26.3						
Weather Conditions: clear						Field Personnel: CC/CC						
Wind Speed and Direction (see Beaufort Scale): 12-15 kts						Recorded By: CC						
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none												
Description of In-water activities (e.g., recreational boating, active discharges): work boats & containers												
In Situ Field Parameters ¹ and Water Sample Collection												
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt) conduct	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID	
1400	1	S	7.8	8.3	50962	22.3	Y		TSS only	Full suite	OB-RW-17-G-S-20170905	
1403	13	M	8.0	8.2	50945	19.8	Y	sp	TSS only	Full suite	OB-RW-17-G-M-20170905	
1405	25	B	8.1	8.2	50832	18.2	Y		TSS only	Full suite	OB-RW-17-G-B-20170905	
									TSS only	Full suite		
									TSS only	Full suite		
									TSS only	Full suite		
									TSS only	Full suite		
QA/QC Samples Collected: 2 / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinse blank (1 during monitoring event)						3 hrs / MSD organics		TSS only	Full suite	
Comments (include photographs taken, if any):												

SALINITY
35.54
37.68
39.07

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1301		
Station ID: SP-RW-18		Latitude/Northing: 33.75358		Longitude/Easting: 118.18090		Water Depth (ft): 50 (m): 13.1					
Weather Conditions: clear & sunny								Field Personnel: CO, MA			
Wind Speed and Direction (see Beaufort Scale): 8-12 mph from W								Recorded By: C. Osuch			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): 1 brown pelican											
Description of In-water activities (e.g., recreational boating, active discharges): Catalina Express, 2 jet skiers, recreational boat											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1304	1	S	8.5	8.4	33.2	24.1	Y	clear, no obs.	TSS only <u>Full suite</u>	SP-RW-18-G-S-20170905	
1307	6.5	M	8.2	8.4	34.1	22.2	Y	particulates	<u>TSS only</u> Full suite	SP-RW-18-G-M-20170905	
1310	12.1	B	2.4	8.2	34.0	18.4	Y		<u>TSS only</u> Full suite	SP-RW-18-G-B-20170905	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: Y / <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1:55			
Station ID: SP-RW-19		Latitude/Northing: 33 73665		Longitude/Easting: 118 13148		Water Depth (ft): / (m): 96			Field Personnel: CC/CD			
Weather Conditions: Clear						Wind Speed and Direction (see Beaufort Scale): 12-15 kph			Recorded By: C. Clark			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none												
Description of In-water activities (e.g., recreational boating, active discharges): none												
In Situ Field Parameters ¹ and Water Sample Collection												
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID		
1525	1	S	7.9	8.2	50913	22.8	Y		TSS only Full suite	SP-RW-19-G-S-20170905		
1530	5.0	M	7.8	8.2	50911	22.8	Y	sp	TSS only Full suite	SP-RW-19-G-M-20170905		
1535	8.5	B	7.7	8.2	50903	22.8	Y		TSS only Full suite	SP-RW-19-G-B-20170905		
									TSS only Full suite			
									TSS only Full suite			
									TSS only Full suite			
									TSS only Full suite			
QA/QC Samples Collected: Y <input checked="" type="radio"/> N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite			
Comments (include photographs taken, if any):												

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date:		Time: 1455		
Station ID: SP-RW-20		Latitude/Northing: 33 72554		Longitude/Easting: 118 15695		Water Depth (ft): 52.3 (m): 17.4				
Weather Conditions: Clear						Field Personnel: CD/CC				
Wind Speed and Direction (see Beaufort Scale): 12-15 knts						Recorded By: C. Cline				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none										
Description of In-water activities (e.g., recreational boating, active discharges): large vessels moored										
In Situ Field Parameters ¹ and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
1455	1	S	7.6	8.3	50751	22.6	Y	/	TSS only <u>Full suite</u>	SP-RW-20-G-S-20170905
1500	8.5	M	7.3	8.2	50816	22.3	Y	/	TSS only <u>Full suite</u>	SP-RW-20-G-M-20170905
1505	16	B	7.4	8.2	50913	20.1	Y	/	TSS only <u>Full suite</u>	SP-RW-20-G-B-20170905
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
QA/QC Samples Collected: Y <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only Full suite		
Comments (include photographs taken, if any):										

SALINITY
35.18
35.43
37.38

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.



Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17		Time: 1221		
Station ID: LE-RW-21		Latitude/Northing: 33.75621		Longitude/Easting: 118.19327		Water Depth (ft): 58 (m): 2.1				
Weather Conditions: clear + sunny						Field Personnel: C. MA				
Wind Speed and Direction (see Beaufort Scale): 3-7 mph from W						Recorded By: C. Osuch				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): 2 western gulls										
Description of In-water activities (e.g., recreational boating, active discharges): None										
In Situ Field Parameters ¹ and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
1225	1	S	9.1	8.2	32.0	24.0	Y	clear, no odor, thin, particulate	TSS only <u>Full suite</u>	LE-RW-21-G-S-20170905
1228									TSS only Full suite	
1230									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
QA/QC Samples Collected: Y / <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite	
Comments (include photographs taken, if any): ① Depth 2.1 m. Due to shallow depth, only sampled surface.										

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 9/5/17			Time: 1131		
Station ID: LE-RW-22		Latitude/Northing: 33.76107		Longitude/Easting: 118.20215		Water Depth (ft): 150		(m): 2.3			
Weather Conditions: clear & sunny								Field Personnel: CO, MA			
Wind Speed and Direction (see Beaufort Scale): 1-3 mph from W								Recorded By: C. Buch			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): None											
Description of In-water activities (e.g., recreational boating, active discharges): None											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1134	1	S	9.3	8.3	32.34	23.76	Y	clear, no odor	TSS only <u>Full suite</u>	LE-RW-22-G-S-20170905	
1136		M	9.3	8.3	32.3	23.5	Y	green, no particulates	TSS only Full suite	LE-RW-22-G-M-20170905	
1138		B					Y		TSS only Full suite	LE-RW-22-G-B-20170905	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: <u>Y</u> <u>N</u>		Field duplicate (5% of project) during monitoring event: 1135						Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)		TSS only <u>Full suite</u>	
Comments (include photographs taken, if any): ① Depth 2.3 m. Due to shallow depth, only sampled surface.											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 11/10/18		Time: 1055	
Station ID: 65-61		Latitude/Northing: 33.77483		Longitude/Easting: 118.24551		Water Depth (ft): 7 (m): 7		Field Personnel: N Kennedy			
Weather Conditions: Sunny; calm wind								Recorded By: N Kennedy			
Wind Speed and Direction (see Beaufort Scale): 1 knot - W											
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): none											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1055	1	S	6.2	7.5	7.7	15.4	Y	Brown	TSS only	Full suite	GS-DW-01-07-S-20180110
1057	3	M	6.8	7.5	26.3	15.6	N	↓	TSS only	Full suite	GS-DW-01-07-M-20180110
1059	6	B	5.8	7.5	30.1	15.7	N	↓	TSS only	Full suite	GS-DW-01-07-B-20180110
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only		Full suite	
Comments (include photographs taken, if any): trash in channel; eg. plastic, no odor; no sheen											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 1/10/18		Time: 1:30	
Station ID: RW-02		Latitude/Northing: 33.76280		Longitude/Easting: 118.25484		Water Depth (ft): 18.9 (m):		Field Personnel: W. Kennedy			
Weather Conditions: Sunny; calm wind								Recorded By: W. Kennedy			
Wind Speed and Direction (see Beaufort Scale): 11 knot West											
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): dredge barge movements; tugs											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
✓ 1130	1	S	6.8	7.7	19.9	15.9	Y	Brown	TSS only	Full suite	1A-RW-02-G-S-20180110
✓ 1132	18	M	6.4	7.8	29.5	15.8	N		TSS only	Full suite	1A-RW-02-G-M-20180110
✓ 1135	18	B	6.5	7.9	28.0	15.8	N		TSS only	Full suite	1A-RW-02-G-B-20180110
		↘	6.2	7.5	29.8	15.6			TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only		Full suite	
Comments (include photographs taken, if any): prior to sampling manson barge movement occurred; trash in the channel; no odor no sheen											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/10/18		Time: 1220		
Station ID: RW-03		Latitude/Northing: 33.76234		Longitude/Easting: 118.27409		Water Depth (ft): 18.1 (m)				
Weather Conditions: Sunny; calm						Field Personnel: JK				
Wind Speed and Direction (see Beaufort Scale): 1 knot; west						Recorded By: N. Kennedy				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none										
Description of In-water activities (e.g., recreational boating, active discharges): none										
In Situ Field Parameters ¹ and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
1220	1	S	6.8	7.6	25.5	15.6		Brown	TSS only <u>Full suite</u>	1A-RW-03-G-S-20180110
1222	8.5	m	6.5	7.6	28.6	15.7			TSS only <u>Full suite</u>	1A-RW-03-G-M-20180110
1224	17	B	6.3	7.6	29.2	15.6	clear		TSS only <u>Full suite</u>	1A-RW-03-G-B-20180110
									TSS only <u>Full suite</u>	
									TSS only <u>Full suite</u>	
									TSS only <u>Full suite</u>	
									TSS only <u>Full suite</u>	
QA/QC Samples Collected: Y <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only <u>Full suite</u>		
Comments (include photographs taken, if any): triplicate taken; debris present (e.g. trash and plastic)										

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02			
Station ID: <u>DW-03</u>		Time: <u>1230</u>		Date: <u>1/10/18</u>			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
<u>1230</u>	<u>m</u>	<u>8.5</u>	<u>6.45</u>	<u>7.6</u>	<u>28.7</u>	<u>15.7</u>	
<u>1232</u>	<u>m</u>	<u>8.5</u>	<u>6.4</u>	<u>7.6</u>	<u>28.8</u>	<u>15.7</u>	
<u>1234</u>	<u>m</u>	<u>8.5</u>	<u>6.4</u>	<u>7.4</u>	<u>28.8</u>	<u>15.7</u>	
Average		<u>8.5</u>	<u>6.4</u>	<u>7.6</u>		<u>15.7</u>	
Difference between max and min		<u>0</u>	<u>0.008</u>	<u>0</u>	<u>0.1</u>	<u>0</u>	
RPD		<u>0</u>	<u>0.008</u>	<u>0.003</u>	<u>0.003</u>		
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²		<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest-smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/10/18			Time: 3:10		
Station ID: RW-04		Latitude/Northing: 33.75180		Longitude/Easting: 118.27103		Water Depth (ft): 18.9 (m):					
Weather Conditions: Sunny, calm						Field Personnel: W. Kennedy					
Wind Speed and Direction (see Beaufort Scale): 7 knot; west						Recorded By: W. Kennedy					
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): none											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1310	1	S	6.5	7.7	22.5	16.0		brown	TSS only	Full suite	1A-RW-04-G-S-20180110
1312	9	M	6.3	7.7	28.2	15.7	N		TSS only	Full suite	1A-RW-04-G-M-20180110
1314	18	B	6.3	7.7	28.7	15.7	N	clear	TSS only	Full suite	1A-RW-04-G-B-20180110
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y <input checked="" type="checkbox"/>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): debris (floating green waste); no odor; no sheen											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 1/10/13		Time: 1435	
Station ID: RW-05		Latitude/Northing: 33.73283		Longitude/Easting: 118.29939		Water Depth (ft):		(m): 18.1			
Weather Conditions: Sunny, calm, breezy								Field Personnel: A. Kennedy			
Wind Speed and Direction (see Beaufort Scale): 1-2 knots west								Recorded By: A. Kennedy			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): tanker docking/berthing; see comments											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1435	1	S	7.5	8.0	28.6	16.2	Y	clear	TSS only	Full suite	1A-RW-05-G-S-20130110
1437	8.5	M	7.2	7.9	30.03	16.0	N		TSS only	Full suite	1A-RW-05-G-M-20130110
1439	17	B	7.0	7.9	30.2	15.9	N		TSS only	Full suite	1A-RW-05-G-B-20130110
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only		Full suite	
Comments (include photographs taken, if any): - Tanker was being docked by 3 tugr in vicinity; no odor * moved location east of tanker no sheen											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 7/10/18		Time: 1340	
Station ID: RW-06		Latitude/Northing: 33.72565		Longitude/Easting: 118.27148		Water Depth (ft):		(m): 17.8			
Weather Conditions: Slight breeze;										Field Personnel: N. Kennedy	
Wind Speed and Direction (see Beaufort Scale): 2-3 knots										Recorded By: N. Kennedy	
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): None											
Description of In-water activities (e.g., recreational boating, active discharges): Recreational boating											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1340	1	S	7.1	7.7	27.9	15.9		clear green	TSS only	Full suite	14-RW-06-S-2018 0110
1342	8.5	M	6.9	7.8	30.5	15.9		↓	TSS only	Full suite	14-RW-06-M-2018 0110
1344	17	B	7.9	7.9	30.8	15.9		↓	TSS only	Full suite	14-RW-06-B-2018 0110
			6.8						TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only		Full suite	
Comments (include photographs taken, if any): no debris; no odor; no sheen 1 cb duplicate											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/10/18			Time: 1410		
Station ID: RW-07		Latitude/Northing: 33.73585		Longitude/Easting: 118.26731		Water Depth (ft): (m): 7.7			Field Personnel: N. Kennedy		
Weather Conditions: Sunny, slight breeze									Recorded By: N. Kennedy		
Wind Speed and Direction (see Beaufort Scale): 2 knot, west											
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): sea lion in entrance											
Description of In-water activities (e.g., recreational boating, active discharges): none											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1410	1	S	6.9	7.9	29.6	16.3	Y	clear	TSS only	Full suite	Fit-RW-07-G-S-2018 0110
1412	3.5	M	6.6	7.9	29.9	16.2	N	↓	TSS only	Full suite	Fit-RW-07-G-M-2018 0110
1414	7	B	6.1	7.8	30.00	16.2	N	↓	TSS only	Full suite	Fit-RW-07-G-B-2018 0110
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): no odor; no sheen; sea weed debris											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.024			Date: 1/10/18		Time: 1815		
Station ID: OA-RW-09		Latitude/Northing: 33.71415		Longitude/Easting: -118.24323		Water Depth (ft): 24 (m): 24.9				
Weather Conditions: sunny light breeze						Field Personnel: CB/CS				
Wind Speed and Direction (see Beaufort Scale): n/a ~ 4 knots						Recorded By: CB				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): gulls										
Description of In-water activities (e.g., recreational boating, active discharges): n/a										
In Situ Field Parameters ¹ and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
1015	1	S	8.2	8.7	30.1	15.8	Y	clear	TSS only <u>Full suite</u>	OA-RW-09-G-S-20180110
1020	12.5	M	7.9	8.6	33.4	16.1	Y	clear	TSS only Full suite	OA-RW-09-G-M-20180110
1025	24	B	7.6	8.1	33.5	16.0	Y	clear	TSS only Full suite	OA-RW-09-G-B-20180110
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) Lab dup @ B, TD							TSS only Full suite	
Comments (include photographs taken, if any):										

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 7/10/17			Time: 0935		
Station ID: 0A-RW-08		Latitude/Northing: 33.71204			Longitude/Easting: 718.26390			Water Depth (ft): (m): 6.2			
Weather Conditions: sunny, light breeze								Field Personnel: CC/CC			
Wind Speed and Direction (see Beaufort Scale): ~ 4 knot								Recorded By: CC			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): gulls											
Description of In-water activities (e.g., recreational boating, active discharges): n/a											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
0935	1	S	8.0	7.9	30.9	15.5	Y	Clear	TSS only <u>Full suite</u>	0A-RW-08-G-S-20180110	
0940	2.7	M	7.8	7.9	32.93	15.6	Y	↓	<u>TSS only</u> Full suite	0A-RW-08-G-M-20180110	
0945	5.2	B	7.6	7.9	33.4	15.8	Y	↓	<u>TSS only</u> Full suite	0A-RW-08-G-B-20180110	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected <u>Y</u> /N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) Field dup TSS @ B (0940)								TSS only Full suite	
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/10/10			Time: 1515		
Station ID: RW-10		Latitude/Northing: 33.71943		Longitude/Easting: 118.27911		Water Depth (ft): (m): 11.4			Field Personnel: W. Kennedy		
Weather Conditions: Sunny, slight breeze									Recorded By: W. Kennedy		
Wind Speed and Direction (see Beaufort Scale): 2-3 knots; west											
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): birds; California sealion											
Description of In-water activities (e.g., recreational boating, active discharges): recreational boating											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1515	1	S	7.4	8.0	27.4	16.4	Y	clear	TSS only	Full suite	CM-RW-10-G-S-20180110
1517	5	M	7.2	7.9	30.1	15.8	N		TSS only	Full suite	CM-RW-10-G-M-20180110
1519	10	B	6.7	7.9	30.7	14.0			TSS only	Full suite	CM-RW-10-G-B-20180110
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): field duplicate collected; no sheen; no odor											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02			
Station ID: <u>RW10</u>		Time: <u>1517</u>		Date: <u>1517 1/10/18</u>			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
<u>1517</u>	<u>S</u>	<u>1</u>	<u>7.3</u>	<u>7.8</u>	<u>29.1</u>	<u>16.22</u>	
<u>1518</u>	<u>S</u>	<u>1</u>	<u>7.3</u>	<u>7.8</u>	<u>28.5</u>	<u>16.2</u>	
<u>1519</u>	<u>S</u>	<u>1</u>	<u>7.3</u>	<u>7.9</u>	<u>28.1</u>	<u>16.3</u>	
Average		<u>1</u>	<u>7.3</u>	<u>7.84</u>	<u>28.6</u>	<u>16.24</u>	
Difference between max and min		<u>0</u>	<u>0</u>	<u>0.1</u>	<u>0.5</u>	<u>0.1</u>	
RPD		<u>0</u>	<u>0</u>	<u>0.13</u>	<u>0.17</u>	<u>0.006</u>	
Precision		<u>± 0.1</u>	<u>5 percent</u>	<u>± 0.2</u>	<u>± 0.2</u>	<u>± 0.5 °C</u>	
DQO Met? (Y/N) ²		<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		<u>± 0.1</u>	<u>5 percent</u>	<u>± 0.2</u>	<u>± 0.2</u>	<u>± 0.5 °C</u>	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest} - \text{smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 11/10/18		Time: 1545		
Station ID: RW-1		Latitude/Northing: 33.71178		Longitude/Easting: 118.28111		Water Depth (ft): (m): 3.4				
Weather Conditions: Sunny & slight breeze						Field Personnel: N.K				
Wind Speed and Direction (see Beaufort Scale): 2-3 knots						Recorded By: N. Kennedy				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): birds										
Description of In-water activities (e.g., recreational boating, active discharges): none										
In Situ Field Parameters ¹ and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
1545	1	S	7.4	8.0	29.4	15.8	Y	clear	TSS only <u>Full suite</u>	CB-RW-1-G-S-20180110
1547	1.5	M	7.3	8.0	29.7	15.6	N	↓	TSS only <u>Full suite</u>	CB-RW-1-G-M-20180110
1549	3	B	7.2	7.9	30.1	15.8	N	✓	TSS only <u>Full suite</u>	CB-RW-1-G-B-20180110
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
QA/QC Samples Collected: Y <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only Full suite		
Comments (include photographs taken, if any): no odor ; no sheen										

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/10/18			Time: 0950	
Station ID: 12		Latitude/Northing: 33.76847		Longitude/Easting: 110.22892		Water Depth (ft): 18.2 (m)				
Weather Conditions: Sunny; calm wind								Field Personnel: NK/SJ		
Wind Speed and Direction (see Beaufort Scale): 1 knot - W								Recorded By: NK		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none										
Description of In-water activities (e.g., recreational boating, active discharges): none										
In Situ Field Parameters ¹ and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
0950	1	S	6.4	7.6	32.9	15.9	Y	Brown	TSS only <u>Full suite</u>	1B-PW-12-G-S-20180110
0952	8.5	M	6.5	7.6	33.2	16.0	Y	Brown	<u>TSS only</u> Full suite	1B-PW-12-G-M-20180110
0958	17	B	6.5	7.6	38.6	16.0	Y	Brown	<u>TSS only</u> Full suite	1B-PW-12-G-B-20180110
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
QA/QC Samples Collected: Y <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only Full suite		
Comments (include photographs taken, if any): Slightly moved position due to barge in channel										

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 1/10/19		Time: 1520	
Station ID: JA RW-13		Latitude/Northing: 33.75792		Longitude/Easting: -118.21625				Water Depth (ft): (m): 24.5			
Weather Conditions: partial sun, light breeze								Field Personnel: CO/CO			
Wind Speed and Direction (see Beaufort Scale): W								Recorded By: CO			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): barges offloading											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1520	1	S	8.1	8.1	30.5	16.5	Y	Clear	TSS only	<u>Full suite</u>	JA-RW-13-G-5-20180110
1525	12	M	7.8	8.1	33.4	16.1	Y	↓	<u>TSS only</u>	Full suite	JA-RW-13-G-M-20180110
1530	23.5	B	7.7	8.0	33.5	16.0	Y	↓	<u>TSS only</u>	Full suite	JA-RW-13-G-B-20180110
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only		Full suite
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 1/10/17		Time: 1600		
Station ID: IA-RW-14		Latitude/Northing: 33.74918			Longitude/Easting: -112.23072			Water Depth (ft): (m): 15.4				
Weather Conditions: partial sun, breezy								Field Personnel: C.D./CC				
Wind Speed and Direction (see Beaufort Scale): W								Recorded By: CD				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): gulls												
Description of In-water activities (e.g., recreational boating, active discharges): offloading barges												
In Situ Field Parameters ¹ and Water Sample Collection												
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID		
1600	1	S	9.1	8.1	32.5	16.3	Y	Clear	TSS only <u>Full suite</u>	IA-RW-14-G-S-20130110		
1605	7.8	M	8.3	8.1	33.3	15.9	Y	Clear	TSS only Full suite	" -M- "		
1610	14.4	B	8.0	8.1	33.4	16.0	Y	Clear	TSS only Full suite	" -B- "		
									TSS only Full suite			
									TSS only Full suite			
									TSS only Full suite			
									TSS only Full suite			
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		Chemistry @ 1615	
Comments (include photographs taken, if any):												

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/16/18			Time: 14:06		
Station ID: 15		Latitude/Northing: 33.74216°			Longitude/Easting: -118.19949°			Water Depth (ft): (m): 17.9			
Weather Conditions: sunny								Field Personnel: MARTIN / M. J. JONES			
Wind Speed and Direction (see Beaufort Scale): 17. WSW.								Recorded By: MARTIN			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): vessels & bath.											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
14:05	1.0	S	8.19	7.93	31.52	16.31	Y	clear	TSS only <u>Full suite</u>	IB-RW-15-G-S-20180116	
14:10	9.0	M	7.82	7.92	33.24	16.10	Y	clear	<u>TSS only</u> Full suite	IB-RW-15-G-M-20180116	
14:12	17.0	B	7.79	7.92	33.22	16.11	Y	clear	<u>TSS only</u> Full suite	IB-RW-15-G-B-20180116	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected <u>Y</u> N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						<u>lab duplicate. just extra volume</u>		<u>TSS only</u> Full suite	IB-RW-15-G-B-20180116
Comments (include photographs taken, if any): for lab of bottom sample											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/10/19			Time: 1140		
Station ID: DB-RW-16		Latitude/Northing: 33.73174		Longitude/Easting: -118.22132			Water Depth (ft): 18.2 (m): 18.2				
Weather Conditions: Sunny								Field Personnel: Cpl/CC			
Wind Speed and Direction (see Beaufort Scale): n/a								Recorded By: CO			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): sea lions, gulls											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
1140	1	S	8.2	8.1	36.4	15.9	Y	cloudy	TSS only <u>Full suite</u>	DB-RW-16-G-S-20180110	
1145	9	M	7.8	8.1	33.4	16.1	Y	brown	<u>TSS only</u> Full suite	-M-	
1150	17	B	7.6	8.1	33.5	16.1	Y	↓	<u>TSS only</u> Full suite	-B-	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: <u>Y</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) <u>none</u>						TSS only Full suite			
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 1/10/18		Time: 13:25	
Station ID: 14 17		Latitude/Northing: 33.72793		Longitude/Easting: 118.18603		Water Depth (ft):		(m): 24.4			
Weather Conditions:								Field Personnel: MARTIN / MASON			
Wind Speed and Direction (see Beaufort Scale):								Recorded By: MARTIN			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton):											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
12:25	1	S	8.79	7.91	31.34	16.22	Y	Clear	TSS only	<u>Full suite</u>	OB-RV-17-G-S-20180110
12:30	12.2	M	8.05	7.93	33.35	16.23	Y	Clear	<u>TSS only</u>	Full suite	OB-RV-17-G-M-20180110
13:32	23.4	B	7.81	7.94	33.37	16.23	Y	Clear	<u>TSS only</u>	Full suite	OB-RV-17-G-B-20180116
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only		Full suite
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 11/10/12			Time: 1230		
Station ID: SP-RW-13		Latitude/Northing: 33.75842		Longitude/Easting: -118.17999			Water Depth (ft): 10.1			(m): 10.1	
Weather Conditions: sunny									Field Personnel: CO/CC		
Wind Speed and Direction (see Beaufort Scale): light breeze									Recorded By: CO		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): n/a											
Description of In-water activities (e.g., recreational boating, active discharges): large amounts of trash & debris											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1230	1	S	7.6	8.1	30.90	16.3	Y		TSS only	Full suite	SP-RW-13-G-S-20120110
1235	5	M	7.8	8.1	33.2	16.3	Y		TSS only	Full suite	" -M- "
1240	9	B	7.7	8.1	33.3	16.3	Y		TSS only	Full suite	" -B- "
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / (N)		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) n/a							TSS only		Full suite
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 1/10/2018		Time: 11:50	
Station ID: 19		Latitude/Northing: 33.73670°			Longitude/Easting: -118.13148°			Water Depth (ft): (m): 8.8			
Weather Conditions: calm sunny								Field Personnel: MARTIN / NUNO			
Wind Speed and Direction (see Beaufort Scale): light wind WSW								Recorded By: MARTIN			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): trash											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
11:50	1	S	9.36	7.94	27.45	15.88	Y	Clear	TSS only	Full suite	SP-RW-19-G-S-20180110
11:52	4H	M	8.41	7.96	33.34	16.35	Y	Clear	TSS only	Full suite	SP-RW-19-G-M-20180110
11:54	7.8	B	8.36	7.96	33.44	16.32	Y	Clear	TSS only	Full suite	SP-RW-19-G-B-20180110
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/10/18			Time: 12:50		
Station ID: 1320		Latitude/Northing: 33.72543°		Longitude/Easting: -118.15737°			Water Depth (ft): (m): 16.0				
Weather Conditions: Sunny								Field Personnel: MAMW/MOINW			
Wind Speed and Direction (see Beaufort Scale): 14 winds WSW								Recorded By: MAMW			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): None											
Description of In-water activities (e.g., recreational boating, active discharges): ships @ anchor nearby, trash in water.											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
12:50	1.0	S	8.61	7.94	30.96	15.94	Y	Clear	TSS only <u>Full suite</u>	SP-RW-20-G-S-20180110	
12:54	8.0	M	8.37	7.96	33.33	16.27	Y	Clear	TSS only <u>Full suite</u>	SP-RW-20-M-M-20180110	
12:56	15.0	B	7.63	7.92	33.43	16.22	Y	Clear	TSS only <u>Full suite</u>	SP-RW-20-G-B-20180110	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: Y / <input checked="" type="checkbox"/>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.02				Date: 1/10/18		Time: 1305	
Station ID: IE-RW-21		Latitude/Northing: 33.75647			Longitude/Easting: -118.19336			Water Depth (ft): (m): 1.3			
Weather Conditions: sunny								Field Personnel: CO/EO			
Wind Speed and Direction (see Beaufort Scale): n/a								Recorded By: CD			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): heavy pollution & organic debris											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1305	1	S	7.4	8.0	26.5	15.4	Y	Brown	TSS only	Full suite	IE-RW-21-G-S-20180110
1310									TSS only	Full suite	
1315									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): S only because of limited depth											

- Notes:
- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
 - Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.02			Date: 1/10/18			Time: 1340		
Station ID: LE-RW-22		Latitude/Northing: 33.76181		Longitude/Easting: -118.20200			Water Depth (ft): (m): 1.4				
Weather Conditions: Sunny, breezy								Field Personnel: CD/CC			
Wind Speed and Direction (see Beaufort Scale): W								Recorded By: CD			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): gulls											
Description of In-water activities (e.g., recreational boating, active discharges): pollution											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
1340	1	S	7.7	8.0	22.9	15.3	Y	Brown	TSS only <u>Full suite</u>	LE-RW-22-G-J-2480110	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: Y/ <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): no M or B, low depth											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 1030		
Station ID: CS-RW-01		Latitude/Northing: 33.77483		Longitude/Easting: -118.24549			Water Depth (ft):			(m): 7.0	
Weather Conditions: Overcast									Field Personnel: CD/AM/MV		
Wind Speed and Direction (see Beaufort Scale): 5-16 KTS SW									Recorded By: MARTIN		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): OCCASIONAL TRASH FLOATING											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1030	1	S	2.00	7.71	31.74	14.14	Y	Clear	TSS only	Full suite	CS-RW-01-G-S-20180227
1032	3.5	M	7.01	7.71	31.05	14.13	Y	Floating particles	TSS only	Full suite	CS-RW-01-G-M-20180227
1034	6.0	B	7.02	7.72	31.00	14.13	Y		TSS only	Full suite	CS-RW-01-G-B-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 1100		
Station ID: JA-RW-02		Latitude/Northing: 33.76307		Longitude/Easting: -118.25482			Water Depth (ft): (m): 17.0				
Weather Conditions: Partial Sun							Field Personnel: CD/AM/MV				
Wind Speed and Direction (see Beaufort Scale): ~1 Mph							Recorded By: MARTIN				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): gulls in water											
Description of In-water activities (e.g., recreational boating, active discharges): n/a											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
1100	1	S	7.53	7.78	31.04	14.46	Y	ELGAL, NO SHEEN	TSS only <u>Full suite</u>	JA-RW-02-G-S-20180227	
1110	8.5	M	7.35	7.77	31.11	14.03	Y	ELGAL, NO SHEEN	TSS only <u>Full suite</u>	JA-RW-02-G-M-20180227	
1112	16	B	7.00	7.75	31.09	13.44	Y	ELGAL, NO SHEEN	TSS only <u>Full suite</u>	JA-RW-02-G-B-20180227	
									TSS only <u>Full suite</u>		
									TSS only <u>Full suite</u>		
									TSS only <u>Full suite</u>		
									TSS only <u>Full suite</u>		
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only <u>Full suite</u>			
Comments (include photographs taken, if any): Field dup TSS @ 5:1105											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18		Time: 11:30		
Station ID: FARW-03		Latitude/Northing: 33.76200		Longitude/Easting: -118.27421		Water Depth (ft): (m): 17.2				
Weather Conditions: partial sun						Field Personnel: CD/AM/MV				
Wind Speed and Direction (see Beaufort Scale): 1-2 mph						Recorded By: CD/AM				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): n/a										
Description of In-water activities (e.g., recreational boating, active discharges): cargo ship offloading										
In Situ Field Parameters and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
1130	1	S	7.62	7.77	30.86	14.40	Y	clear	TSS only <u>Full suite</u>	
1132	8.5	M	7.44	7.75	30.89	13.87	Y	↓	<u>TSS only</u> Full suite	
1134	12.0	B	6.97	7.73	31.03	13.64	Y	↓	<u>TSS only</u> Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
QA/QC Samples Collected: Y <u>KN</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite	
Comments (include photographs taken, if any): Triplicate measurement										

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 1150		
Station ID: IA-RW-04		Latitude/Northing: 33.75187			Longitude/Easting: -118.27129			Water Depth (ft): (m): 18.4			
Weather Conditions: Overcast								Field Personnel: CD/AM/MV			
Wind Speed and Direction (see Beaufort Scale): 1-2 mph								Recorded By: MARTIN			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): none											
Description of In-water activities (e.g., recreational boating, active discharges): none											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
1150	1	S	7.58	7.79	30.91	14.14	Y	CLEAR, NO ODOR, NO SHEEN	TSS only <u>Full suite</u>	IA-RW-04-G-S-20180227	
1200	9.2	M	7.47	7.78	30.87	13.78	Y	↓	<u>TSS only</u> Full suite	IA-RW-04-G-M-20180227	
1205	17.4	B	7.15	7.77	30.90	13.45	Y	↓	<u>TSS only</u> Full suite	IA-RW-04-G-B-20180227	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected (Y/N)		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): AM/MD @ 5' @ 1150											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.04			
Station ID: <u>JA-RW-04</u>		Time:		Date: <u>2/27/18</u>			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
<u>1132</u>	<u>M</u>	<u>8.5</u>	<u>7.44</u>	<u>7.75</u>	<u>30.89</u>	<u>13.87</u>	
<u>1133</u>	<u>M</u>	<u>8.5</u>	<u>7.19</u>	<u>7.76</u>	<u>30.74</u>	<u>13.86</u>	
<u>1134</u>	<u>M</u>	<u>8.5</u>	<u>7.14</u>	<u>7.75</u>	<u>30.99</u>	<u>13.87</u>	
Average		<u>8.5</u>	<u>7.24</u>	<u>7.75</u>	<u>30.87</u>	<u>13.87</u>	
Difference between max and min		<u>0</u>	<u>0.3</u>	<u>0.01</u>	<u>0.1</u>	<u>0.01</u>	
RPD			<u>4%</u>		<u>0.3%</u>	<u>0.01%</u>	
Precision		<u>± 0.1</u>	<u>5 percent</u>	<u>± 0.2</u>	<u>± 0.2</u>	<u>± 0.5 °C</u>	
DQO Met? (Y/N) ²		<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		<u>± 0.1</u>	<u>5 percent</u>	<u>± 0.2</u>	<u>± 0.2</u>	<u>± 0.5 °C</u>	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest} - \text{smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.



Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/2018			Time: 1330	
Station ID: IA-05		Latitude/Northing: 33.73240		Longitude/Easting: -118.25137		Water Depth (ft):		(m): 16.5		
Weather Conditions: partly sunny								Field Personnel: CO/AM/ML		
Wind Speed and Direction (see Beaufort Scale): 5-10 kts								Recorded By: Martin		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): n/a										
Description of In-water activities (e.g., recreational boating, active discharges): container ship offloading										
In Situ Field Parameters ¹ and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
1330	1	S	8.28	7.88	31.42	14.34	Y	CLEAR, NO ODOR, NO SHEEN	TSS only <u>Full suite</u>	IA-05-RW-G-S-20180227
1335	8	M	7.95	7.85	31.34	13.65	Y	CLEAR, NO ODOR, NO SHEEN	<u>TSS only</u> Full suite	IA-05-RW-G-M-20180227
1340	15.5	B	6.45	7.77	30.97	12.20	Y	CLEAR, NO ODOR, NO SHEEN	<u>TSS only</u> Full suite	IA-05-RW-G-B-20180227
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) Field dup TSS @ 1337							TSS only Full suite	
Comments (include photographs taken, if any):										

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 1220		
Station ID: IA-RW-06		Latitude/Northing: 33.72552		Longitude/Easting: -118.27158			Water Depth (ft):			(m): 16.9	
Weather Conditions: w5 partly sunny									Field Personnel: AD/AM/AM		
Wind Speed and Direction (see Beaufort Scale): w5 mph									Recorded By: CD/AM		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): NONE											
Description of In-water activities (e.g., recreational boating, active discharges): NONE											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1220	1	S	7.54	7.78	31.28	13.81	Y	clear, no odor, no sheen	TSS only	Full suite	IA-RW-06-G-S-20180227
1225	8.5	M	7.40	7.78	31.11	13.30	Y	↓	TSS only	Full suite	IA-RW-06-G-M-20180227
1230	15.0	B	6.69	7.74	31.89	12.52	Y	↓	TSS only	Full suite	IA-RW-06-G-B-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) Lab dup TSS							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.



Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 9/27/18			Time: 1300		
Station ID: FH-RW-07		Latitude/Northing: 33.73568		Longitude/Easting: -118.26727		Water Depth (ft):			(m): 5.9		
Weather Conditions: partly sunny								Field Personnel: CD/AM/MV			
Wind Speed and Direction (see Beaufort Scale): ~1 mph								Recorded By: MARTIN			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): gulls, cormorants											
Description of In-water activities (e.g., recreational boating, active discharges): shipyard activities											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1300	1	S	7.46	7.79	31.13	14.32	Y	Clear	TSS only	Full suite	FH-RW-07-G-S-20180227
1305	3	M	7.51	7.80	31.21	14.03	Y	↓	TSS only	Full suite	FH-RW-07-G-M-20180227
1310	5	B	7.21	7.79	31.33	13.77	Y		TSS only	Full suite	FH-RW-07-G-B-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 355		
Station ID: OA-RW-08		Latitude/Northing: 33.71456		Longitude/Easting: -118.24237		Water Depth (ft): (m): 23.5					
Weather Conditions: partial sun						Field Personnel: C.D.A.M., M.V.					
Wind Speed and Direction (see Beaufort Scale): 4.5 mph						Recorded By: MANTON					
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): BASS, WHALE											
Description of In-water activities (e.g., recreational boating, active discharges): OCCASIONAL VESSEL											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1355	1	S	8.47	7.86	3.04	13.65	Y	CLEAR NO ODOOR/SMELL	TSS only	Full suite	OA-RW-08-G-S-20180227
1400	11.0	M	7.74	7.80	31.11	12.85	Y	CLEAR NO ODOOR/SMELL	TSS only	Full suite	OA-RW-08-G-M-20180227
181405	22.5	B	6.62	7.76	30.92	12.28	Y	CLEAR NO ODOOR/SMELL	TSS only	Full suite	OA-RW-08-G-B-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: 17 N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)						TSS only		Full suite	
Comments (include photographs taken, if any): Field Lab dup TSS B @ 1405											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 1:30 PM		
Station ID: OA-09		Latitude/Northing: 33 71211			Longitude/Easting: -118. 26355			Water Depth (ft): (m): 4.8			
Weather Conditions: pt. cloudy								Field Personnel: CB/AM/MV			
Wind Speed and Direction (see Beaufort Scale): 5 mph								Recorded By: MARTIN			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): gulls, pelicans											
Description of In-water activities (e.g., recreational boating, active discharges): N/A											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
1425	1	S	7.69	7.83	31.02	13.69	Y	Clear	TSS only <u>Full suite</u>	OA-RW-09-G-S-20180227	
1430	2.5	M	7.67	7.83	31.94	13.45	Y	↓	<u>TSS only</u> Full suite	OA-RW-09-G-M-20180227	
1435	3.8	B	7.70	7.84	30.82	13.17	Y	↓	<u>TSS only</u> Full suite	OA-RW-09-G-B-20180227	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) TSS @ mid @ 1430 Lab dup							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 1500		
Station ID: CM-RW-11-1 CM-10			Latitude/Northing: 33.71935			Longitude/Easting: 118.27910			Water Depth (ft): (m): 12.3		
Weather Conditions: partly sunny									Field Personnel: CO/AM/MV		
Wind Speed and Direction (see Beaufort Scale): 1-3 mph									Recorded By: Martin		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): SEAL											
Description of In-water activities (e.g., recreational boating, active discharges): MANTA ACTIVITIES											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
1500	1	S	7.71	7.84	31.04	14.22	Y	Clear	TSS only	Full suite	CM-RW-11-G-S-20180227
1505	5.0	M	7.03	7.82	31.04	13.40	Y	↓	TSS only	Full suite	CM-RW-11-G-M-20180227
1510	9.0	B	6.83	7.80	31.02	12.89	Y	↓	TSS only	Full suite	CM-RW-11-G-B-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 1515		
Station ID: CB-10 CB-11 H-10		Latitude/Northing: 33.71243		Longitude/Easting: -118.25072			Water Depth (ft): (m): 3.0				
Weather Conditions: Partial Sun							Field Personnel: CB/AM/mvr				
Wind Speed and Direction (see Beaufort Scale): 1-3 mph							Recorded By: mvr				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): kelp pieces floating, gulls											
Description of In-water activities (e.g., recreational boating, active discharges): none											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
1515	1.0	S	8.06	7.86	31.17	13.67	Y	Clear	TSS only <u>Full suite</u>		
1517	1.5	M	8.10	7.87	31.16	13.67	Y	↓	<u>TSS only</u> Full suite		
1522	2.0	B	8.67	7.87	31.27	13.67	Y	↓	<u>TSS only</u> Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: <u>Y</u> / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event) TSS @ md @ 1526							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04				
Station ID: CB-11		Time: 15:17		Date: 2/27/18			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
1517	M	1.50	8.10	7.87	31.16	13.67	
1518	M	1.53	8.05	7.87	31.18	13.68	
1519	M	1.53	8.04	7.87	31.28	13.67	
Average		1.52	8.1	7.87			
Difference between max and min		0.03	0.06	0	0.12	0.01	
RPD			0.74%				
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²		Y	Y	Y	Y	Y	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest} - \text{smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 01/27/18			Time: 0915-935		
Station ID: IB-RW-12		Latitude/Northing: 33, 76838		Longitude/Easting: -118. 22847			Water Depth (ft): (m): 17.5				
Weather Conditions: partly cloudy							Field Personnel: CD/AM/MV				
Wind Speed and Direction (see Beaufort Scale): 1-2 mph							Recorded By: MARTIN				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): n/a											
Description of In-water activities (e.g., recreational boating, active discharges): n/a											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
0935	1	S	7.55	7.73	31.10	14.36	Y	clear, no sheen, no odor	TSS only <u>Full suite</u>	IB-RW-12-G-S-20180227	
0937	8.5	M	7.51	7.73	31.70	14.15	Y	clear, no sheen, no odor	TSS only <u>Full suite</u>	IB-RW-12-G-M-20180227	
0939	16.5	B	7.28	7.74	30.87	13.81	Y	clear, no sheen, no odor	TSS only <u>Full suite</u>	IB-RW-12-G-B-20180227	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: Y <u>(N)</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/18			Time: 09:22	
Station ID: RW-13		Latitude/Northing: 33.75379		Longitude/Easting: 118.21650		Water Depth (ft):		(m): 25.1		
Weather Conditions: Part cloud, 50°F Steady breeze								Field Personnel: N. Kennedy R. Marry		
Wind Speed and Direction (see Beaufort Scale): 5 kt West								Recorded By: R. Marry		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton):										
Description of In-water activities (e.g., recreational boating, active discharges):										
In Situ Field Parameters ¹ and Water Sample Collection										
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID
09:23	1	S	7.34	7.78	34.02	14.21	Y	Clear	<u>TSS only</u> Full suite	IB-RW-13-G-S-20180227
9:26	12	M	7.04	7.76	34.04	13.76	Y	Clear	<u>TSS only</u> Full suite	IB-RW-13-G-M-20180227
9:27	24	B	6.65	7.73	34.05	12.96	Y	Clear	<u>TSS only</u> Full suite	IB-RW-13-G-B-20180227
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
									TSS only Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite	
Comments (include photographs taken, if any):										

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.04			
Station ID: <u>RO-14 2143</u>		Time: <u>09:37</u>		Date: <u>02.27.18</u>			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
<u>09:57</u>	<u>M</u>	<u>12</u>	<u>7.03</u>	<u>7.80</u>	<u>34.04</u>	<u>13.86</u>	
<u>09:39</u>	<u>M</u>	<u>12</u>	<u>7.04</u>	<u>7.78</u>	<u>34.04</u>	<u>13.89</u>	
<u>09:41</u>	<u>N</u>	<u>12</u>	<u>7.04</u>	<u>7.78</u>	<u>34.03</u>	<u>13.86</u>	
Average		<u>12</u>	<u>7.03</u>	<u>7.8</u>			
Difference between max and min		<u>0</u>	<u>0.01</u>	<u>0.02</u>	<u>±0.01</u>	<u>0.03</u>	
RPD			<u>0.14%</u>	<u>0.3%</u>			
Precision		<u>± 0.1</u>	<u>5 percent</u>	<u>± 0.2</u>	<u>± 0.2</u>	<u>± 0.5 °C</u>	
DQO Met? (Y/N) ²		<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		<u>± 0.1</u>	<u>5 percent</u>	<u>± 0.2</u>	<u>± 0.2</u>	<u>± 0.5 °C</u>	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest} - \text{smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 2/27/19			Time: 830		
Station ID: RW-1814		Latitude/Northing: 33.74896		Longitude/Easting: 118.23087		Water Depth (ft): (m): 16.1					
Weather Conditions: cloudy 50°F; slight breeze									Field Personnel: N. Kennedy M. Murray		
Wind Speed and Direction (see Beaufort Scale): 3 Knot from west									Recorded By: N. Kennedy		
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton):											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
08:30	1	S	7.20	7.45	34.06	14.07	Y	Clear	TSS only	Full suite	IB-RW-14-G-S-20180227
08:35	2.5	M	7.09	7.52	34.06	13.94	Y	Clear	TSS only	Full suite	IB-RW-14-G-M-20180227
08:40	15	B	6.60	7.51	34.08	13.29	Y	Clear	TSS only	Full suite	IB-RW-14-G-B-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected (Y/N)		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): collected field duplicate at surface @ 0830											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.04			
Station ID: RW-14		Time: 0850		Date: 2/27/13			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
08:45	S	7.5	7.05	7.61	34.05	13.95	
08:47	M	7.5	7.06	7.60	34.05	13.95	
08:49	B	7.5	7.07	7.60	34.05	13.94	
Average		7.5	7.06		34.05	13.95	
Difference between max and min		0	0.02	0.01	0.00	0.01	
RPD			0.3%				
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²		Y	Y	Y	Y	Y	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²							
Comments: mis-labelled gps point so accidentally collected in-situ triplicate here							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest} - \text{smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 02.27.18			Time: 9:55		
Station ID: RW-15		Latitude/Northing: 33.74203		Longitude/Easting: 118.19968		Water Depth (ft): (m): 18.4					
Weather Conditions: Part cloudy, 50 F, 5 kt west							Field Personnel: N. Kennedy R. Mooney				
Wind Speed and Direction (see Beaufort Scale): 5 kt from west							Recorded By: R. Mooney				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton):											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
9:55	1	S	7.12	7.82	34.04	13.55	Y	Clear	TSS only Full suite	IB-RW-15-G-S-20180227	
9:57	8.5	M	7.03	7.82	34.04	13.72	Y	Clear	TSS only Full suite	IB-RW-15-G-M-20180227	
9:59	17.5	B	7.01	7.82	34.05	13.42	Y	Clear	TSS only Full suite	IB-RW-15-G-B-20180227	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 02.27.18			Time: 10:25		
Station ID: RW-16		Latitude/Northing: 33.73140			Longitude/Easting: 118.22097			Water Depth (ft): 19.7 (m):			
Weather Conditions: Cloudy 50°F								Field Personnel: N. Kennedy, R. Mooney			
Wind Speed and Direction (see Beaufort Scale): 8 kt West								Recorded By: R. Mooney			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton):											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
10:25	1	S	7.85	7.91	34.05	13.77	Y	Clear	TSS only Full suite	OB-RW-16-G-S-20180227	
10:27	9.5	M	7.54	7.88	34.05	13.53	Y	Clear	TSS only Full suite	OB-RW-16-G-M-20180227	
10:29	18.7	B	6.42	7.79	34.04	12.89	Y	Clear	TSS only Full suite	OB-RW-16-G-B-20180227	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: Y / <u>N</u>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): IMP Station											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 02.27.18			Time: 11:05		
Station ID: RW-17		Latitude/Northing: 33.72763			Longitude/Easting: 118.18587			Water Depth (ft): (m): 22.7			
Weather Conditions: Part Cloud 55F								Field Personnel: N. Kennedy P. Mooney			
Wind Speed and Direction (see Beaufort Scale): 7 Kt West								Recorded By: P. Mooney			
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): 2 4 bottlenose dolphin, WECU											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
11:05	1	S	8.23	7.96	33.82	13.74	X	Clear	<u>TSS only</u> <u>Full suite</u>		08-RW-17-G-S-20180227
11:07	11	M	7.84	7.91	34.05	13.57	Y	Clear	<u>TSS only</u> <u>Full suite</u>		08-RW-17-G-M-20180227
11:09	22	B	6.60	7.79	34.07	12.48	Y	Clear	<u>TSS only</u> <u>Full suite</u>		08-RW-17-G-B-20180227
									<u>TSS only</u> <u>Full suite</u>		
									<u>TSS only</u> <u>Full suite</u>		
									<u>TSS only</u> <u>Full suite</u>		
									<u>TSS only</u> <u>Full suite</u>		
QA/QC Samples Collected: Y <input checked="" type="checkbox"/>		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							<u>TSS only</u> <u>Full suite</u>		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 02.27.18			Time: 11:37		
Station ID: RW 18		Latitude/Northing: 33.75387		Longitude/Easting: 118.18124		Water Depth (ft): 13.0			(m): 13.0		
Weather Conditions: Partly cloudy 95 F						Field Personnel: N. Kennedy R. Mooney					
Wind Speed and Direction (see Beaufort Scale): 3 kt West						Recorded By: R. Mooney					
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): Western Grebe Double-crested cormorant western gull											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
11:37	1	S	7.63	7.92	30.88	14.25	Y	Slightly cloudy clear w. little brown over soil	TSS only	Full suite	SP-RW-18-S-20180227
11:39	6	M	6.61	7.79	33.98	13.67	Y	Clear	TSS only	Full suite	SP-RW-18-M-20180227
11:41	12	B	6.92	7.77	34.02	13.38	Y	Clear	TSS only	Full suite	SP-RW-18-B-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y/(N)		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): River influence at station water brown. Fresh-scan interface 150m downstream. Double checked mid-water DO; it was lower than S + B. Water slightly cloudy in sampler @ surface.											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 02.27.18			Time: 14:30		
Station ID: RW19		Latitude/Northing: 33.73667		Longitude/Easting: 118.13152			Water Depth (ft): (m): 8.3				
Weather Conditions: Partly cloudy 55 F							Field Personnel: N. Kennedy R. Mooney				
Wind Speed and Direction (see Beaufort Scale): 10 kt West							Recorded By: R. Mooney				
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): Sea lion brown pelican											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)	Sample ID	
14:30	1	S	9.23	7.84	33.78	14.77	Y	Clear	TSS only Full suite	SP-RW-19-G-S-20180227	
14:32	3.5	M	8.59	7.72	33.96	13.86	Y	Clear	TSS only Full suite	SP-RW-19-G-M-20180227	
14:34	7	B	8.19	7.67	33.97	13.74	Y	Clear	TSS only Full suite	SP-RW-19-G-B-20180227	
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
									TSS only Full suite		
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.



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Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 02.27.18			Time: 14:05		
Station ID: RW20		Latitude/Northing: 33.72546		Longitude/Easting: 118.15729		Water Depth (ft): (m): 15.5					
Weather Conditions: Partly cloudy 55°F						Field Personnel: N. Kennedy R. Mooney					
Wind Speed and Direction (see Beaufort Scale): 8 kt west						Recorded By: R. Mooney					
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton):											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
14:05	1	S	8.66	7.76	33.91	13.98	Y	Clear	TSS only	Full suite	
14:07	7	M	7.83	7.68	34.00	13.29	Y	Clear	TSS only	Full suite	
14:09	14	B	7.22	7.60	34.03	12.92	Y	Clear	TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

DQO Measurements

Project Name: GWMA TMDL WQ Sampling				Project Number: 141205-01.04			
Station ID: RW-20		Time: 14:12		Date: 02.27.16			
In Situ Field Parameters ¹							
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH (units)	Salinity (ppt)	Temp (°C)	Comments
14:12	S	1m	8.64	7.72	33.89	13.94	
14:14	S	1m	8.63	7.72	33.90	13.91	
14:16	S	1m	8.64	7.72	33.89	13.92	
Average		1	8.63	7.72	33.89	13.92	
Difference between max and min		0	0.01	0	0.01	0.03	
RPD			0.12%				
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²		Y	Y	Y	Y	Y	
Time	Surface (S), Mid-depth (M), or Bottom (B)	Depth (m)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Comments
Average							
Difference between max and min							
RPD							
Precision		± 0.1	5 percent	± 0.2	± 0.2	± 0.5 °C	
DQO Met? (Y/N) ²							
Comments:							

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. Each result will be recorded along with the average of the three results, the difference between the largest and smallest result, and the percent difference between the largest and smallest result. The percent difference will be calculated as follows:

$$\text{Percent difference} = 100 * (\text{largest} - \text{smallest}) / \text{average}$$

Triplicate measurements, the average of the results, and percent difference will be recorded on the field data sheet. The percent difference, as appropriate, will be compared against the precision criteria established for field measurements in Table 7.

- If no, write corrective actions taken in the comments box (e.g., re-calibrated instrument, etc.) and re-measure.



Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 02.27.18			Time: 12:46		
Station ID: RW-21		Latitude/Northing: 33.75647		Longitude/Easting: 118.19322		Water Depth (ft): (m): 0.8m					
Weather Conditions: partly cloudy 55°F						Field Personnel: N. Kennedy R. Mooney					
Wind Speed and Direction (see Beaufort Scale): 5 kt west						Recorded By: R. Mooney					
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton):											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
12:46	0.8	S	5.80	7.69	22.77	14.85	Y	Brown/Cloudy	TSS only	Full suite	LE-RW-21-G-5-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any):											

Notes:

1. Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
2. Description should include suspended or floating material, color, odor, or sheen.

Water Quality Sample Form

Project Name: GWMA TMDL WQ Sampling			Project Number: 141205-01.04			Date: 02.27.18			Time: 12:15		
Station ID: RW 22		Latitude/Northing: 33.7608		Longitude/Easting: 118.20190		Water Depth (ft): 1.0			(m): 1.0		
Weather Conditions: Partly cloudy 55°F						Field Personnel: N. Kennedy R. Mooney					
Wind Speed and Direction (see Beaufort Scale): 5 kt west						Recorded By: R. Mooney					
Biological Activity (e.g., presence of fish, birds, macrophytes, phytoplankton): eucalyptus surf scoter brown pelican											
Description of In-water activities (e.g., recreational boating, active discharges):											
In Situ Field Parameters ¹ and Water Sample Collection											
Time	Depth (m)	Surface (S), Mid-depth (M), or Bottom (B)	DO (mg/L)	pH	Salinity (ppt)	Temp (°C)	Sample Collected? (Y/N)	Physical Description of Sample ²	Analytes (circle one)		Sample ID
12:15	1	S	5.79	7.69	20.14	15.24	Y	Brown Cloudy	TSS only	Full suite	LE-RW-22-G-S-20180227
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
									TSS only	Full suite	
QA/QC Samples Collected: Y / N		Field duplicate (5% of project) / Field blank (1 during monitoring event) / Rinsate blank (1 during monitoring event)							TSS only Full suite		
Comments (include photographs taken, if any): Too shallow to collect below 1m * Odor (H ₂ SO ₄)											

Notes:

- Field measurements will be made in triplicate on 5 percent of measurements to ensure project DQOs are met. These measurements will be recorded on the next page.
- Description should include suspended or floating material, color, odor, or sheen.

Appendix C

Water Sample Chemistry Reports



WORK ORDER NUMBER: 17-09-0158

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: GWMA - TMDL Compliance Monitoring

Attention: Andy Martin
 27201 Puerta Real
 Suite 350
 Mission Viejo, CA 92691-8306

A handwritten signature in black ink, appearing to read "Carla Hollowell".

Approved for release on 10/16/2017 by:
 Carla Hollowell
 Project Manager

ResultLink ▶

Email your PM ▶

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

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 Work Order Number: 17-09-0158

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Work Order Narrative

Work Order: 17-09-0158Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/05/17. They were assigned to Work Order 17-09-0158.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

CASE NARRATIVE

Eurofins Calscience Work Order No.: 17-09-0158

Project ID: GWMA-TMDL Compliance Monitoring

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the associated samples.

Sample Condition on Receipt

Thirty-seven (37) seawater samples were received for this project on September 5, 2017. The samples were transferred to the laboratory in an ice chest following strict chain-of-custody procedures. The temperature of the samples upon receipt at the laboratory ranged from 4.7°C to 5.6°C. All samples were assigned laboratory identification numbers, logged into the Laboratory Information Management System (LIMS), and subsequently stored refrigerated pending analytical chemistry testing.

Sample receiving anomalies (if any) are noted in the attached Sample Anomaly Report.

Tests Performed

Total Suspended Solids by SM 2540B (M)
Total and Dissolved Metals by EPA 1640/1631
OC Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM

Data Summary

Samples were filtered in the laboratory for the dissolved metals analysis.

Holding times

All holding times were met with the exception of the extraction holding time for the OC Pesticides analysis. During the initial data review, it was determined that a laboratory error occurred during the original analysis. The associated samples were re-extracted and re-analyzed to correct for this error; however, the re-extraction occurred outside of the recommended holding time. The results have been flagged with a qualifier to indicate that the extraction occurred outside of the recommended holding time. Results are reported in this document.

Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Reporting Limits

All Method Detection Limits were met. Results were evaluated to the MDL and if detections were found below the RL the results were flagged with a J Flag qualifier.

Blanks

Concentrations of target analytes in the method blanks were found to be non-detect (ND) for all tests with the following exception:

The Method Blank for Filtered Mercury (batch 170912L02B) had a detectable concentration between the RL and the MDL; a J Flag qualifier has been added and all detectable Mercury results in this batch have a B Flag qualifier indicating that the parameter was also detected in the associated blank sample.

Laboratory Control Samples

Laboratory Control Sample analysis was performed at the required frequencies for all applicable tests and, unless otherwise noted, all parameters were within the established control limits.

Matrix Spikes and QC Duplicates

Matrix spike analyses and/or QC Duplicates were performed for each applicable analysis as sample volume allowed. All parameters were within the established control limits .

Surrogates

Surrogate recoveries for all applicable tests and samples were within the established control limits.

Sample Summary

Client: ANCHOR QEA, LLC	Work Order: 17-09-0158
27201 Puerta Real, Suite 350	Project Name: GWMA - TMDL Compliance Monitoring
Mission Viejo, CA 92691-8306	PO Number: Use CF060227a
	Date/Time Received: 09/05/17 17:06
	Number of Containers: 138

Attn: Andy Martin

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
IB-RW-13-G-S-20170905	17-09-0158-1	09/05/17 08:54	12	Sea Water
IB-RW-13-G-M-20170905	17-09-0158-2	09/05/17 08:56	1	Sea Water
IB-RW-13-G-B-20170905	17-09-0158-3	09/05/17 08:58	1	Sea Water
IB-RW-14-G-S-20170905	17-09-0158-4	09/05/17 09:27	8	Sea Water
IB-RW-14-G-M-20170905	17-09-0158-5	09/05/17 09:30	1	Sea Water
IB-RW-14-G-B-20170905	17-09-0158-6	09/05/17 09:32	1	Sea Water
IB-RW-15-G-S-20170905	17-09-0158-7	09/05/17 10:00	8	Sea Water
IB-RW-15-G-M-20170905	17-09-0158-8	09/05/17 10:03	1	Sea Water
IB-RW-15-G-B-20170905	17-09-0158-9	09/05/17 10:06	1	Sea Water
OB-RW-16-G-S-20170905	17-09-0158-10	09/05/17 10:27	8	Sea Water
OB-RW-16-G-M-20170905	17-09-0158-11	09/05/17 10:30	1	Sea Water
OB-RW-16-G-B-20170905	17-09-0158-12	09/05/17 10:32	1	Sea Water
SP-RW-18-G-S-20170905	17-09-0158-13	09/05/17 13:04	8	Sea Water
SP-RW-18-G-M-20170905	17-09-0158-14	09/05/17 13:07	1	Sea Water
SP-RW-18-G-B-20170905	17-09-0158-15	09/05/17 13:10	1	Sea Water
LE-RW-21-G-S-20170905	17-09-0158-16	09/05/17 12:25	8	Sea Water
LE-RW-22-G-S-20170905	17-09-0158-17	09/05/17 11:34	8	Sea Water
LE-RW-1022-G-S-20170905	17-09-0158-18	09/05/17 11:35	8	Sea Water
OA-RW-08-G-S-20170905	17-09-0158-19	09/05/17 13:30	8	Sea Water
OA-RW-08-G-M-20170905	17-09-0158-20	09/05/17 13:35	1	Sea Water
OA-RW-08-G-B-20170905	17-09-0158-21	09/05/17 13:40	1	Sea Water
OA-RW-09-G-S-20170905	17-09-0158-22	09/05/17 13:00	8	Sea Water
OA-RW-09-G-M-20170905	17-09-0158-23	09/05/17 13:03	1	Sea Water
OA-RW-09-G-B-20170905	17-09-0158-24	09/05/17 13:05	1	Sea Water
OB-RW-17-G-S-20170905	17-09-0158-25	09/05/17 14:00	11	Sea Water
OB-RW-17-G-M-20170905	17-09-0158-26	09/05/17 14:03	1	Sea Water
OB-RW-17-G-B-20170905	17-09-0158-27	09/05/17 14:05	1	Sea Water
SP-RW-19-G-S-20170905	17-09-0158-28	09/05/17 15:25	8	Sea Water
SP-RW-19-G-M-20170905	17-09-0158-29	09/05/17 15:30	1	Sea Water
SP-RW-19-G-B-20170905	17-09-0158-30	09/05/17 15:35	1	Sea Water
SP-RW-20-G-S-20170905	17-09-0158-31	09/05/17 14:55	8	Sea Water
SP-RW-20-G-M-20170905	17-09-0158-32	09/05/17 15:00	1	Sea Water
SP-RW-20-G-B-20170905	17-09-0158-33	09/05/17 15:05	1	Sea Water
FB-20170905	17-09-0158-34	09/05/17 14:15	4	Aqueous
OB-RW-16-G-B-20170905-LAB DUP	17-09-0158-35	09/05/17 10:32	1	Sea Water
OA-RW-08-G-M-20170905-LAB DUP	17-09-0158-36	09/05/17 13:35	1	Sea Water
SP-RW-19-G-M-20170905-LAB DUP	17-09-0158-37	09/05/17 15:30	1	Sea Water

Return to Contents

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20170905	17-09-0158-1-L	09/05/17 08:54	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-13-G-M-20170905	17-09-0158-2-A	09/05/17 08:56	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.0	1.0	0.83	1.00	

IB-RW-13-G-B-20170905	17-09-0158-3-A	09/05/17 08:58	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.4	1.0	0.83	1.00	

IB-RW-14-G-S-20170905	17-09-0158-4-H	09/05/17 09:27	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-14-G-M-20170905	17-09-0158-5-A	09/05/17 09:30	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-14-G-B-20170905	17-09-0158-6-A	09/05/17 09:32	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.9	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20170905	17-09-0158-7-A	09/05/17 10:00	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-15-G-M-20170905	17-09-0158-8-A	09/05/17 10:03	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.6	1.0	0.83	1.00	

IB-RW-15-G-B-20170905	17-09-0158-9-A	09/05/17 10:06	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.8	1.0	0.83	1.00	

OB-RW-16-G-S-20170905	17-09-0158-10-H	09/05/17 10:27	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OB-RW-16-G-M-20170905	17-09-0158-11-A	09/05/17 10:30	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OB-RW-16-G-B-20170905	17-09-0158-12-A	09/05/17 10:32	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	6.4	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: N/A
Method: SM 2540 D
Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

Page 3 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20170905	17-09-0158-13-H	09/05/17 13:04	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.1	1.0	0.83	1.00	

SP-RW-18-G-M-20170905	17-09-0158-14-A	09/05/17 13:07	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	0.90	1.0	0.83	1.00	J

SP-RW-18-G-B-20170905	17-09-0158-15-A	09/05/17 13:10	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.9	1.0	0.83	1.00	

LE-RW-21-G-S-20170905	17-09-0158-16-H	09/05/17 12:25	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.5	1.0	0.83	1.00	

LE-RW-22-G-S-20170905	17-09-0158-17-H	09/05/17 11:34	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.0	1.0	0.83	1.00	

LE-RW-1022-G-S-20170905	17-09-0158-18-H	09/05/17 11:35	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	5.2	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-S-20170905	17-09-0158-19-H	09/05/17 13:30	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OA-RW-08-G-M-20170905	17-09-0158-20-A	09/05/17 13:35	Sea Water	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OA-RW-08-G-B-20170905	17-09-0158-21-A	09/05/17 13:40	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.1	1.0	0.83	1.00	

OA-RW-09-G-S-20170905	17-09-0158-22-H	09/05/17 13:00	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.0	1.0	0.83	1.00	

OA-RW-09-G-M-20170905	17-09-0158-23-A	09/05/17 13:03	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OA-RW-09-G-B-20170905	17-09-0158-24-A	09/05/17 13:05	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-17-G-S-20170905	17-09-0158-25-K	09/05/17 14:00	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OB-RW-17-G-M-20170905	17-09-0158-26-A	09/05/17 14:03	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OB-RW-17-G-B-20170905	17-09-0158-27-A	09/05/17 14:05	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.1	1.0	0.83	1.00	

SP-RW-19-G-S-20170905	17-09-0158-28-H	09/05/17 15:25	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

SP-RW-19-G-M-20170905	17-09-0158-29-A	09/05/17 15:30	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

SP-RW-19-G-B-20170905	17-09-0158-30-A	09/05/17 15:35	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.7	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20170905	17-09-0158-31-H	09/05/17 14:55	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

SP-RW-20-G-M-20170905	17-09-0158-32-A	09/05/17 15:00	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

SP-RW-20-G-B-20170905	17-09-0158-33-A	09/05/17 15:05	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OB-RW-16-G-B-20170905-LAB DUP	17-09-0158-35-B	09/05/17 10:32	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	6.8	1.0	0.83	1.00	

OA-RW-08-G-M-20170905-LAB DUP	17-09-0158-36-B	09/05/17 13:35	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

SP-RW-19-G-M-20170905-LAB DUP	17-09-0158-37-B	09/05/17 15:30	Sea Water	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-09-010-8564	N/A	Aqueous	N/A	09/09/17	09/09/17 15:00	H0909TSSL1

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8565	N/A	Aqueous	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8563	N/A	Aqueous	N/A	09/11/17	09/11/17 16:00	H0911TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20170905	17-09-0158-1-A	09/05/17 08:54	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000602	0.000500	0.000113	1.00	

IB-RW-14-G-S-20170905	17-09-0158-4-A	09/05/17 09:27	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00149	0.000500	0.000113	1.00	

IB-RW-15-G-S-20170905	17-09-0158-7-A	09/05/17 10:00	Sea Water	Hg/AF 1	09/12/17	09/15/17 00:00	170912L02A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00142	0.000500	0.000113	1.00	

OB-RW-16-G-S-20170905	17-09-0158-10-A	09/05/17 10:27	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00146	0.000500	0.000113	1.00	

SP-RW-18-G-S-20170905	17-09-0158-13-A	09/05/17 13:04	Sea Water	Hg/AF 1	09/14/17	09/15/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00136	0.000500	0.000113	1.00	

LE-RW-21-G-S-20170905	17-09-0158-16-A	09/05/17 12:25	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0106	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20170905	17-09-0158-17-A	09/05/17 11:34	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00244	0.000500	0.000113	1.00	

LE-RW-1022-G-S-20170905	17-09-0158-18-A	09/05/17 11:35	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00166	0.000500	0.000113	1.00	

OA-RW-08-G-S-20170905	17-09-0158-19-A	09/05/17 13:30	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000682	0.000500	0.000113	1.00	

OA-RW-09-G-S-20170905	17-09-0158-22-A	09/05/17 13:00	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000959	0.000500	0.000113	1.00	

OB-RW-17-G-S-20170905	17-09-0158-25-A	09/05/17 14:00	Sea Water	Hg/AF 1	09/14/17	09/15/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00104	0.000500	0.000113	1.00	

SP-RW-19-G-S-20170905	17-09-0158-28-A	09/05/17 15:25	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000180	0.000500	0.000113	1.00	J

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20170905	17-09-0158-31-A	09/05/17 14:55	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000313	0.000500	0.000113	1.00	J

FB-20170905	17-09-0158-34-A	09/05/17 14:15	Aqueous	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

Method Blank	099-15-224-193	N/A	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

Method Blank	099-15-224-194	N/A	Aqueous	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: Filtered
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20170905	17-09-0158-1-B	09/05/17 08:54	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000407	0.000500	0.000113	1.00	B,J

IB-RW-14-G-S-20170905	17-09-0158-4-B	09/05/17 09:27	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00101	0.000500	0.000113	1.00	B

IB-RW-15-G-S-20170905	17-09-0158-7-B	09/05/17 10:00	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00136	0.000500	0.000113	1.00	B

OB-RW-16-G-S-20170905	17-09-0158-10-B	09/05/17 10:27	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000757	0.000500	0.000113	1.00	B

SP-RW-18-G-S-20170905	17-09-0158-13-B	09/05/17 13:04	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00120	0.000500	0.000113	1.00	B

LE-RW-21-G-S-20170905	17-09-0158-16-B	09/05/17 12:25	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00109	0.000500	0.000113	1.00	B

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: Filtered
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20170905	17-09-0158-17-B	09/05/17 11:34	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

LE-RW-1022-G-S-20170905	17-09-0158-18-B	09/05/17 11:35	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000248	0.000500	0.000113	1.00	B,J

OA-RW-08-G-S-20170905	17-09-0158-19-B	09/05/17 13:30	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

OA-RW-09-G-S-20170905	17-09-0158-22-B	09/05/17 13:00	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

OB-RW-17-G-S-20170905	17-09-0158-25-B	09/05/17 14:00	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000473	0.000500	0.000113	1.00	B,J

SP-RW-19-G-S-20170905	17-09-0158-28-B	09/05/17 15:25	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: Filtered
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20170905	17-09-0158-31-B	09/05/17 14:55	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

FB-20170905	17-09-0158-34-B	09/05/17 14:15	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

Method Blank	099-15-226-138	N/A	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000290	0.000500	0.000113	1.00	J

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20170905	17-09-0158-1-C	09/05/17 08:54	Sea Water	ICP/MS 06	09/13/17	09/21/17 23:49	170913L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0175	0.0300	0.00567	1.00	J
Chromium	0.208	0.500	0.164	1.00	J
Copper	1.64	0.0300	0.00898	1.00	
Lead	0.0624	0.0300	0.0135	1.00	
Zinc	8.39	0.500	0.176	1.00	

IB-RW-14-G-S-20170905	17-09-0158-4-C	09/05/17 09:27	Sea Water	ICP/MS 06	09/13/17	09/22/17 00:17	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0174	0.0300	0.00567	1.00	J
Chromium	0.195	0.500	0.164	1.00	J
Copper	0.924	0.0300	0.00898	1.00	
Lead	0.0500	0.0300	0.0135	1.00	
Zinc	4.90	0.500	0.176	1.00	

IB-RW-15-G-S-20170905	17-09-0158-7-C	09/05/17 10:00	Sea Water	ICP/MS 06	09/13/17	09/22/17 00:53	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0174	0.0300	0.00567	1.00	J
Chromium	0.170	0.500	0.164	1.00	J
Copper	0.745	0.0300	0.00898	1.00	
Lead	0.0388	0.0300	0.0135	1.00	
Zinc	10.7	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20170905	17-09-0158-10-C	09/05/17 10:27	Sea Water	ICP/MS 06	09/13/17	09/22/17 01:00	170913L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0124	0.0300	0.00567	1.00	J
Chromium	0.193	0.500	0.164	1.00	J
Copper	0.606	0.0300	0.00898	1.00	
Lead	0.0533	0.0300	0.0135	1.00	
Zinc	1.69	0.500	0.176	1.00	

SP-RW-18-G-S-20170905	17-09-0158-13-C	09/05/17 13:04	Sea Water	ICP/MS 06	09/13/17	09/22/17 01:07	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0159	0.0300	0.00567	1.00	J
Chromium	0.212	0.500	0.164	1.00	J
Copper	0.670	0.0300	0.00898	1.00	
Lead	0.102	0.0300	0.0135	1.00	
Zinc	2.08	0.500	0.176	1.00	

LE-RW-21-G-S-20170905	17-09-0158-16-C	09/05/17 12:25	Sea Water	ICP/MS 06	09/13/17	09/22/17 01:14	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0274	0.0300	0.00567	1.00	J
Chromium	0.282	0.500	0.164	1.00	J
Copper	1.72	0.0300	0.00898	1.00	
Lead	0.424	0.0300	0.0135	1.00	
Zinc	13.4	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20170905	17-09-0158-17-C	09/05/17 11:34	Sea Water	ICP/MS 06	09/13/17	09/22/17 01:21	170913L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0282	0.0300	0.00567	1.00	J
Chromium	0.240	0.500	0.164	1.00	J
Copper	1.43	0.0300	0.00898	1.00	
Lead	0.383	0.0300	0.0135	1.00	
Zinc	11.7	0.500	0.176	1.00	

LE-RW-1022-G-S-20170905	17-09-0158-18-C	09/05/17 11:35	Sea Water	ICP/MS 06	09/13/17	09/22/17 01:28	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0357	0.0300	0.00567	1.00	
Chromium	0.248	0.500	0.164	1.00	J
Copper	1.73	0.0300	0.00898	1.00	
Lead	0.540	0.0300	0.0135	1.00	
Zinc	8.68	0.500	0.176	1.00	

OA-RW-08-G-S-20170905	17-09-0158-19-C	09/05/17 13:30	Sea Water	ICP/MS 06	09/13/17	09/22/17 01:36	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0148	0.0300	0.00567	1.00	J
Chromium	0.187	0.500	0.164	1.00	J
Copper	0.836	0.0300	0.00898	1.00	
Lead	0.0777	0.0300	0.0135	1.00	
Zinc	4.70	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-S-20170905	17-09-0158-22-C	09/05/17 13:00	Sea Water	ICP/MS 06	09/13/17	09/22/17 01:43	170913L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0214	0.0300	0.00567	1.00	J
Chromium	0.189	0.500	0.164	1.00	J
Copper	2.23	0.0300	0.00898	1.00	
Lead	0.0452	0.0300	0.0135	1.00	
Zinc	13.5	0.500	0.176	1.00	

OB-RW-17-G-S-20170905	17-09-0158-25-C	09/05/17 14:00	Sea Water	ICP/MS 06	09/13/17	09/22/17 01:50	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0122	0.0300	0.00567	1.00	J
Chromium	0.179	0.500	0.164	1.00	J
Copper	0.469	0.0300	0.00898	1.00	
Lead	0.0331	0.0300	0.0135	1.00	
Zinc	3.02	0.500	0.176	1.00	

SP-RW-19-G-S-20170905	17-09-0158-28-C	09/05/17 15:25	Sea Water	ICP/MS 06	09/13/17	09/22/17 02:25	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0100	0.0300	0.00567	1.00	J
Chromium	0.240	0.500	0.164	1.00	J
Copper	0.364	0.0300	0.00898	1.00	
Lead	0.0582	0.0300	0.0135	1.00	
Zinc	3.98	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20170905	17-09-0158-31-C	09/05/17 14:55	Sea Water	ICP/MS 06	09/13/17	09/22/17 02:32	170913L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0120	0.0300	0.00567	1.00	J
Chromium	0.183	0.500	0.164	1.00	J
Copper	0.504	0.0300	0.00898	1.00	
Lead	0.0487	0.0300	0.0135	1.00	
Zinc	10.2	0.500	0.176	1.00	

FB-20170905	17-09-0158-34-C	09/05/17 14:15	Aqueous	ICP/MS 06	09/13/17	09/22/17 11:41	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	0.284	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	0.488	0.500	0.176	1.00	J

Method Blank	099-13-067-732	N/A	Aqueous	ICP/MS 06	09/13/17	09/25/17 19:28	170913L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	ND	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20170905	17-09-0158-1-D	09/05/17 08:54	Sea Water	ICP/MS 06	09/13/17	09/21/17 21:12	170913L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0149	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	0.769	0.0300	0.00898	1.00	
Lead	0.0196	0.0300	0.0135	1.00	J
Zinc	4.81	0.500	0.0736	1.00	

IB-RW-14-G-S-20170905	17-09-0158-4-D	09/05/17 09:27	Sea Water	ICP/MS 06	09/13/17	09/22/17 23:50	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0218	0.0300	0.00567	1.00	J
Chromium	0.166	0.500	0.164	1.00	J
Copper	0.649	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	2.26	0.500	0.0736	1.00	

IB-RW-15-G-S-20170905	17-09-0158-7-D	09/05/17 10:00	Sea Water	ICP/MS 06	09/13/17	09/21/17 21:55	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0179	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	0.634	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	8.91	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20170905	17-09-0158-10-D	09/05/17 10:27	Sea Water	ICP/MS 06	09/13/17	09/21/17 22:02	170913L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0129	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	0.370	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	1.68	0.500	0.0736	1.00	

SP-RW-18-G-S-20170905	17-09-0158-13-D	09/05/17 13:04	Sea Water	ICP/MS 06	09/13/17	09/21/17 22:16	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0152	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	0.502	0.0300	0.00898	1.00	
Lead	0.0310	0.0300	0.0135	1.00	
Zinc	2.52	0.500	0.0736	1.00	

LE-RW-21-G-S-20170905	17-09-0158-16-D	09/05/17 12:25	Sea Water	ICP/MS 06	09/13/17	09/21/17 22:24	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0233	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	1.02	0.0300	0.00898	1.00	
Lead	0.0308	0.0300	0.0135	1.00	
Zinc	5.07	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20170905	17-09-0158-17-D	09/05/17 11:34	Sea Water	ICP/MS 06	09/13/17	09/21/17 22:31	170913L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0262	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	0.928	0.0300	0.00898	1.00	
Lead	0.0347	0.0300	0.0135	1.00	
Zinc	10.1	0.500	0.0736	1.00	

LE-RW-1022-G-S-20170905	17-09-0158-18-D	09/05/17 11:35	Sea Water	ICP/MS 06	09/13/17	09/21/17 22:38	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0321	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	1.12	0.0300	0.00898	1.00	
Lead	0.0429	0.0300	0.0135	1.00	
Zinc	6.06	0.500	0.0736	1.00	

OA-RW-08-G-S-20170905	17-09-0158-19-D	09/05/17 13:30	Sea Water	ICP/MS 06	09/13/17	09/21/17 22:45	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0136	0.0300	0.00567	1.00	J
Chromium	0.166	0.500	0.164	1.00	J
Copper	0.588	0.0300	0.00898	1.00	
Lead	0.0216	0.0300	0.0135	1.00	J
Zinc	3.40	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3005A Filt.
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-S-20170905	17-09-0158-22-D	09/05/17 13:00	Sea Water	ICP/MS 06	09/13/17	09/21/17 23:20	170913L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0226	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	2.00	0.0300	0.00898	1.00	
Lead	0.0182	0.0300	0.0135	1.00	J
Zinc	11.3	0.500	0.0736	1.00	

OB-RW-17-G-S-20170905	17-09-0158-25-D	09/05/17 14:00	Sea Water	ICP/MS 06	09/13/17	09/21/17 23:28	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0124	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	0.478	0.0300	0.00898	1.00	
Lead	0.0165	0.0300	0.0135	1.00	J
Zinc	4.30	0.500	0.0736	1.00	

SP-RW-19-G-S-20170905	17-09-0158-28-D	09/05/17 15:25	Sea Water	ICP/MS 06	09/13/17	09/21/17 23:35	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.00961	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	0.289	0.0300	0.00898	1.00	
Lead	0.0165	0.0300	0.0135	1.00	J
Zinc	4.80	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20170905	17-09-0158-31-D	09/05/17 14:55	Sea Water	ICP/MS 06	09/13/17	09/21/17 23:42	170913L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0109	0.0300	0.00567	1.00	J
Chromium	0.172	0.500	0.164	1.00	J
Copper	0.394	0.0300	0.00898	1.00	
Lead	0.0142	0.0300	0.0135	1.00	J
Zinc	9.22	0.500	0.0736	1.00	

FB-20170905	17-09-0158-34-D	09/05/17 14:15	Aqueous	ICP/MS 06	09/13/17	09/22/17 11:34	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	0.264	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	0.211	0.500	0.0736	1.00	J

Method Blank	099-15-823-289	N/A	Aqueous	ICP/MS 06	09/13/17	09/21/17 18:50	170913L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	ND	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20170905	17-09-0158-1-ABC	09/05/17 08:54	Sea Water	GC 44	09/14/17	09/15/17 07:39	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	50-150	
2,4,5,6-Tetrachloro-m-Xylene	81	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-14-G-S-20170905	17-09-0158-4-ABC	09/05/17 09:27	Sea Water	GC 44	09/14/17	09/15/17 07:53	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	147	50-150	
2,4,5,6-Tetrachloro-m-Xylene	116	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20170905	17-09-0158-7-ABC	09/05/17 10:00	Sea Water	GC 44	09/14/17	09/15/17 08:07	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	3.7	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	0.91	1.3	0.50	1.00	J,ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	82	50-150	
2,4,5,6-Tetrachloro-m-Xylene	59	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20170905	17-09-0158-10-ABC	09/05/17 10:27	Sea Water	GC 44	09/14/17	09/15/17 08:22	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	74	50-150	
2,4,5,6-Tetrachloro-m-Xylene	54	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20170905	17-09-0158-13-ABC	09/05/17 13:04	Sea Water	GC 44	09/14/17	09/15/17 08:36	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	0.95	1.3	0.50	1.00	J,ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	76	50-150	
2,4,5,6-Tetrachloro-m-Xylene	53	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-21-G-S-20170905	17-09-0158-16-ABC	09/05/17 12:25	Sea Water	GC 44	09/14/17	09/15/17 08:50	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	50-150	
2,4,5,6-Tetrachloro-m-Xylene	72	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20170905	17-09-0158-17-ABC	09/05/17 11:34	Sea Water	GC 44	09/14/17	09/15/17 09:04	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	50-150	
2,4,5,6-Tetrachloro-m-Xylene	71	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-1022-G-S-20170905	17-09-0158-18-ABC	09/05/17 11:35	Sea Water	GC 44	09/14/17	09/15/17 09:19	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	104	50-150	
2,4,5,6-Tetrachloro-m-Xylene	73	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-S-20170905	17-09-0158-19-ABC	09/05/17 13:30	Sea Water	GC 44	09/14/17	09/15/17 09:33	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	50-150	
2,4,5,6-Tetrachloro-m-Xylene	74	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-S-20170905	17-09-0158-22-ABC	09/05/17 13:00	Sea Water	GC 44	09/14/17	09/15/17 09:47	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	0.93	1.3	0.50	1.00	J,ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	73	50-150	
2,4,5,6-Tetrachloro-m-Xylene	74	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-17-G-S-20170905	17-09-0158-25-ABC	09/05/17 14:00	Sea Water	GC 44	09/14/17	09/15/17 10:01	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	50-150	
2,4,5,6-Tetrachloro-m-Xylene	81	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20170905	17-09-0158-28-ABC	09/05/17 15:25	Sea Water	GC 44	09/14/17	09/15/17 10:15	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	ND	1.3	0.50	1.00	ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	50-150	
2,4,5,6-Tetrachloro-m-Xylene	82	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20170905	17-09-0158-31-ABC	09/05/17 14:55	Sea Water	GC 44	09/14/17	09/15/17 10:30	170914L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.
 - Sample extracted outside recommended holding time.

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	ET
2,4'-DDE	ND	1.3	0.50	1.00	ET
2,4'-DDT	ND	2.0	1.0	1.00	ET
4,4'-DDD	ND	1.3	0.50	1.00	ET
4,4'-DDE	0.71	1.3	0.50	1.00	J,ET
4,4'-DDT	ND	1.3	0.50	1.00	ET
Alpha Chlordane	ND	3.3	1.7	1.00	ET
Cis-nonachlor	ND	3.3	1.7	1.00	ET
Dieldrin	ND	1.3	0.50	1.00	ET
Gamma Chlordane	ND	3.3	1.7	1.00	ET
Oxychlordane	ND	3.3	1.7	1.00	ET
Toxaphene	ND	50	25	1.00	ET
Trans-nonachlor	ND	3.3	1.7	1.00	ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	75	50-150	
2,4,5,6-Tetrachloro-m-Xylene	71	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-704-17	N/A	Aqueous	GC 44	09/14/17	09/14/17 16:02	170914L10

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	50-150	
2,4,5,6-Tetrachloro-m-Xylene	87	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20170905	17-09-0158-1-I	09/05/17 08:54	Sea Water	GC/MS HHH	09/09/17	09/12/17 16:41	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	94	50-150			
p-Terphenyl-d14	88	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 3 of 28

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-14-G-S-20170905	17-09-0158-4-G	09/05/17 09:27	Sea Water	GC/MS HHH	09/09/17	09/12/17 17:05	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	93	50-150			
p-Terphenyl-d14	93	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20170905	17-09-0158-7-G	09/05/17 10:00	Sea Water	GC/MS HHH	09/09/17	09/12/17 17:29	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	0.0042	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	89	50-150			
p-Terphenyl-d14	81	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 7 of 28

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20170905	17-09-0158-10-E	09/05/17 10:27	Sea Water	GC/MS HHH	09/09/17	09/12/17 17:54	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	83	50-150			
p-Terphenyl-d14	78	50-150			

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 9 of 28

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20170905	17-09-0158-13-E	09/05/17 13:04	Sea Water	GC/MS HHH	09/09/17	09/12/17 18:18	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	88	50-150			
p-Terphenyl-d14	78	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-21-G-S-20170905	17-09-0158-16-E	09/05/17 12:25	Sea Water	GC/MS HHH	09/09/17	09/12/17 18:42	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	90	50-150			
p-Terphenyl-d14	83	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 13 of 28

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20170905	17-09-0158-17-E	09/05/17 11:34	Sea Water	GC/MS HHH	09/09/17	09/12/17 19:06	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	84	50-150			
p-Terphenyl-d14	72	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-1022-G-S-20170905	17-09-0158-18-E	09/05/17 11:35	Sea Water	GC/MS HHH	09/09/17	09/12/17 19:30	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	80	50-150			
p-Terphenyl-d14	71	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 17 of 28

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-S-20170905	17-09-0158-19-E	09/05/17 13:30	Sea Water	GC/MS HHH	09/09/17	09/12/17 19:54	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 18 of 28

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	77	50-150			
p-Terphenyl-d14	74	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-S-20170905	17-09-0158-22-E	09/05/17 13:00	Sea Water	GC/MS HHH	09/09/17	09/12/17 20:17	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00045	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00069	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00054	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00069	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00033	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00081	1.00	
PCB126	ND	0.0019	0.00025	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0039	0.00067	1.00	
PCB138/158	ND	0.0039	0.00058	1.00	
PCB149	ND	0.0019	0.00023	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00051	1.00	
PCB187	ND	0.0019	0.00042	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00073	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00042	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	85	50-150			
p-Terphenyl-d14	85	50-150			

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-17-G-S-20170905	17-09-0158-25-G	09/05/17 14:00	Sea Water	GC/MS HHH	09/09/17	09/12/17 20:41	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	125	50-150			
p-Terphenyl-d14	125	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 23 of 28

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20170905	17-09-0158-28-E	09/05/17 15:25	Sea Water	GC/MS HHH	09/09/17	09/12/17 21:05	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	63	50-150			
p-Terphenyl-d14	61	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 25 of 28

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20170905	17-09-0158-31-E	09/05/17 14:55	Sea Water	GC/MS HHH	09/09/17	09/12/17 21:28	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	105	50-150			
p-Terphenyl-d14	100	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-414-108	N/A	Aqueous	GC/MS HHH	09/09/17	09/11/17 10:58	170909L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0158
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	89	50-150			
p-Terphenyl-d14	86	50-150			

Return to Contents

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



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
IB-RW-13-G-S-20170905	Sample	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914S01				
IB-RW-13-G-S-20170905	Matrix Spike	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914S01				
IB-RW-13-G-S-20170905	Matrix Spike Duplicate	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914S01				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.0006022	0.02000	0.01914	93	0.01762	85	71-125	8	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
OB-RW-17-G-S-20170905	Sample	Sea Water	Hg/AF 1	09/14/17	09/15/17 00:00	170914S01A
OB-RW-17-G-S-20170905	Matrix Spike	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914S01A
OB-RW-17-G-S-20170905	Matrix Spike Duplicate	Sea Water	Hg/AF 1	09/14/17	09/14/17 00:00	170914S01A

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.001038	0.02000	0.01841	87	0.01930	91	71-125	5	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IB-RW-13-G-S-20170905	Sample	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02B
IB-RW-13-G-S-20170905	Matrix Spike	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02B
IB-RW-13-G-S-20170905	Matrix Spike Duplicate	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02B

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.02000	0.01776	89	0.01822	91	71-125	3	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-09-0168-19	Sample	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02
17-09-0168-19	Matrix Spike	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02
17-09-0168-19	Matrix Spike Duplicate	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.002269	0.02000	0.01885	83	0.02036	90	71-125	8	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IB-RW-13-G-S-20170905	Sample	Sea Water	ICP/MS 06	09/13/17	09/21/17 23:49	170913S01
IB-RW-13-G-S-20170905	Matrix Spike	Sea Water	ICP/MS 06	09/13/17	09/21/17 23:56	170913S01
IB-RW-13-G-S-20170905	Matrix Spike Duplicate	Sea Water	ICP/MS 06	09/13/17	09/22/17 00:03	170913S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	ND	0.5000	0.5060	101	0.5082	102	50-150	0	0-20	
Chromium	ND	5.000	5.813	116	5.770	115	50-150	1	0-20	
Copper	1.643	0.5000	1.919	55	2.023	76	50-150	5	0-20	
Lead	0.06244	0.5000	0.5485	97	0.5792	103	50-150	5	0-20	
Zinc	8.386	5.000	14.71	127	14.89	130	50-150	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IB-RW-13-G-S-20170905	Sample	Sea Water	ICP/MS 06	09/13/17	09/21/17 21:12	170913S02
IB-RW-13-G-S-20170905	Matrix Spike	Sea Water	ICP/MS 06	09/13/17	09/21/17 20:51	170913S02
IB-RW-13-G-S-20170905	Matrix Spike Duplicate	Sea Water	ICP/MS 06	09/13/17	09/21/17 20:58	170913S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	ND	0.5000	0.4013	80	0.4180	84	50-150	4	0-20	
Chromium	ND	5.000	5.180	104	5.623	112	50-150	8	0-20	
Copper	0.7694	0.5000	1.374	121	1.410	128	50-150	3	0-20	
Lead	ND	0.5000	0.3652	73	0.4046	81	50-150	10	0-20	
Zinc	4.809	5.000	9.882	101	10.20	108	50-150	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
OB-RW-17-G-S-20170905	Sample	Sea Water	GC/MS HHH	09/09/17	09/12/17 20:41	170909S01A
OB-RW-17-G-S-20170905	Matrix Spike	Sea Water	GC/MS HHH	09/09/17	09/12/17 14:49	170909S01A
OB-RW-17-G-S-20170905	Matrix Spike Duplicate	Sea Water	GC/MS HHH	09/09/17	09/13/17 02:10	170909S01A

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB018	ND	0.5000	0.5317	106	0.5906	118	50-150	10	0-25	
PCB028	ND	0.5000	0.5435	109	0.6174	123	50-150	13	0-25	
PCB044	ND	0.5000	0.5173	103	0.5922	118	50-150	13	0-25	
PCB052	ND	0.5000	0.4730	95	0.5341	107	50-150	12	0-25	
PCB066	ND	0.5000	0.5496	110	0.6397	128	50-150	15	0-25	
PCB077	ND	0.5000	0.5150	103	0.6116	122	50-150	17	0-25	
PCB101	ND	0.5000	0.4881	98	0.5711	114	50-150	16	0-25	
PCB105	ND	0.5000	0.5252	105	0.6311	126	50-150	18	0-25	
PCB118	ND	0.5000	0.5251	105	0.6428	129	50-150	20	0-25	
PCB126	ND	0.5000	0.5005	100	0.6180	124	50-150	21	0-25	
PCB128	ND	0.5000	0.4792	96	0.5752	115	50-150	18	0-25	
PCB170	ND	0.5000	0.5473	109	0.6281	126	50-150	14	0-25	
PCB180	ND	0.5000	0.5177	104	0.6399	128	50-150	21	0-25	
PCB187	ND	0.5000	0.5013	100	0.6065	121	50-150	19	0-25	
PCB195	ND	0.5000	0.5739	115	0.6984	140	50-150	20	0-25	
PCB206	ND	0.5000	0.5138	103	0.6125	122	50-150	18	0-25	
PCB209	ND	0.5000	0.5276	106	0.6475	129	50-150	20	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: N/A Method: SM 2540 D Page 1 of 4
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
LE-RW-22-G-S-20170905	Sample	Sea Water	N/A	09/09/17 00:00	09/09/17 15:00	H0909TSSD1
LE-RW-22-G-S-20170905	Sample Duplicate	Sea Water	N/A	09/09/17 00:00	09/09/17 15:00	H0909TSSD1

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	4.000	4.200	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	09/05/17
27201 Puerta Real, Suite 350	Work Order:	17-09-0158
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
LE-RW-1022-G-S-20170905	Sample	Sea Water	N/A	09/09/17 00:00	09/09/17 15:00	H0909TSSD2
LE-RW-1022-G-S-20170905	Sample Duplicate	Sea Water	N/A	09/09/17 00:00	09/09/17 15:00	H0909TSSD2
<u>Parameter</u>	<u>Sample Conc.</u>		<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	5.200		5.200	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	09/05/17
27201 Puerta Real, Suite 350	Work Order:	17-09-0158
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
17-09-0394-2	Sample	Aqueous	N/A	09/11/17 00:00	09/11/17 16:00	H0911TSSD1
17-09-0394-2	Sample Duplicate	Aqueous	N/A	09/11/17 00:00	09/11/17 16:00	H0911TSSD1

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	582.0	596.0	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: N/A Method: SM 2540 D Page 4 of 4
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
17-09-0554-2	Sample	Aqueous	N/A	09/11/17 00:00	09/11/17 16:00	H0911TSSD2
17-09-0554-2	Sample Duplicate	Aqueous	N/A	09/11/17 00:00	09/11/17 16:00	H0911TSSD2
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		648.0	634.0	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 09/05/17 Work Order: 17-09-0158 Preparation: N/A Method: SM 2540 D Page 1 of 10
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-8564	LCS	Aqueous	N/A	09/09/17	09/09/17 15:00	H0909TSSL1
099-09-010-8564	LCSD	Aqueous	N/A	09/09/17	09/09/17 15:00	H0909TSSL1

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	98.00	98	100.0	100	80-120	2	0-20	



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8565	LCS	Aqueous	N/A	09/09/17	09/09/17 15:00	H0909TSSL1			
099-09-010-8565	LCSD	Aqueous	N/A	09/09/17	09/09/17 15:00	H0909TSSL1			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	100.0	98.00	98	100.0	100	80-120	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8563	LCS	Aqueous	N/A	09/11/17	09/11/17 16:00	H0911TSSL1			
099-09-010-8563	LCSD	Aqueous	N/A	09/11/17	09/11/17 16:00	H0911TSSL1			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	100.0	96.00	96	98.00	98	80-120	2	0-20	



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Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-224-193	LCS	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A
099-15-224-193	LCSD	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02000	0.02063	103	0.01959	98	71-125	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-224-194	LCS	Aqueous	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01			
099-15-224-194	LCSD	Aqueous	Hg/AF 1	09/14/17	09/14/17 00:00	170914L01			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	0.02000	0.01970	99	0.02083	104	71-125	6	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-226-138	LCS	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B			
099-15-226-138	LCSD	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02B			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	0.02000	0.02063	103	0.01959	98	71-125	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-067-732	LCS	Aqueous	ICP/MS 06	09/13/17	09/22/17 18:09	170913L01
099-13-067-732	LCSD	Aqueous	ICP/MS 06	09/13/17	09/22/17 18:16	170913L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5340	107	0.5570	111	70-130	4	0-20	
Chromium	5.000	5.090	102	5.063	101	70-130	1	0-20	
Copper	0.5000	0.5012	100	0.4967	99	70-130	1	0-20	
Lead	0.5000	0.5431	109	0.4898	98	70-130	10	0-20	
Zinc	5.000	4.969	99	5.182	104	70-130	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-823-289	LCS	Aqueous	ICP/MS 06	09/13/17	09/21/17 19:04	170913L02
099-15-823-289	LCSD	Aqueous	ICP/MS 06	09/13/17	09/21/17 19:12	170913L02

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5196	104	0.5139	103	70-130	1	0-20	
Chromium	5.000	5.041	101	5.106	102	70-130	1	0-20	
Copper	0.5000	0.5214	104	0.5183	104	70-130	1	0-20	
Lead	0.5000	0.4945	99	0.5182	104	70-130	5	0-20	
Zinc	5.000	5.176	104	5.074	101	70-130	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-704-17	LCS	Aqueous	GC 44	09/14/17	09/15/17 14:51	170914L10
099-16-704-17	LCSD	Aqueous	GC 44	09/14/17	09/15/17 15:05	170914L10

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	33.35	28.18	84	27.14	81	50-150	33-167	4	0-25	
4,4'-DDD	33.35	29.86	90	28.85	86	50-150	33-167	3	0-25	
4,4'-DDE	33.35	29.91	90	28.89	87	50-150	33-167	3	0-25	
4,4'-DDT	33.35	30.04	90	28.75	86	50-150	33-167	4	0-25	
Alpha Chlordane	33.35	28.24	85	27.27	82	50-150	33-167	4	0-25	
Dieldrin	33.35	29.75	89	28.70	86	50-150	33-167	4	0-25	
Gamma Chlordane	33.35	28.49	85	27.57	83	50-150	33-167	3	0-25	
Endrin	33.35	28.54	86	27.28	82	50-150	33-167	5	0-25	
Gamma-BHC	33.35	29.17	87	28.15	84	50-150	33-167	4	0-25	
Heptachlor	33.35	29.38	88	28.31	85	50-150	33-167	4	0-25	
Heptachlor Epoxide	33.35	28.24	85	27.31	82	50-150	33-167	3	0-25	

Total number of LCS compounds: 11

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0158
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-414-108	LCS	Aqueous	GC/MS HHH	09/09/17	09/11/17 11:21	170909L01
099-16-414-108	LCSD	Aqueous	GC/MS HHH	09/09/17	09/11/17 11:45	170909L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB018	0.5000	0.3754	75	0.3698	74	50-150	33-167	1	0-25	
PCB028	0.5000	0.3994	80	0.3898	78	50-150	33-167	2	0-25	
PCB044	0.5000	0.3994	80	0.3865	77	50-150	33-167	3	0-25	
PCB052	0.5000	0.3506	70	0.3433	69	50-150	33-167	2	0-25	
PCB066	0.5000	0.4282	86	0.4200	84	50-150	33-167	2	0-25	
PCB077	0.5000	0.4096	82	0.4170	83	50-150	33-167	2	0-25	
PCB101	0.5000	0.3916	78	0.3755	75	50-150	33-167	4	0-25	
PCB105	0.5000	0.4176	84	0.4486	90	50-150	33-167	7	0-25	
PCB118	0.5000	0.4286	86	0.4365	87	50-150	33-167	2	0-25	
PCB126	0.5000	0.3957	79	0.3938	79	50-150	33-167	0	0-25	
PCB128	0.5000	0.3865	77	0.3872	77	50-150	33-167	0	0-25	
PCB170	0.5000	0.4251	85	0.4110	82	50-150	33-167	3	0-25	
PCB180	0.5000	0.4379	88	0.4218	84	50-150	33-167	4	0-25	
PCB187	0.5000	0.4111	82	0.4089	82	50-150	33-167	1	0-25	
PCB195	0.5000	0.4477	90	0.4614	92	50-150	33-167	3	0-25	
PCB206	0.5000	0.3944	79	0.4083	82	50-150	33-167	3	0-25	
PCB209	0.5000	0.4252	85	0.4377	88	50-150	33-167	3	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Glossary of Terms and Qualifiers

Work Order: 17-09-0158

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Laboratory Number:

Date: 9/5/2017

Project Name: **GWMA-TMDL Compliance Monitoring**

Project Number: **141205-01.03**

Project Manager: **Andy Martin**

Phone Number: **(949) 334-9630**

Shipment Method: **Courier**

Field Team: LB Harbor/SPB

Test Parameters





17-09-0158

[illegible]

Notes: Please send lab report to amartin@anchorgea.com, cfields@anchorgea.com and labdata@anchorgea.com

Relinquished By: Chen David / Chen David Company: Anchor QEA
Signature/Printed Name Chen David / Chen David Date/Time 9/5/16

Received By:	Company:
 Chris Clark	SIX SC 9/5/71000
Signature/Printed Name	Date/Time

Relinquished By:  Company: SIX SCI
Signature/Printed Name Rhonda Clark Date/Time 9/5/17 1700


Received By:	Company:
Dannyle B22	9/5/17 17:06
Signature/Printed Name	Date/Time

Chain of Custody Record & Laboratory Analysis Request

[illegible]

Notes: Please send lab report to amartin@anchoragea.com, cfields@anchoragea.com and labdata@anchoragea.com

Relinquished By: Chris Osuch / Chris Osuch Company: Anchor BEA
Signature/Printed Name Chris Osuch Date/Time 9/5/17 1600

Received By:  Company: S.A.S.C.
Signature/Printed Name Chris Clark 9/5/17 1600 Date/Time

Relinquished By:  Company: Six Six
Signature/Printed Name Chris Cleveland Date/Time 7/5/7 1600


Received By:	Company:
<i>Bunnage</i>	<i>ar</i>
Signature/Printed Name	Date/Time
<i>ar</i>	<i>9/5/17 17:06</i>

[illegible][illegible]

Notes: Please send lab report to amartin@anchorgea.com, cfields@anchorgea.com and labdata@anchorgea.com

Relinquished By: Chris Clark Company: Ancha Q&A
Signature/Printed Name Chris Clark Date/Time 9/5/17 1600

Received By:	Company: <u>SIX SC</u>
Signature/Printed Name <u>Chris Clark</u>	Date/Time <u>9/5/7 1600</u>

Relinquished By:  Company: SIRSC
Signature/Printed Name: Chris Clark Date/Time: 9/5/17 1700

Received By:	Company:
<i>Bunnyl</i>	<i>9/5/17</i>
Signature/Printed Name	Date/Time

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 7

CLIENT: Anchor QEA

DATE: 09/05/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 5.1 °C (w/ CF): 5.3 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 619

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1050

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers <input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500) <input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_z (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGB_s (pH__2) ☐ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1050

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z_{na} = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 7

CLIENT:

Anchor QEA

DATE: 09/05/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.7 °C (w/ CF): 4.9 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 619

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1050

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☒ Yes ☐ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☐ Yes ☐ No ☒ N/A

Sample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace..... ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1050

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 3 OF 7

CLIENT:

Anchor QEA

DATE: 09/05/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 5.4 °C (w/ CF): 5.6 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ Filter

Checked by: 679

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 679

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1050

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☐ Yes ☐ No ☒ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☐ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1050s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

 COOLER 4 OF 7

CLIENT:

Anchor QEA

 DATE: 09/05/2017

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

 Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 5.0 °C (w/ CF): 5.2 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

 Ambient Temperature: ☐ Air ☐ Filter

 Checked by: 619

CUSTODY SEAL:

 Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

 Checked by: 619

 Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

 Checked by: 1050

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

 Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBz₂na (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

 Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

 Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

 Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1050

 s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z₂na = Zn (CH₃CO₂)₂ + NaOH

 Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 5 OF 7

CLIENT:

Anchor QEA

DATE: 09/05/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.7°C (w/ CF): 4.9°C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ Filter

Checked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 619

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1050

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☐ Yes ☐ No ☒ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)☐ 250AGB ☐ 250CGB ☐ 250CGB_s (pH__2) ☐ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☐ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1050s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 6 OF 7CLIENT: Anchor QEADATE: 09/05/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 5.2°C (w/ CF): 5.4°C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 619Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 1050

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☐ Yes ☐ No ☒ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace..... ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_z (pH__9)☐ 250AGB ☐ 250CGB ☐ 250CGB_s (pH__2) ☐ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1050s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z_{na} = Zn (CH₃CO₂)₂ + NaOHReviewed by: 1053

SAMPLE RECEIPT CHECKLIST

 COOLER 7 OF 7

 CLIENT: Anchor QEA

 DATE: 09/05/2017
TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

 Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 5.3 °C (w/ CF): 5.5 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

 Ambient Temperature: ☐ Air ☐ Filter

 Checked by: 619
CUSTODY SEAL:

 Cooler ☐ Present and Intact

☐ Present but Not Intact

☒ Not Present

☐ N/A

 Checked by: 619

 Sample(s) ☐ Present and Intact

☐ Present but Not Intact

☒ Not Present

☐ N/A

 Checked by: 1050
SAMPLE CONDITION:

Yes No N/A

 Chain-of-Custody (COC) document(s) received with samples ☒ ☐ ☐

 COC document(s) received complete ☒ ☐ ☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

 Sampler's name indicated on COC ☐ ☐ ☒

 Sample container label(s) consistent with COC ☒ ☐ ☐

 Sample container(s) intact and in good condition ☒ ☐ ☐

 Proper containers for analyses requested ☒ ☐ ☐

 Sufficient volume/mass for analyses requested ☒ ☐ ☐

 Samples received within holding time ☒ ☐ ☐

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ ☐ ☒

 Proper preservation chemical(s) noted on COC and/or sample container ☒ ☐ ☐

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

 Acid/base preserved samples - pH within acceptable range ☐ ☐ ☒

 Container(s) for certain analysis free of headspace ☐ ☐ ☒
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

 Tedlar™ bag(s) free of condensation ☐ ☐ ☒
CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBz₂na (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (____): ☐ _____ ☐ _____ ☐ _____

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

 Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1050

 s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z₂na = Zn (CH₃CO₂)₂ + NaOH

 Reviewed by: 1053

SAMPLE ANOMALY REPORT

DATE: **09/05/2017**

SAMPLES, CONTAINERS, AND LABELS:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☐ Client sample label(s) do not match COC (comment)
 - ☐ Project information
 - ☐ Client sample ID
 - ☐ Sampling date and/or time
 - ☐ Number of container(s)
 - ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
 - ☐ Broken
 - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
 - ☐ Flat
 - ☐ Very low in volume
 - ☐ Leaking (not transferred; duplicate bag submitted)
 - ☐ Leaking (transferred into ECI Tedlar™ bags*)
 - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

Comments

(-7-E) Received 1 AGB empty for PCB

MISCELLANEOUS: (Describe)

** Empty*

Comments

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: _____

Reported by: *1050*

Reviewed by: *1053*

** Record the total number of containers (i.e., vials or bottles) for the affected sample.



WORK ORDER NUMBER: 17-09-0168

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: GWMA - TMDL Compliance Monitoring

Attention: Andy Martin
27201 Puerta Real
Suite 350
Mission Viejo, CA 92691-8306

A handwritten signature in black ink, reading "Kathleen M. Burney" followed by the initials "FOL".

Approved for release on 09/28/2017 by:
Carla Hollowell
Project Manager

ResultLink ▶

Email your PM ▶

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

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 Work Order Number: 17-09-0168

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Work Order Narrative

Work Order: 17-09-0168Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/05/17. They were assigned to Work Order 17-09-0168.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

CASE NARRATIVE

Eurofins Calscience Work Order No.: 17-09-0168
Project ID: GWMA – TMDL Compliance Monitoring

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the seawater samples.

Sample Condition on Receipt

Thirty-four (34) seawater samples were received for this project on September 5, 2017. The samples were transferred to the laboratory in ice chests with wet ice, following strict chain-of-custody (COC) procedures. The temperatures of the samples upon receipt at the laboratory were 2.2- 2.8°C. All samples were assigned laboratory identification numbers, logged into the Laboratory Information Management System (LIMS), and subsequently stored refrigerated pending analytical chemistry testing.

Tests Performed

Pursuant to the chain of custody, the samples were analyzed for the following:

Total Suspended Solids by SM 2540D
Total and Dissolved Metals by EPA 1640/1631
OC Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM

Data Summary

Samples were filtered in the laboratory for the dissolved metals analyses.

Holding times

All holding times were met.

Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Reporting Limits

All Method Detection Limits were met. Analytical results were evaluated to the MDL and, if applicable, “J” flags were reported.

Blanks

Concentrations of target analytes in the method blanks were found to be non-detect (ND) for all testing.

Laboratory Control Samples

Laboratory Control Sample (LCS) analyses were performed at the required frequencies for all applicable tests. All LCS parameters were within the established control limits.

Matrix Spikes

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) analyses were performed for each applicable analysis. All parameters for the spikes were within the established control limits, with the following exceptions:

For EPA 1640, concentrations of copper and zinc detected in the parent sample were four times or greater than those of the matrix spikes; therefore the control limits do not apply. The results have been flagged with the appropriate qualifier and are released with no further action.

For EPA 8081A, the MS/MSD RPD was outside of established control limits for numerous constituents due to matrix interference. The individual % recoveries were within accepted limits with one exception (MSD for gamma-chlordane); therefore, the results have been flagged with the appropriate qualifier and are released with no further action.

For EPA 8270C SIM PCB Congeners, the MS/MSD RPD was outside of established control limits for PCB 126 and PCB 180 due to matrix interference. The individual % recoveries were all within accepted limits; therefore, the results have been flagged with the appropriate qualifier and are released with no further action.

Surrogates

Surrogate recoveries for all applicable tests and samples were within the established control limits.

Sample Summary

Client: ANCHOR QEA, LLC	Work Order: 17-09-0168
27201 Puerta Real, Suite 350	Project Name: GWMA - TMDL Compliance Monitoring
Mission Viejo, CA 92691-8306	PO Number: Use CF060227a
	Date/Time Received: 09/05/17 18:50
	Number of Containers: 120

Attn: Andy Martin

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
IA-RW-06-G-S-20170905	17-09-0168-1	09/05/17 13:35	8	Sea Water
IA-RW-06-G-M-20170905	17-09-0168-2	09/05/17 13:37	1	Sea Water
IA-RW-06-G-B-20170905	17-09-0168-3	09/05/17 13:39	1	Sea Water
FH-RW-07-G-S-20170905	17-09-0168-4	09/05/17 14:09	8	Sea Water
FH-RW-07-G-M-20170905	17-09-0168-5	09/05/17 14:11	1	Sea Water
FH-RW-07-G-B-20170905	17-09-0168-6	09/05/17 14:13	1	Sea Water
CM-RW-10-G-S-20170905	17-09-0168-7	09/05/17 15:40	8	Sea Water
CM-RW-10-G-M-20170905	17-09-0168-8	09/05/17 15:42	1	Sea Water
CM-RW-10-G-B-20170905	17-09-0168-9	09/05/17 15:44	1	Sea Water
CB-RW-11-G-S-20170905	17-09-0168-10	09/05/17 16:15	8	Sea Water
CB-RW-11-G-M-20170905	17-09-0168-11	09/05/17 16:17	1	Sea Water
CB-RW-11-G-B-20170905	17-09-0168-12	09/05/17 16:19	1	Sea Water
CB-RW-1011-G-M-20170905	17-09-0168-13	09/05/17 16:18	1	Sea Water
IB-RW-12-G-S-20170905	17-09-0168-14	09/05/17 09:39	8	Sea Water
IB-RW-12-G-M-20170905	17-09-0168-15	09/05/17 09:48	1	Sea Water
IB-RW-12-G-B-20170905	17-09-0168-16	09/05/17 09:51	1	Sea Water
IB-RW-1012-G-B-20170905	17-09-0168-17	09/05/17 09:52	1	Sea Water
EB-20170905	17-09-0168-18	09/05/17 17:01	7	Aqueous
CS-RW-01-G-S-20170905	17-09-0168-19	09/05/17 10:46	12	Sea Water
CS-RW-01-G-M-20170905	17-09-0168-20	09/05/17 10:52	1	Sea Water
CS-RW-01-G-B-20170905	17-09-0168-21	09/05/17 10:54	1	Sea Water
IA-RW-02-G-S-20170905	17-09-0168-22	09/05/17 11:16	8	Sea Water
IA-RW-02-G-M-20170905	17-09-0168-23	09/05/17 11:22	1	Sea Water
IA-RW-1002-G-M-20170905	17-09-0168-24	09/05/17 11:23	1	Sea Water
IA-RW-02-G-B-20170905	17-09-0168-25	09/05/17 11:25	1	Sea Water
IA-RW-03-G-S-20170905	17-09-0168-26	09/05/17 12:06	8	Sea Water
IA-RW-03-G-M-20170905	17-09-0168-27	09/05/17 12:04	1	Sea Water
IA-RW-03-G-B-20170905	17-09-0168-28	09/05/17 12:06	1	Sea Water
IA-RW-04-G-S-20170905	17-09-0168-29	09/05/17 12:30	14	Sea Water
IA-RW-04-G-M-20170905	17-09-0168-30	09/05/17 12:32	1	Sea Water
IA-RW-04-G-B-20170905	17-09-0168-31	09/05/17 12:34	1	Sea Water
IA-RW-05-G-S-20170905	17-09-0168-32	09/05/17 14:47	8	Sea Water
IA-RW-05-G-M-20170905	17-09-0168-33	09/05/17 14:49	1	Sea Water
IA-RW-05-G-B-20170905	17-09-0168-34	09/05/17 14:51	1	Sea Water

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20170905	17-09-0168-1-H	09/05/17 13:35	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-06-G-M-20170905	17-09-0168-2-H	09/05/17 13:37	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-06-G-B-20170905	17-09-0168-3-H	09/05/17 13:39	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.7	1.0	0.83	1.00	

FH-RW-07-G-S-20170905	17-09-0168-4-H	09/05/17 14:09	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

FH-RW-07-G-M-20170905	17-09-0168-5-H	09/05/17 14:11	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.0	1.0	0.83	1.00	

FH-RW-07-G-B-20170905	17-09-0168-6-H	09/05/17 14:13	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.5	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: N/A
Method: SM 2540 D
Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20170905	17-09-0168-7-H	09/05/17 15:40	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

CM-RW-10-G-M-20170905	17-09-0168-8-H	09/05/17 15:42	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.3	1.0	0.83	1.00	

CM-RW-10-G-B-20170905	17-09-0168-9-H	09/05/17 15:44	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.3	1.0	0.83	1.00	

CB-RW-11-G-S-20170905	17-09-0168-10-H	09/05/17 16:15	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	7.1	1.0	0.83	1.00	

CB-RW-11-G-M-20170905	17-09-0168-11-A	09/05/17 16:17	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	7.7	1.0	0.83	1.00	

CB-RW-11-G-B-20170905	17-09-0168-12-A	09/05/17 16:19	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	7.1	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-RW-1011-G-M-20170905	17-09-0168-13-A	09/05/17 16:18	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	7.3	1.0	0.83	1.00	

IB-RW-12-G-S-20170905	17-09-0168-14-H	09/05/17 09:39	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-12-G-M-20170905	17-09-0168-15-A	09/05/17 09:48	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.8	1.0	0.83	1.00	

IB-RW-12-G-B-20170905	17-09-0168-16-A	09/05/17 09:51	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.4	1.0	0.83	1.00	

IB-RW-1012-G-B-20170905	17-09-0168-17-A	09/05/17 09:52	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.4	1.0	0.83	1.00	

CS-RW-01-G-S-20170905	17-09-0168-19-H	09/05/17 10:46	Sea Water	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-M-20170905	17-09-0168-20-A	09/05/17 10:52	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

CS-RW-01-G-B-20170905	17-09-0168-21-A	09/05/17 10:54	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	0.90	1.0	0.83	1.00	J

IA-RW-02-G-S-20170905	17-09-0168-22-H	09/05/17 11:16	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-02-G-M-20170905	17-09-0168-23-A	09/05/17 11:22	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.2	1.0	0.83	1.00	

IA-RW-1002-G-M-20170905	17-09-0168-24-A	09/05/17 11:23	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.2	1.0	0.83	1.00	

IA-RW-02-G-B-20170905	17-09-0168-25-A	09/05/17 11:25	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.4	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20170905	17-09-0168-26-H	09/05/17 12:06	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-M-20170905	17-09-0168-27-A	09/05/17 12:04	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.6	1.0	0.83	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-B-20170905	17-09-0168-28-A	09/05/17 12:06	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	0.90	1.0	0.83	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20170905	17-09-0168-29-H	09/05/17 12:30	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-M-20170905	17-09-0168-30-A	09/05/17 12:32	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.4	1.0	0.83	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-B-20170905	17-09-0168-31-A	09/05/17 12:34	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.7	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-05-G-S-20170905	17-09-0168-32-H	09/05/17 14:47	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.0	1.0	0.83	1.00	

IA-RW-05-G-M-20170905	17-09-0168-33-A	09/05/17 14:49	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.1	1.0	0.83	1.00	

IA-RW-05-G-B-20170905	17-09-0168-34-A	09/05/17 14:51	Sea Water	N/A	09/12/17	09/12/17 15:00	H0912TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	5.8	1.0	0.83	1.00	

Method Blank	099-09-010-8568	N/A	Aqueous	N/A	09/11/17	09/11/17 17:00	H0911TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8567	N/A	Aqueous	N/A	09/12/17	09/12/17 15:00	H0912TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20170905	17-09-0168-1-B	09/05/17 13:35	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00160	0.000500	0.000113	1.00	

FH-RW-07-G-S-20170905	17-09-0168-4-B	09/05/17 14:09	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00168	0.000500	0.000113	1.00	

CM-RW-10-G-S-20170905	17-09-0168-7-B	09/05/17 15:40	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000915	0.000500	0.000113	1.00	

CB-RW-11-G-S-20170905	17-09-0168-10-B	09/05/17 16:15	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00255	0.000500	0.000113	1.00	

IB-RW-12-G-S-20170905	17-09-0168-14-B	09/05/17 09:39	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00326	0.000500	0.000113	1.00	

EB-20170905	17-09-0168-18-B	09/05/17 17:01	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00134	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 1631E Total
Method: EPA 1631E
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20170905	17-09-0168-19-B	09/05/17 10:46	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00227	0.000500	0.000113	1.00	

IA-RW-02-G-S-20170905	17-09-0168-22-B	09/05/17 11:16	Sea Water	Hg/AF 1	09/12/17	09/15/17 00:00	170912L01A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00193	0.000500	0.000113	1.00	

IA-RW-03-G-S-20170905	17-09-0168-26-B	09/05/17 12:06	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00242	0.000500	0.000113	1.00	

IA-RW-04-G-S-20170905	17-09-0168-29-B	09/05/17 12:30	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00222	0.000500	0.000113	1.00	

IA-RW-05-G-S-20170905	17-09-0168-32-B	09/05/17 14:47	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00236	0.000500	0.000113	1.00	

Method Blank	099-15-224-192	N/A	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC	Date Received:	09/05/17
27201 Puerta Real, Suite 350	Work Order:	17-09-0168
Mission Viejo, CA 92691-8306	Preparation:	EPA 1631E Total
	Method:	EPA 1631E
	Units:	ug/L
Project: GWMA - TMDL Compliance Monitoring		Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-224-193	N/A	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: Filtered
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20170905	17-09-0168-1-A	09/05/17 13:35	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00114	0.000500	0.000113	1.00	

FH-RW-07-G-S-20170905	17-09-0168-4-A	09/05/17 14:09	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00100	0.000500	0.000113	1.00	

CM-RW-10-G-S-20170905	17-09-0168-7-A	09/05/17 15:40	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000678	0.000500	0.000113	1.00	

CB-RW-11-G-S-20170905	17-09-0168-10-A	09/05/17 16:15	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00108	0.000500	0.000113	1.00	

IB-RW-12-G-S-20170905	17-09-0168-14-A	09/05/17 09:39	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000807	0.000500	0.000113	1.00	

EB-20170905	17-09-0168-18-A	09/05/17 17:01	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000450	0.000500	0.000113	1.00	J

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: Filtered
Method: EPA 1631E
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20170905	17-09-0168-19-A	09/05/17 10:46	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00115	0.000500	0.000113	1.00	

IA-RW-02-G-S-20170905	17-09-0168-22-A	09/05/17 11:16	Sea Water	Hg/AF 1	09/12/17	09/15/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00106	0.000500	0.000113	1.00	

IA-RW-03-G-S-20170905	17-09-0168-26-A	09/05/17 12:06	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

IA-RW-04-G-S-20170905	17-09-0168-29-A	09/05/17 12:30	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00101	0.000500	0.000113	1.00	

IA-RW-05-G-S-20170905	17-09-0168-32-A	09/05/17 14:47	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000854	0.000500	0.000113	1.00	

Method Blank	099-15-226-137	N/A	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20170905	17-09-0168-1-C	09/05/17 13:35	Sea Water	ICP/MS 06	09/14/17	09/22/17 22:17	170914L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0258	0.0300	0.00567	1.00	J
Chromium	0.294	0.500	0.164	1.00	J
Copper	1.22	0.0300	0.00898	1.00	
Lead	0.0778	0.0300	0.0135	1.00	
Zinc	5.73	0.500	0.176	1.00	

FH-RW-07-G-S-20170905	17-09-0168-4-C	09/05/17 14:09	Sea Water	ICP/MS 06	09/14/17	09/22/17 22:25	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0342	0.0300	0.00567	1.00	
Chromium	0.226	0.500	0.164	1.00	J
Copper	4.81	0.0300	0.00898	1.00	
Lead	0.0751	0.0300	0.0135	1.00	
Zinc	14.9	0.500	0.176	1.00	

CM-RW-10-G-S-20170905	17-09-0168-7-C	09/05/17 15:40	Sea Water	ICP/MS 06	09/14/17	09/22/17 22:32	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0494	0.0300	0.00567	1.00	
Chromium	0.236	0.500	0.164	1.00	J
Lead	0.0599	0.0300	0.0135	1.00	

CM-RW-10-G-S-20170905	17-09-0168-7-C	09/05/17 15:40	Sea Water	ICP/MS 06	09/14/17	09/25/17 19:49	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	69.1	0.300	0.0898	10.0	
Zinc	27.9	5.00	1.76	10.0	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-RW-11-G-S-20170905	17-09-0168-10-C	09/05/17 16:15	Sea Water	ICP/MS 06	09/14/17	09/22/17 22:39	170914L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0404	0.0300	0.00567	1.00	
Chromium	0.547	0.500	0.164	1.00	
Copper	1.43	0.0300	0.00898	1.00	
Lead	0.186	0.0300	0.0135	1.00	
Zinc	3.52	0.500	0.176	1.00	

IB-RW-12-G-S-20170905	17-09-0168-14-C	09/05/17 09:39	Sea Water	ICP/MS 06	09/14/17	09/26/17 12:33	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0315	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	2.20	0.0300	0.00898	1.00	
Lead	0.0613	0.0300	0.0135	1.00	
Zinc	4.85	0.500	0.176	1.00	

EB-20170905	17-09-0168-18-C	09/05/17 17:01	Aqueous	ICP/MS 06	09/14/17	09/22/17 11:55	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	0.857	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	1.81	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20170905	17-09-0168-19-C	09/05/17 10:46	Sea Water	ICP/MS 06	09/14/17	09/22/17 22:10	170914L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0743	0.0300	0.00567	1.00	
Chromium	0.400	0.500	0.164	1.00	J
Copper	3.12	0.0300	0.00898	1.00	
Lead	0.233	0.0300	0.0135	1.00	
Zinc	26.1	5.00	1.76	10.0	

IA-RW-02-G-S-20170905	17-09-0168-22-C	09/05/17 11:16	Sea Water	ICP/MS 06	09/14/17	09/22/17 22:53	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0415	0.0300	0.00567	1.00	
Chromium	0.250	0.500	0.164	1.00	J
Copper	2.28	0.0300	0.00898	1.00	
Lead	0.111	0.0300	0.0135	1.00	
Zinc	13.4	0.500	0.176	1.00	

IA-RW-03-G-S-20170905	17-09-0168-26-C	09/05/17 12:06	Sea Water	ICP/MS 06	09/14/17	09/22/17 23:29	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0371	0.0300	0.00567	1.00	
Chromium	0.252	0.500	0.164	1.00	J
Copper	1.98	0.0300	0.00898	1.00	
Lead	0.119	0.0300	0.0135	1.00	
Zinc	8.40	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20170905	17-09-0168-29-C	09/05/17 12:30	Sea Water	ICP/MS 06	09/14/17	09/22/17 23:36	170914L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0384	0.0300	0.00567	1.00	
Chromium	0.272	0.500	0.164	1.00	J
Copper	2.10	0.0300	0.00898	1.00	
Lead	0.0833	0.0300	0.0135	1.00	
Zinc	10.1	0.500	0.176	1.00	

IA-RW-05-G-S-20170905	17-09-0168-32-C	09/05/17 14:47	Sea Water	ICP/MS 06	09/14/17	09/22/17 23:43	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0266	0.0300	0.00567	1.00	J
Chromium	0.325	0.500	0.164	1.00	J
Copper	1.29	0.0300	0.00898	1.00	
Lead	0.0832	0.0300	0.0135	1.00	
Zinc	7.04	0.500	0.176	1.00	

Method Blank	099-13-067-733	N/A	Aqueous	ICP/MS 06	09/14/17	09/25/17 19:35	170914L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	ND	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20170905	17-09-0168-1-D	09/05/17 13:35	Sea Water	ICP/MS 06	09/14/17	09/22/17 19:48	170914L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0282	0.0300	0.00567	1.00	J
Chromium	0.174	0.500	0.164	1.00	J
Copper	1.07	0.0300	0.00898	1.00	
Lead	0.0211	0.0300	0.0135	1.00	J
Zinc	3.28	0.500	0.0736	1.00	

FH-RW-07-G-S-20170905	17-09-0168-4-D	09/05/17 14:09	Sea Water	ICP/MS 06	09/14/17	09/22/17 20:24	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0327	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	3.93	0.0300	0.00898	1.00	
Lead	0.0228	0.0300	0.0135	1.00	J
Zinc	13.3	0.500	0.0736	1.00	

CM-RW-10-G-S-20170905	17-09-0168-7-D	09/05/17 15:40	Sea Water	ICP/MS 06	09/14/17	09/22/17 20:31	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0409	0.0300	0.00567	1.00	
Chromium	0.188	0.500	0.164	1.00	J
Copper	7.57	0.0300	0.00898	1.00	
Lead	0.0171	0.0300	0.0135	1.00	J

CM-RW-10-G-S-20170905	17-09-0168-7-D	09/05/17 15:40	Sea Water	ICP/MS 06	09/14/17	09/25/17 19:42	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Zinc	29.4	5.00	0.736	10.0	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3005A Filt.
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-RW-11-G-S-20170905	17-09-0168-10-D	09/05/17 16:15	Sea Water	ICP/MS 06	09/14/17	09/22/17 20:38	170914L01

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0352	0.0300	0.00567	1.00	
Chromium	0.177	0.500	0.164	1.00	J
Copper	0.692	0.0300	0.00898	1.00	
Lead	0.0159	0.0300	0.0135	1.00	J
Zinc	1.90	0.500	0.0736	1.00	

IB-RW-12-G-S-20170905	17-09-0168-14-D	09/05/17 09:39	Sea Water	ICP/MS 06	09/14/17	09/26/17 12:26	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0359	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	1.14	0.0300	0.00898	1.00	
Lead	0.0303	0.0300	0.0135	1.00	
Zinc	4.08	0.500	0.0736	1.00	

EB-20170905	17-09-0168-18-D	09/05/17 17:01	Aqueous	ICP/MS 06	09/14/17	09/22/17 11:48	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	0.769	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	2.40	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20170905	17-09-0168-19-D	09/05/17 10:46	Sea Water	ICP/MS 06	09/14/17	09/22/17 19:41	170914L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0624	0.0300	0.00567	1.00	
Chromium	0.295	0.500	0.164	1.00	J
Copper	2.70	0.0300	0.00898	1.00	
Lead	0.121	0.0300	0.0135	1.00	
Zinc	23.1	5.00	0.736	10.0	

IA-RW-02-G-S-20170905	17-09-0168-22-D	09/05/17 11:16	Sea Water	ICP/MS 06	09/14/17	09/22/17 20:52	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0377	0.0300	0.00567	1.00	
Chromium	0.214	0.500	0.164	1.00	J
Copper	1.69	0.0300	0.00898	1.00	
Lead	0.0286	0.0300	0.0135	1.00	J
Zinc	11.3	0.500	0.0736	1.00	

IA-RW-03-G-S-20170905	17-09-0168-26-D	09/05/17 12:06	Sea Water	ICP/MS 06	09/14/17	09/22/17 20:59	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0320	0.0300	0.00567	1.00	
Chromium	0.187	0.500	0.164	1.00	J
Copper	1.20	0.0300	0.00898	1.00	
Lead	0.0190	0.0300	0.0135	1.00	J
Zinc	4.52	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20170905	17-09-0168-29-D	09/05/17 12:30	Sea Water	ICP/MS 06	09/14/17	09/22/17 21:06	170914L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0316	0.0300	0.00567	1.00	
Chromium	0.200	0.500	0.164	1.00	J
Copper	1.40	0.0300	0.00898	1.00	
Lead	0.0197	0.0300	0.0135	1.00	J
Zinc	4.67	0.500	0.0736	1.00	

IA-RW-05-G-S-20170905	17-09-0168-32-D	09/05/17 14:47	Sea Water	ICP/MS 06	09/14/17	09/22/17 21:13	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0257	0.0300	0.00567	1.00	J
Chromium	0.165	0.500	0.164	1.00	J
Copper	0.949	0.0300	0.00898	1.00	
Lead	0.0190	0.0300	0.0135	1.00	J
Zinc	1.86	0.500	0.0736	1.00	

Method Blank	099-15-823-290	N/A	Aqueous	ICP/MS 06	09/14/17	09/22/17 17:33	170914L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	ND	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20170905	17-09-0168-1-FG	09/05/17 13:35	Sea Water	GC 44	09/08/17	09/14/17 13:11	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	57	50-150	
2,4,5,6-Tetrachloro-m-Xylene	53	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20170905	17-09-0168-4-FG	09/05/17 14:09	Sea Water	GC 44	09/08/17	09/14/17 13:25	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	1.2	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	50-150	
2,4,5,6-Tetrachloro-m-Xylene	87	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20170905	17-09-0168-7-FG	09/05/17 15:40	Sea Water	GC 44	09/08/17	09/14/17 13:39	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	69	50-150			
2,4,5,6-Tetrachloro-m-Xylene	75	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-RW-11-G-S-20170905	17-09-0168-10-FG	09/05/17 16:15	Sea Water	GC 44	09/08/17	09/14/17 13:53	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	83	50-150			
2,4,5,6-Tetrachloro-m-Xylene	85	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3510C
Method: EPA 8081A
Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20170905	17-09-0168-14-FG	09/05/17 09:39	Sea Water	GC 44	09/08/17	09/14/17 14:08	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	50-150	
2,4,5,6-Tetrachloro-m-Xylene	96	50-150	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20170905	17-09-0168-18-FG	09/05/17 17:01	Aqueous	GC 44	09/08/17	09/14/17 14:22	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	50-150	
2,4,5,6-Tetrachloro-m-Xylene	120	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20170905	17-09-0168-19-FG	09/05/17 10:46	Sea Water	GC 44	09/08/17	09/14/17 14:36	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	50-150	
2,4,5,6-Tetrachloro-m-Xylene	85	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-02-G-S-20170905	17-09-0168-22-FG	09/05/17 11:16	Sea Water	GC 44	09/08/17	09/14/17 14:50	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	1.7	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	50-150	
2,4,5,6-Tetrachloro-m-Xylene	75	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20170905	17-09-0168-26-FG	09/05/17 12:06	Sea Water	GC 44	09/08/17	09/14/17 15:05	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	1.2	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	50-150	
2,4,5,6-Tetrachloro-m-Xylene	88	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20170905	17-09-0168-29-FG	09/05/17 12:30	Sea Water	GC 44	09/08/17	09/14/17 15:19	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	85	50-150	
2,4,5,6-Tetrachloro-m-Xylene	93	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-05-G-S-20170905	17-09-0168-32-FG	09/05/17 14:47	Sea Water	GC 44	09/08/17	09/14/17 15:33	170908L07

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	100	50-150			
2,4,5,6-Tetrachloro-m-Xylene	98	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-704-16	N/A	Aqueous	GC 44	09/08/17	09/14/17 11:40	170908L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	50-150	
2,4,5,6-Tetrachloro-m-Xylene	86	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20170905	17-09-0168-1-E	09/05/17 13:35	Sea Water	GC/MS HHH	09/09/17	09/12/17 21:52	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	92	50-150			
p-Terphenyl-d14	91	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20170905	17-09-0168-4-E	09/05/17 14:09	Sea Water	GC/MS HHH	09/09/17	09/12/17 22:15	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	79	50-150			
p-Terphenyl-d14	74	50-150			

Analytical Report

ANCHOR QEA, LLC	Date Received: 09/05/17
27201 Puerta Real, Suite 350	Work Order: 17-09-0168
Mission Viejo, CA 92691-8306	Preparation: EPA 3510C
	Method: EPA 8270C SIM PCB Congeners
	Units: ug/L

Project: GWMA - TMDL Compliance Monitoring Page 5 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20170905	17-09-0168-7-E	09/05/17 15:40	Sea Water	GC/MS HHH	09/09/17	09/13/17 13:37	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	67	50-150			
p-Terphenyl-d14	57	50-150			



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0168 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 7 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-RW-11-G-S-20170905	17-09-0168-10-E	09/05/17 16:15	Sea Water	GC/MS HHH	09/09/17	09/12/17 23:02	170909L02

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	86	50-150			
p-Terphenyl-d14	77	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20170905	17-09-0168-14-E	09/05/17 09:39	Sea Water	GC/MS HHH	09/09/17	09/12/17 23:26	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	88	50-150			
p-Terphenyl-d14	80	50-150			



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20170905	17-09-0168-18-E	09/05/17 17:01	Aqueous	GC/MS HHH	09/09/17	09/12/17 23:50	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	80	50-150			
p-Terphenyl-d14	79	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20170905	17-09-0168-19-E	09/05/17 10:46	Sea Water	GC/MS HHH	09/09/17	09/13/17 00:13	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	96	50-150			
p-Terphenyl-d14	92	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-02-G-S-20170905	17-09-0168-22-E	09/05/17 11:16	Sea Water	GC/MS HHH	09/09/17	09/13/17 00:37	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	93	50-150			
p-Terphenyl-d14	87	50-150			

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20170905	17-09-0168-26-E	09/05/17 12:06	Sea Water	GC/MS HHH	09/09/17	09/13/17 01:00	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	99	50-150			
p-Terphenyl-d14	91	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20170905	17-09-0168-29-I	09/05/17 12:30	Sea Water	GC/MS HHH	09/09/17	09/13/17 01:23	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	99	50-150			
p-Terphenyl-d14	92	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-05-G-S-20170905	17-09-0168-32-E	09/05/17 14:47	Sea Water	GC/MS HHH	09/09/17	09/13/17 01:47	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	77	50-150			
p-Terphenyl-d14	70	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-414-109	N/A	Aqueous	GC/MS HHH	09/09/17	09/12/17 12:49	170909L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 09/05/17
 Work Order: 17-09-0168
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	70	50-150			
p-Terphenyl-d14	63	50-150			

Return to Contents

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

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-09-0461-1	Sample	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912S01A
17-09-0461-1	Matrix Spike	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912S01A
17-09-0461-1	Matrix Spike Duplicate	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912S01A

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.0008591	0.02000	0.01658	79	0.01802	86	71-125	8	0-24	



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CS-RW-01-G-S-20170905	Sample	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02
CS-RW-01-G-S-20170905	Matrix Spike	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02
CS-RW-01-G-S-20170905	Matrix Spike Duplicate	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.002269	0.02000	0.01885	83	0.02036	90	71-125	8	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CS-RW-01-G-S-20170905	Sample	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S01B
CS-RW-01-G-S-20170905	Matrix Spike	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S01B
CS-RW-01-G-S-20170905	Matrix Spike Duplicate	Sea Water	Hg/AF 1	09/12/17	09/12/17 00:00	170912S01B

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.001150	0.02000	0.01975	93	0.01910	90	71-125	3	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CS-RW-01-G-S-20170905	Sample	Sea Water	ICP/MS 06	09/14/17	09/22/17 22:10	170914S02
CS-RW-01-G-S-20170905	Matrix Spike	Sea Water	ICP/MS 06	09/14/17	09/22/17 21:21	170914S02
CS-RW-01-G-S-20170905	Matrix Spike Duplicate	Sea Water	ICP/MS 06	09/14/17	09/22/17 21:56	170914S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.07425	0.5000	0.6259	110	0.6479	115	50-150	3	0-20	
Chromium	ND	5.000	5.998	120	5.640	113	50-150	6	0-20	
Copper	3.118	0.5000	3.638	4X	3.599	4X	50-150	4X	0-20	Q
Lead	0.2325	0.5000	0.7852	111	0.7268	99	50-150	8	0-20	
Zinc	26.05	5.000	31.63	4X	31.45	4X	50-150	4X	0-20	Q

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CS-RW-01-G-S-20170905	Sample	Sea Water	ICP/MS 06	09/14/17	09/22/17 19:41	170914S01
CS-RW-01-G-S-20170905	Matrix Spike	Sea Water	ICP/MS 06	09/14/17	09/22/17 19:20	170914S01
CS-RW-01-G-S-20170905	Matrix Spike Duplicate	Sea Water	ICP/MS 06	09/14/17	09/22/17 19:27	170914S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.06244	0.5000	0.5760	103	0.5576	99	50-150	3	0-20	
Chromium	ND	5.000	5.592	112	5.391	108	50-150	4	0-20	
Copper	2.702	0.5000	3.306	4X	3.363	4X	50-150	4X	0-20	Q
Lead	0.1214	0.5000	0.6006	96	0.5714	90	50-150	5	0-20	
Zinc	23.13	5.000	35.43	4X	35.45	4X	50-150	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IA-RW-04-G-S-20170905	Sample	Sea Water	GC 44	09/08/17	09/14/17 15:19	170908S07
IA-RW-04-G-S-20170905	Matrix Spike	Sea Water	GC 44	09/08/17	09/14/17 09:23	170908S07
IA-RW-04-G-S-20170905	Matrix Spike Duplicate	Sea Water	GC 44	09/08/17	09/14/17 09:38	170908S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
4,4'-DDD	ND	33.35	23.94	72	18.28	55	50-150	27	0-25	4
4,4'-DDE	ND	33.35	22.64	68	17.02	51	50-150	28	0-25	4
4,4'-DDT	ND	33.35	25.58	77	19.33	58	50-150	28	0-25	4
Alpha Chlordane	ND	33.35	23.35	70	17.54	53	50-150	28	0-25	4
Dieldrin	ND	33.35	22.62	68	17.33	52	50-150	27	0-25	4
Gamma Chlordane	ND	33.35	22.23	67	16.23	49	50-150	31	0-25	3,4

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type		Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number			
IA-RW-04-G-S-20170905	Sample		Sea Water	GC/MS HHH	09/09/17	09/13/17 01:23	170909S02			
IA-RW-04-G-S-20170905	Matrix Spike		Sea Water	GC/MS HHH	09/09/17	09/13/17 02:33	170909S02			
IA-RW-04-G-S-20170905	Matrix Spike Duplicate		Sea Water	GC/MS HHH	09/09/17	09/12/17 14:25	170909S02			
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB018	ND	0.5000	0.3381	68	0.2935	59	50-150	14	0-25	
PCB028	ND	0.5000	0.3494	70	0.3030	61	50-150	14	0-25	
PCB044	ND	0.5000	0.3436	69	0.2964	59	50-150	15	0-25	
PCB052	ND	0.5000	0.3064	61	0.2645	53	50-150	15	0-25	
PCB066	ND	0.5000	0.3598	72	0.3062	61	50-150	16	0-25	
PCB077	ND	0.5000	0.3513	70	0.2845	57	50-150	21	0-25	
PCB101	ND	0.5000	0.3157	63	0.2689	54	50-150	16	0-25	
PCB105	ND	0.5000	0.3648	73	0.2952	59	50-150	21	0-25	
PCB118	ND	0.5000	0.3709	74	0.2956	59	50-150	23	0-25	
PCB126	ND	0.5000	0.3553	71	0.2714	54	50-150	27	0-25	4
PCB128	ND	0.5000	0.3404	68	0.2649	53	50-150	25	0-25	
PCB170	ND	0.5000	0.3510	70	0.2918	58	50-150	18	0-25	
PCB180	ND	0.5000	0.3733	75	0.2833	57	50-150	27	0-25	4
PCB187	ND	0.5000	0.3561	71	0.2819	56	50-150	23	0-25	
PCB195	ND	0.5000	0.3922	78	0.3146	63	50-150	22	0-25	
PCB206	ND	0.5000	0.3421	68	0.2856	57	50-150	18	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 09/05/17 Work Order: 17-09-0168 Preparation: N/A Method: SM 2540 D Page 1 of 4
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
17-09-0398-1	Sample	Aqueous	N/A	09/11/17 00:00	09/11/17 17:00	H0911TSSD3
17-09-0398-1	Sample Duplicate	Aqueous	N/A	09/11/17 00:00	09/11/17 17:00	H0911TSSD3
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		40.40	37.20	8	0-20	

[Return to Contents](#)

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - Sample Duplicate

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 09/05/17 Work Order: 17-09-0168 Preparation: N/A Method: SM 2540 D
Project: GWMA - TMDL Compliance Monitoring	Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
17-09-0267-1	Sample	Aqueous	N/A	09/11/17 00:00	09/11/17 17:00	H0911TSSD4
17-09-0267-1	Sample Duplicate	Aqueous	N/A	09/11/17 00:00	09/11/17 17:00	H0911TSSD4
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		4710	5070	7	0-20	

Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	09/05/17
27201 Puerta Real, Suite 350	Work Order:	17-09-0168
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
17-09-0397-1	Sample	Aqueous	N/A	09/12/17 00:00	09/12/17 15:00	H0912TSSD1
17-09-0397-1	Sample Duplicate	Aqueous	N/A	09/12/17 00:00	09/12/17 15:00	H0912TSSD1
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		2510	2480	1	0-20	

Quality Control - Sample Duplicate

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 09/05/17 Work Order: 17-09-0168 Preparation: N/A Method: SM 2540 D Page 4 of 4
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
17-09-0651-4	Sample	Aqueous	N/A	09/12/17 00:00	09/12/17 15:00	H0912TSSD2
17-09-0651-4	Sample Duplicate	Aqueous	N/A	09/12/17 00:00	09/12/17 15:00	H0912TSSD2
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		4440	4340	2	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8568	LCS	Aqueous	N/A	09/11/17	09/11/17 17:00	H0911TSSL2			
099-09-010-8568	LCSD	Aqueous	N/A	09/11/17	09/11/17 17:00	H0911TSSL2			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	93.00	93	95.00	95	80-120	2	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8567	LCS	Aqueous	N/A	09/12/17	09/12/17 15:00	H0912TSSL1			
099-09-010-8567	LCSD	Aqueous	N/A	09/12/17	09/12/17 15:00	H0912TSSL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	96.00	96	98.00	98	80-120	2	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-224-192	LCS	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A			
099-15-224-192	LCSD	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01A			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02000	0.01695	85	0.01616	81	71-125	5	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-224-193	LCS	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A			
099-15-224-193	LCSD	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L02A			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02000	0.02063	103	0.01959	98	71-125	5	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

Page 5 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-226-137	LCS	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01			
099-15-226-137	LCSD	Aqueous	Hg/AF 1	09/12/17	09/12/17 00:00	170912L01			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02000	0.01695	85	0.01616	81	71-125	5	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-067-733	LCS	Aqueous	ICP/MS 06	09/14/17	09/22/17 19:05	170914L02
099-13-067-733	LCSD	Aqueous	ICP/MS 06	09/14/17	09/22/17 19:13	170914L02

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5135	103	0.5082	102	70-130	1	0-20	
Chromium	5.000	4.889	98	5.350	107	70-130	9	0-20	
Copper	0.5000	0.4525	90	0.4457	89	70-130	2	0-20	
Lead	0.5000	0.4578	92	0.5123	102	70-130	11	0-20	
Zinc	5.000	4.821	96	4.789	96	70-130	1	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-823-290	LCS	Aqueous	ICP/MS 06	09/14/17	09/22/17 18:51	170914L01
099-15-823-290	LCSD	Aqueous	ICP/MS 06	09/14/17	09/22/17 18:58	170914L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5408	108	0.5235	105	70-130	3	0-20	
Chromium	5.000	5.140	103	5.218	104	70-130	2	0-20	
Copper	0.5000	0.4440	89	0.4429	89	70-130	0	0-20	
Lead	0.5000	0.5225	105	0.5199	104	70-130	1	0-20	
Zinc	5.000	4.960	99	4.865	97	70-130	2	0-20	



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

Page 8 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-704-16	LCS	Aqueous	GC 44	09/08/17	09/14/17 11:55	170908L07			
099-16-704-16	LCSD	Aqueous	GC 44	09/08/17	09/14/17 12:09	170908L07			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
4,4'-DDD	33.35	29.11	87	32.22	97	50-150	10	0-25	
4,4'-DDE	33.35	27.93	84	31.02	93	50-150	10	0-25	
4,4'-DDT	33.35	30.01	90	33.66	101	50-150	11	0-25	
Alpha Chlordane	33.35	27.01	81	29.75	89	50-150	10	0-25	
Dieldrin	33.35	27.63	83	30.35	91	50-150	9	0-25	
Gamma Chlordane	33.35	26.67	80	29.18	88	50-150	9	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 09/05/17
Work Order: 17-09-0168
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-16-414-109	LCS	Aqueous	GC/MS HHH	09/09/17	09/12/17 13:13	170909L02				
099-16-414-109	LCSD	Aqueous	GC/MS HHH	09/09/17	09/12/17 13:37	170909L02				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB018	0.5000	0.2988	60	0.3019	60	50-150	33-167	1	0-25	
PCB028	0.5000	0.2956	59	0.3016	60	50-150	33-167	2	0-25	
PCB044	0.5000	0.2940	59	0.2972	59	50-150	33-167	1	0-25	
PCB052	0.5000	0.2617	52	0.2590	52	50-150	33-167	1	0-25	
PCB066	0.5000	0.3046	61	0.3095	62	50-150	33-167	2	0-25	
PCB077	0.5000	0.2853	57	0.2814	56	50-150	33-167	1	0-25	
PCB101	0.5000	0.2725	55	0.2676	54	50-150	33-167	2	0-25	
PCB105	0.5000	0.2824	56	0.2855	57	50-150	33-167	1	0-25	
PCB118	0.5000	0.2903	58	0.2942	59	50-150	33-167	1	0-25	
PCB126	0.5000	0.2687	54	0.2687	54	50-150	33-167	0	0-25	
PCB128	0.5000	0.2569	51	0.2615	52	50-150	33-167	2	0-25	
PCB170	0.5000	0.2914	58	0.3039	61	50-150	33-167	4	0-25	
PCB180	0.5000	0.2750	55	0.2781	56	50-150	33-167	1	0-25	
PCB187	0.5000	0.2672	53	0.2798	56	50-150	33-167	5	0-25	
PCB195	0.5000	0.3177	64	0.3288	66	50-150	33-167	3	0-25	
PCB206	0.5000	0.2800	56	0.2885	58	50-150	33-167	3	0-25	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Glossary of Terms and Qualifiers

Work Order: 17-09-0168

Page 1 of 1


<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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

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

[illegible]

Relinquished By: SARAH POTTER Company: ATQ
Signature/Printed Name Su Date/Time 9/5/12 1744

Received By:	Company:
	DO/ECC
Signature/Printed Name	Date/Time
	9/5/17 1744

Relinquished By: Jeff Chalk Company: DCS/ECI
9/15/17 1850

Received By: Dannagle Company: etc
9/5/17 18:50

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: _____ Date: <u>9/5/2017</u> Project Name: <u>GWMA-TMDL Compliance Monitoring</u> Project Number: <u>141205-01.03</u> Project Manager: <u>Andy Martin</u> Phone Number: <u>(949) 334-9630</u> Shipment Method: <u>Courier</u> Field Team: <u>LA Harbor</u>				Test Parameters <table border="1"> <tr> <th></th> <th>TSS</th> <th>Total and dissolved metals</th> <th>Total and dissolved mercury</th> <th>Organochlorine pesticides</th> <th>PCB Congeners</th> <th>MS/MSD</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> <tr> <td>1</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>17</td> </tr> <tr> <td>2</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>18</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>19</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20</td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>21</td> </tr> <tr> <td>6</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>22</td> </tr> <tr> <td>7</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>23</td> </tr> <tr> <td>8</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>24</td> </tr> <tr> <td>9</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>25</td> </tr> <tr> <td>10</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>26</td> </tr> <tr> <td>11</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>27</td> </tr> <tr> <td>12</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>28</td> </tr> <tr> <td>13</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>29</td> </tr> <tr> <td>14</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>30</td> </tr> <tr> <td>15</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>31</td> </tr> <tr> <td>16</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>32</td> </tr> </table>																TSS	Total and dissolved metals	Total and dissolved mercury	Organochlorine pesticides	PCB Congeners	MS/MSD												1	X																17	2		X	X	X	X												18	3						X											19	4																	20	5																	21	6		X	X	X	X												22	7		X															23	8		X															24	9		X															25	10		X	X	X	X												26	11		X															27	12		X															28	13		X	X	X	X	X											29	14		X															30	15		X															31	16		X	X	X	X												32
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Notes: Please send lab report to amartin@anchorqea.com, cfields@anchorqea.com and labdata@anchorqea.com

Relinquished By: SARA BODA Company: AQ
9/5/17 1744
 Signature/Printed Name Date/Time

Received By: Jeff Chandler Company: DCS/ECI
9/5/17 1744
 Signature/Printed Name Date/Time

Relinquished By: Jeff Chandler Company: DCS/ECI
9/5/17 1850
 Signature/Printed Name Date/Time

Received By: Danuyale Company: ECI
9/5/17 1850
 Signature/Printed Name Date/Time

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:

Date: 9/5/17

Project Name: GWMATMDL

Project Number: 141205-01-03

Project Manager: A. MARDIN

Phone Number: 949-347-2780

Shipment Method: COURIER

Test Parameters



Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Test Parameters																Comments/Preservation
1	1A-RW-05-G-M-20170905	9/5/17 1449	WATER	1	X																33
2	1A-RW-05-G-B-20170905	9/5/17 1451	↓	1	X																34
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Notes:

Relinquished By:

Company: Anchor QEA

SARA PETER

9/5/17 1740

Signature/Printed Name

Date/Time

Received By:

Company: DCS/ECI

Jeff A. ...

9/5/17 1744

Signature/Printed Name

Date/Time

Relinquished By:

Company: DCS/ECI

Jeff A. ...

9/5/17 1850

Signature/Printed Name

Date/Time

Received By:

Company: ECI

Dannyle

9/5/17 18:50

Signature/Printed Name

Date/Time

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 6

CLIENT: Anchor

DATE: 09/5/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.2 °C (w/ CF): 24 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1091

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☐ Yes ☒ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☒ Number of containers (-22)

☒ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time (-19) to (-21)

Sampler's name indicated on COC ☒ Yes ☐ No ☐ N/A

Sample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☒ VOAh ☐ VOAna2 ☐ 100PJ ☒ 100PJna2 ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznna (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBna2 ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO3, na = NaOH, na2 = Na2S2O3, p = H3PO4, Labeled/Checked by: 1050/1140

s = H2SO4, u = ultra-pure, x = Na2SO3+NaHSO4.H2O, znna = Zn (CH3CO2)2 + NaOH

Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 6

CLIENT: Anchor

DATE: 09/5/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.4 °C (w/ CF): 2.6 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1091

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☒ Yes ☐ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☒ Yes ☐ No ☐ N/A

Sample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace..... ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1143/1050

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 3 OF 6

CLIENT: Anchor

DATE: 09/5/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.6 °C (w/ CF): 2.8 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1091

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☒ Yes ☐ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☒ Yes ☐ No ☐ N/A

Sample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace..... ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1140/1090

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 4 OF 6

CLIENT: Archer

DATE: 09/5/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.2 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/A

Checked by: 1091

Sample(s) ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ Yes ☐ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace..... ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 11401050s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 5 OF 6

CLIENT: Anchor

DATE: 09/5/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.2 °C (w/ CF): 2.4 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/AChecked by: 1091Sample(s) ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/AChecked by: 1053

SAMPLE CONDITION:

Yes No N/A

Chain-of-Custody (COC) document(s) received with samples ☒ ☐ ☐COC document(s) received complete ☒ ☐ ☐☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ ☐ ☐Sample container label(s) consistent with COC ☒ ☐ ☐Sample container(s) intact and in good condition ☒ ☐ ☐Proper containers for analyses requested ☒ ☐ ☐Sufficient volume/mass for analyses requested ☒ ☐ ☐Samples received within holding time ☒ ☐ ☐

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ ☐ ☒Proper preservation chemical(s) noted on COC and/or sample container ☒ ☐ ☐

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ ☐ ☒Container(s) for certain analysis free of headspace ☐ ☐ ☒☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ ☐ ☒

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1140/1050s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 1053

SAMPLE RECEIPT CHECKLIST

COOLER 6 OF 6

CLIENT: Anchor

DATE: 09/5/2017

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 24 °C (w/ CF): 26 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1091

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1053

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☒ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznna (pH__9)
☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB
☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____
Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____
Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1140/1050s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄·H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

**WORK ORDER NUMBER: 18-01-0662***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** ANCHOR QEA, LLC**Client Project Name:** GWMA - TMDL Compliance Monitoring**Attention:** Andrew Martin
27201 Puerta Real
Suite 350
Mission Viejo, CA 92691-8306

A handwritten signature in black ink, appearing to read "Richard Villafania".

Approved for release on 01/25/2018 by:
Richard Villafania
Project Manager

ResultLink ▶

Email your PM ▶

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 Work Order Number: 18-01-0662

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Work Order Narrative

Work Order: 18-01-0662

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 01/10/18. They were assigned to Work Order 18-01-0662.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

Sample Summary

Client: ANCHOR QEA, LLC	Work Order: 18-01-0662
27201 Puerta Real, Suite 350	Project Name: GWMA - TMDL Compliance Monitoring
Mission Viejo, CA 92691-8306	PO Number: 141205-01.03
	Date/Time Received: 01/10/18 17:45
	Number of Containers: 48
Attn: Andrew Martin	

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
IB-RW-15-G-S-20180110	18-01-0662-1	01/10/18 14:05	8	Aqueous
IB-RW-15-G-M-20180110	18-01-0662-2	01/10/18 14:10	1	Aqueous
IB-RW-15-G-B-20180110	18-01-0662-3	01/10/18 14:12	2	Aqueous
OB-RW-17-G-S-20180110	18-01-0662-4	01/10/18 13:25	8	Aqueous
OB-RW-17-G-M-20180110	18-01-0662-5	01/10/18 13:30	1	Aqueous
OB-RW-17-G-B-20180110	18-01-0662-6	01/10/18 13:32	1	Aqueous
EB-20180110	18-01-0662-7	01/10/18 15:15	7	Aqueous
SP-RW-19-G-S-20180110	18-01-0662-8	01/10/18 11:50	8	Aqueous
SP-RW-19-G-M-20180110	18-01-0662-9	01/10/18 11:52	1	Aqueous
SP-RW-19-G-B-20180110	18-01-0662-10	01/10/18 11:54	1	Aqueous
SP-RW-20-G-S-20180110	18-01-0662-11	01/10/18 12:50	8	Aqueous
SP-RW-20-G-M-20180110	18-01-0662-12	01/10/18 12:54	1	Aqueous
SP-RW-20-G-B-20180110	18-01-0662-13	01/10/18 12:56	1	Aqueous

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180110	18-01-0662-1-H	01/10/18 14:05	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.3	1.0	0.83	1.00	

IB-RW-15-G-M-20180110	18-01-0662-2-A	01/10/18 14:10	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.5	1.0	0.83	1.00	

IB-RW-15-G-B-20180110	18-01-0662-3-B	01/10/18 14:12	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.9	1.0	0.83	1.00	

OB-RW-17-G-S-20180110	18-01-0662-4-H	01/10/18 13:25	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	7.9	1.0	0.83	1.00	

OB-RW-17-G-M-20180110	18-01-0662-5-A	01/10/18 13:30	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.0	1.0	0.83	1.00	

OB-RW-17-G-B-20180110	18-01-0662-6-A	01/10/18 13:32	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.0	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20180110	18-01-0662-8-H	01/10/18 11:50	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	40	1.0	0.83	1.00	

SP-RW-19-G-M-20180110	18-01-0662-9-A	01/10/18 11:52	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	5.4	1.0	0.83	1.00	

SP-RW-19-G-B-20180110	18-01-0662-10-A	01/10/18 11:54	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.3	1.0	0.83	1.00	

SP-RW-20-G-S-20180110	18-01-0662-11-H	01/10/18 12:50	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.2	1.0	0.83	1.00	

SP-RW-20-G-M-20180110	18-01-0662-12-A	01/10/18 12:54	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.5	1.0	0.83	1.00	

SP-RW-20-G-B-20180110	18-01-0662-13-A	01/10/18 12:56	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.6	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-09-010-8820	N/A	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8814	N/A	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180110	18-01-0662-1-A	01/10/18 14:05	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000514	0.000500	0.000113	1.00	

OB-RW-17-G-S-20180110	18-01-0662-4-A	01/10/18 13:25	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00336	0.000500	0.000113	1.00	

EB-20180110	18-01-0662-7-A	01/10/18 15:15	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

SP-RW-19-G-S-20180110	18-01-0662-8-A	01/10/18 11:50	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

SP-RW-20-G-S-20180110	18-01-0662-11-A	01/10/18 12:50	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

Method Blank	099-15-224-210	N/A	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: Filtered
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180110	18-01-0662-1-A	01/10/18 14:05	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

OB-RW-17-G-S-20180110	18-01-0662-4-A	01/10/18 13:25	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000263	0.000500	0.000113	1.00	J

EB-20180110	18-01-0662-7-A	01/10/18 15:15	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

SP-RW-19-G-S-20180110	18-01-0662-8-A	01/10/18 11:50	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

SP-RW-20-G-S-20180110	18-01-0662-11-A	01/10/18 12:50	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

Method Blank	099-15-226-144	N/A	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180110	18-01-0662-1-C	01/10/18 14:05	Aqueous	ICP/MS 06	01/12/18	01/15/18 15:44	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0658	0.0300	0.00567	1.00	
Chromium	0.444	0.500	0.164	1.00	J
Copper	2.82	0.0300	0.00898	1.00	
Lead	0.695	0.0300	0.0135	1.00	
Zinc	10.7	0.500	0.176	1.00	

OB-RW-17-G-S-20180110	18-01-0662-4-C	01/10/18 13:25	Aqueous	ICP/MS 06	01/12/18	01/15/18 15:52	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0764	0.0300	0.00567	1.00	
Chromium	0.705	0.500	0.164	1.00	
Copper	3.89	0.0300	0.00898	1.00	
Lead	1.16	0.0300	0.0135	1.00	
Zinc	14.5	0.500	0.176	1.00	

EB-20180110	18-01-0662-7-C	01/10/18 15:15	Aqueous	ICP/MS 06	01/12/18	01/15/18 17:20	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.00659	0.0300	0.00567	1.00	J
Chromium	ND	0.500	0.164	1.00	
Copper	5.74	0.0300	0.00898	1.00	
Lead	0.0424	0.0300	0.0135	1.00	
Zinc	0.845	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20180110	18-01-0662-8-C	01/10/18 11:50	Aqueous	ICP/MS 06	01/12/18	01/15/18 16:00	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0919	0.0300	0.00567	1.00	
Chromium	0.704	0.500	0.164	1.00	
Copper	4.62	0.0300	0.00898	1.00	
Lead	1.76	0.0300	0.0135	1.00	
Zinc	17.3	0.500	0.176	1.00	

SP-RW-20-G-S-20180110	18-01-0662-11-C	01/10/18 12:50	Aqueous	ICP/MS 06	01/12/18	01/15/18 16:08	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0528	0.0300	0.00567	1.00	
Chromium	0.471	0.500	0.164	1.00	J
Copper	1.99	0.0300	0.00898	1.00	
Lead	0.588	0.0300	0.0135	1.00	
Zinc	7.83	0.500	0.176	1.00	

Method Blank	099-13-067-756	N/A	Aqueous	ICP/MS 06	01/12/18	01/12/18 16:56	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	ND	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180110	18-01-0662-1-D	01/10/18 14:05	Aqueous	ICP/MS 06	01/12/18	01/12/18 20:00	180112L01F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0592	0.0300	0.00567	1.00	
Chromium	0.486	0.500	0.164	1.00	J
Copper	1.67	0.0300	0.00898	1.00	
Lead	0.301	0.0300	0.0135	1.00	
Zinc	6.70	0.500	0.0736	1.00	

OB-RW-17-G-S-20180110	18-01-0662-4-D	01/10/18 13:25	Aqueous	ICP/MS 06	01/12/18	01/12/18 20:08	180112L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0696	0.0300	0.00567	1.00	
Chromium	0.598	0.500	0.164	1.00	
Copper	2.38	0.0300	0.00898	1.00	
Lead	0.519	0.0300	0.0135	1.00	
Zinc	12.3	0.500	0.0736	1.00	

EB-20180110	18-01-0662-7-D	01/10/18 15:15	Aqueous	ICP/MS 06	01/12/18	01/12/18 19:52	180112L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	4.45	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	0.467	0.500	0.0736	1.00	J

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20180110	18-01-0662-8-D	01/10/18 11:50	Aqueous	ICP/MS 06	01/12/18	01/12/18 20:16	180112L01F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0781	0.0300	0.00567	1.00	
Chromium	0.701	0.500	0.164	1.00	
Copper	2.88	0.0300	0.00898	1.00	
Lead	0.744	0.0300	0.0135	1.00	
Zinc	13.6	0.500	0.0736	1.00	

SP-RW-20-G-S-20180110	18-01-0662-11-D	01/10/18 12:50	Aqueous	ICP/MS 06	01/12/18	01/12/18 20:24	180112L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0450	0.0300	0.00567	1.00	
Chromium	0.463	0.500	0.164	1.00	J
Copper	1.23	0.0300	0.00898	1.00	
Lead	0.249	0.0300	0.0135	1.00	
Zinc	7.28	0.500	0.0736	1.00	

Method Blank	099-15-823-301	N/A	Aqueous	ICP/MS 06	01/12/18	01/12/18 17:04	180112L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	ND	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180110	18-01-0662-1-EF	01/10/18 14:05	Aqueous	GC 44	01/16/18	01/18/18 16:23	180116L19

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	70	50-150			
2,4,5,6-Tetrachloro-m-Xylene	68	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-17-G-S-20180110	18-01-0662-4-EF	01/10/18 13:25	Aqueous	GC 44	01/16/18	01/18/18 16:37	180116L19

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	0.99	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	70	50-150	
2,4,5,6-Tetrachloro-m-Xylene	66	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 3 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20180110	18-01-0662-7-GF	01/10/18 15:15	Aqueous	GC 44	01/16/18	01/18/18 16:51	180116L19

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	59	50-150	
2,4,5,6-Tetrachloro-m-Xylene	61	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20180110	18-01-0662-8-EF	01/10/18 11:50	Aqueous	GC 44	01/16/18	01/18/18 17:05	180116L19

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	2.6	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	77	50-150			
2,4,5,6-Tetrachloro-m-Xylene	60	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20180110	18-01-0662-11-EF	01/10/18 12:50	Aqueous	GC 44	01/16/18	01/18/18 17:20	180116L19

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	70	50-150	
2,4,5,6-Tetrachloro-m-Xylene	60	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 6 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-704-18	N/A	Aqueous	GC 44	01/16/18	01/18/18 16:09	180116L19

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	68	50-150	
2,4,5,6-Tetrachloro-m-Xylene	69	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 12

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180110	18-01-0662-1-G	01/10/18 14:05	Aqueous	GC/MS HHH	01/12/18	01/17/18 00:27	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00071	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	68	50-150			
p-Terphenyl-d14	78	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-17-G-S-20180110	18-01-0662-4-G	01/10/18 13:25	Aqueous	GC/MS HHH	01/12/18	01/17/18 00:51	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00071	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	109	50-150			
p-Terphenyl-d14	121	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20180110	18-01-0662-7-E	01/10/18 15:15	Aqueous	GC/MS HHH	01/12/18	01/17/18 01:15	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00071	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	104	50-150			
p-Terphenyl-d14	117	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20180110	18-01-0662-8-G	01/10/18 11:50	Aqueous	GC/MS HHH	01/12/18	01/17/18 01:38	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	71	50-150			
p-Terphenyl-d14	91	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20180110	18-01-0662-11-G	01/10/18 12:50	Aqueous	GC/MS HHH	01/12/18	01/17/18 02:02	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	86	50-150			
p-Terphenyl-d14	95	50-150			

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-414-116	N/A	Aqueous	GC/MS HHH	01/12/18	01/17/18 13:34	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0662
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	77	50-150			
p-Terphenyl-d14	89	50-150			



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Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IB-RW-15-G-S-20180110	Sample	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116S01
IB-RW-15-G-S-20180110	Matrix Spike	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116S01
IB-RW-15-G-S-20180110	Matrix Spike Duplicate	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.0005144	0.02000	0.01654	80	0.01648	80	71-125	0	0-24	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-01-0625-1	Sample	Sea Water	ICP/MS 06	01/12/18	01/12/18 18:56	180112S01
18-01-0625-1	Matrix Spike	Sea Water	ICP/MS 06	01/12/18	01/12/18 19:04	180112S01
18-01-0625-1	Matrix Spike Duplicate	Sea Water	ICP/MS 06	01/12/18	01/12/18 19:12	180112S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.04542	0.5000	0.5890	109	0.5869	108	50-150	0	0-20	
Chromium	0.7367	5.000	7.037	126	7.120	128	50-150	1	0-20	
Copper	20.07	0.5000	20.97	4X	20.77	4X	50-150	4X	0-20	Q
Lead	0.1876	0.5000	0.6705	97	0.6549	93	50-150	2	0-20	
Zinc	24.73	5.000	29.88	4X	29.63	4X	50-150	4X	0-20	Q

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	01/10/18
27201 Puerta Real, Suite 350	Work Order:	18-01-0662
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
IB-RW-15-G-B-20180110	Sample	Aqueous	N/A	01/13/18 00:00	01/13/18 17:00	I0113TSSD7
IB-RW-15-G-B-20180110	Sample Duplicate	Aqueous	N/A	01/13/18 00:00	01/13/18 17:00	I0113TSSD7

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	2.900	2.800	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - Sample Duplicate

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 01/10/18 Work Order: 18-01-0662 Preparation: N/A Method: SM 2540 D Page 2 of 2
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-01-0831-1	Sample	Aqueous	N/A	01/13/18 00:00	01/13/18 17:00	I0113TSSD8
18-01-0831-1	Sample Duplicate	Aqueous	N/A	01/13/18 00:00	01/13/18 17:00	I0113TSSD8
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		68.75	72.50	5	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8820	LCS	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4			
099-09-010-8820	LCSD	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	105.0	105	102.0	102	80-120	3	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8814	LCS	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4			
099-09-010-8814	LCSD	Aqueous	N/A	01/13/18	01/13/18 17:00	I0113TSSL4			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	105.0	105	102.0	102	80-120	3	0-20	



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Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-224-210	LCS	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01
099-15-224-210	LCSD	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02000	0.01676	84	0.01761	88	71-125	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-226-144	LCS	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01F			
099-15-226-144	LCSD	Aqueous	Hg/AF 1	01/16/18	01/23/18 00:00	180116L01F			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02000	0.01676	84	0.01761	88	71-125	5	0-20	



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-13-067-756	LCS	Aqueous	ICP/MS 06	01/12/18	01/12/18 17:28	180112L01			
099-13-067-756	LCSD	Aqueous	ICP/MS 06	01/12/18	01/12/18 17:36	180112L01			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5214	104	0.5219	104	70-130	0	0-20	
Chromium	5.000	5.176	104	5.103	102	70-130	1	0-20	
Copper	0.5000	0.5437	109	0.5504	110	70-130	1	0-20	
Lead	0.5000	0.5288	106	0.5314	106	70-130	0	0-20	
Zinc	5.000	5.371	107	5.345	107	70-130	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-823-301	LCS	Aqueous	ICP/MS 06	01/12/18	01/12/18 17:28	180112L01F
099-15-823-301	LCSD	Aqueous	ICP/MS 06	01/12/18	01/12/18 17:36	180112L01F

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5214	104	0.5219	104	70-130	0	0-20	
Chromium	5.000	5.176	104	5.103	102	70-130	1	0-20	
Copper	0.5000	0.5437	109	0.5504	110	70-130	1	0-20	
Lead	0.5000	0.5288	106	0.5314	106	70-130	0	0-20	
Zinc	5.000	5.371	107	5.345	107	70-130	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix		Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-704-18	LCS	Aqueous		GC 44	01/16/18	01/18/18 18:11	180116L19			
099-16-704-18	LCSD	Aqueous		GC 44	01/16/18	01/18/18 18:25	180116L19			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	33.35	23.46	70	25.96	78	50-150	33-167	10	0-25	
4,4'-DDD	33.35	25.15	75	25.92	78	50-150	33-167	3	0-25	
4,4'-DDE	33.35	25.54	77	26.79	80	50-150	33-167	5	0-25	
4,4'-DDT	33.35	27.97	84	28.99	87	50-150	33-167	4	0-25	
Alpha Chlordane	33.35	24.49	73	25.51	76	50-150	33-167	4	0-25	
Dieldrin	33.35	26.52	80	27.78	83	50-150	33-167	5	0-25	
Gamma Chlordane	33.35	24.32	73	25.20	76	50-150	33-167	4	0-25	
Endrin	33.35	25.27	76	26.31	79	50-150	33-167	4	0-25	
Gamma-BHC	33.35	23.95	72	26.95	81	50-150	33-167	12	0-25	
Heptachlor	33.35	24.61	74	27.67	83	50-150	33-167	12	0-25	
Heptachlor Epoxide	33.35	23.94	72	25.01	75	50-150	33-167	4	0-25	

Total number of LCS compounds: 11

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0662
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-414-116	LCS	Aqueous	GC/MS HHH	01/12/18	01/16/18 21:42	180112L01
099-16-414-116	LCSD	Aqueous	GC/MS HHH	01/12/18	01/16/18 22:06	180112L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB018	0.5000	0.2996	60	0.3652	73	50-150	33-167	20	0-25	
PCB028	0.5000	0.3576	72	0.4114	82	50-150	33-167	14	0-25	
PCB044	0.5000	0.3503	70	0.3912	78	50-150	33-167	11	0-25	
PCB052	0.5000	0.3298	66	0.3753	75	50-150	33-167	13	0-25	
PCB066	0.5000	0.4232	85	0.4697	94	50-150	33-167	10	0-25	
PCB077	0.5000	0.3787	76	0.4133	83	50-150	33-167	9	0-25	
PCB101	0.5000	0.3678	74	0.4002	80	50-150	33-167	8	0-25	
PCB105	0.5000	0.3934	79	0.4191	84	50-150	33-167	6	0-25	
PCB118	0.5000	0.3889	78	0.4207	84	50-150	33-167	8	0-25	
PCB126	0.5000	0.3712	74	0.3935	79	50-150	33-167	6	0-25	
PCB128	0.5000	0.3611	72	0.3886	78	50-150	33-167	7	0-25	
PCB170	0.5000	0.3946	79	0.4034	81	50-150	33-167	2	0-25	
PCB180	0.5000	0.4024	80	0.4217	84	50-150	33-167	5	0-25	
PCB187	0.5000	0.3915	78	0.4172	83	50-150	33-167	6	0-25	
PCB195	0.5000	0.3366	67	0.3385	68	50-150	33-167	1	0-25	
PCB206	0.5000	0.3787	76	0.3547	71	50-150	33-167	7	0-25	
PCB209	0.5000	0.3078	62	0.2693	54	50-150	33-167	13	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Sample Analysis Summary Report

Work Order: 18-01-0662

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 1631E	Filtered	1080	Hg/AF 1	1
EPA 1631E	EPA 1631E Total	1080	Hg/AF 1	1
EPA 1640	EPA 3005A Total	110	ICP/MS 06	1
EPA 1640	EPA 3005A Filt.	110	ICP/MS 06	1
EPA 8081A	EPA 3510C	669	GC 44	1
EPA 8270C SIM PCB Congeners	EPA 3510C	907	GC/MS HHH	1
SM 2540 D	N/A	1009	N/A	1

Glossary of Terms and Qualifiers

Work Order: 18-01-0662

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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


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

[illegible]

Notes: Send lab report to smartin@anchorage2.com, cfields@anchorage2.com, lrbdata@anchorage2.com

Relinquished By: [Signature] Company: Anchor QEA
Signature/Printed Name 1/10/18 17:00 Date/Time

Received By: Jeff Chandler Company: DCS/EC
Signature/Printed Name Jeff Chandler Date/Time 1/19/18 1700

Relinquished By: 	Company: <u>DCS/ECI</u>
Signature/Printed Name	<u>1/10/18 1745</u> Date/Time

Received By: <u>Yan Cao</u>	Company: <u>EEF</u>
Signature/Printed Name	Date/Time <u>1/10/18 1745</u>

Richard Villafania

From: Andy Martin <amartin@anchorage.com>
Sent: Thursday, January 11, 2018 12:26 PM
To: Linda Ta; Cindy Fields
Cc: Richard Villafania
Subject: RE: GWMA - TMDL Compliance Monitoring - 18-01-0662 - Sample Receipt Confirmation & COC Document

Hi Linda,

Thank you. That is my mistake. The EB-20180110 sample only had 7 containers as opposed to 8. This is on purpose. TSS should not have been checked on the COC>

Andy

Andrew Martin
 Managing Environmental Scientist

ANCHOR QEA, LLC

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From: Linda Ta [<mailto:LindaTa@eurofinsUS.com>]
Sent: Thursday, January 11, 2018 8:43 AM
To: Andy Martin <amartin@anchorage.com>; Cindy Fields <cfields@anchorage.com>; Lab Data Attachments <LabDataAttachments@anchorage.com>
Cc: Richard Villafania <RichardVillafania@eurofinsUS.com>
Subject: GWMA - TMDL Compliance Monitoring - 18-01-0662 - Sample Receipt Confirmation & COC Document

Good Morning,

Please be advised for sample "EB-20180110" the lab did not receive a container for the requested TSS analysis.

Thanks!

Linda Ta
 Project Manager Assistant



Eurofins Calscience, Inc.
 7440 Lincoln Way
 Garden Grove, CA 92841
 USA
 P: +1 714 895 5494
 F: +1 714 894 7501

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 3

CLIENT: Anchor

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.2 °C (w/ CF): 2.4 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1091

Checked by: 720

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna2 ☐ 100PJ ☐ 100PJna2 ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznna (pH_9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH_2) ☒ 250PB ☐ 250PBn (pH_2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH_2) ☐ 500PB

☒ 1AGB ☐ 1AGBna2 ☐ 1AGBs (pH_2) ☐ 1AGBs (O&G) ☐ 1PB ☐ 1PBna (pH_12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO3, na = NaOH, na2 = Na2S2O3, p = H3PO4, Labeled/Checked by: 720

s = H2SO4, u = ultra-pure, x = Na2SO3+NaHSO4.H2O, znna = Zn (CH3CO2)2 + NaOH

Reviewed by: 1053

7 containers

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 3

CLIENT: Anchor

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.4 °C (w/ CF): 2.6 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1091

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 778

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☒ Yes ☐ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☒ Yes ☐ No ☒ N/A

Sample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna2 ☐ 100PJ ☒ 100PJna2 ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBz (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBna2 ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO3, na = NaOH, na2 = Na2S2O3, p = H3PO4, Labeled/Checked by: 778

s = H2SO4, u = ultra-pure, x = Na2SO3+NaHSO4.H2O, znna = Zn (CH3CO2)2 + NaOH

Reviewed by: 1053

8 Containers

SAMPLE RECEIPT CHECKLIST

COOLER 3 OF 3

CLIENT: Anchor

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.6 °C (w/ CF): 2.8 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1091

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 728

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznna (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH__2) ☐ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 728

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1053

SAMPLE ANOMALY REPORT

DATE: **01 / 10 / 2018**

SAMPLES, CONTAINERS, AND LABELS:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☒ Client sample label(s) do not match COC (comment)
 - ☐ Project information
 - ☐ Client sample ID
 - ☐ Sampling date and/or time
 - ☐ Number of container(s)
 - ☒ Requested analysis
- ☐ Sample container(s) compromised (comment)
 - ☐ Broken
 - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
 - ☐ Flat
 - ☐ Very low in volume
 - ☐ Leaking (not transferred; duplicate bag submitted)
 - ☐ Leaking (transferred into ECI Tedlar™ bags*)
 - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

MISCELLANEOUS: (Describe)

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

Comments

(-7) TSS container not received.

Comments

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: _____

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

Reported by: 778

Reviewed by: 1053



WORK ORDER NUMBER: 18-01-0691

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: GWMA - TMDL Compliance Monitoring

Attention: Andrew Martin
27201 Puerta Real
Suite 350
Mission Viejo, CA 92691-8306

A handwritten signature in black ink, appearing to read "Richard Villafania".

Approved for release on 01/25/2018 by:
Richard Villafania
Project Manager

ResultLink ▶

Email your PM ▶

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

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 Work Order Number: 18-01-0691

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Work Order Narrative

Work Order: 18-01-0691Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 01/10/18. They were assigned to Work Order 18-01-0691.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) analyses were performed for each applicable analysis. All parameters for the spikes were within the established control limits, with the following exceptions:

EPA 1640 - concentrations of Copper and Zinc detected in the parent sample were four times or greater than those of the matrix spikes; therefore the control limits do not apply. The results have been flagged with the appropriate qualifier. The MS recovery for Lead was slightly below control limits and attributed to sample matrix effect; the result has been flagged with the appropriate qualifier.

EPA 8081A - the individual % recoveries were within accepted limits with one exception (MS for 4,4'-DDD); the result has been flagged with the appropriate qualifier.

Sample Summary

Client: ANCHOR QEA, LLC	Work Order: 18-01-0691
27201 Puerta Real, Suite 350	Project Name: GWMA - TMDL Compliance Monitoring
Mission Viejo, CA 92691-8306	PO Number:
	Date/Time Received: 01/10/18 18:45
	Number of Containers: 201

Attn: Andrew Martin

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
IA-RW-06-G-M-20180110	18-01-0691-1	01/10/18 13:42	1	Aqueous
IA-RW-06-G-B-20180110	18-01-0691-2	01/10/18 13:44	1	Aqueous
FH-RW-07-G-S-20180110	18-01-0691-3	01/10/18 14:10	8	Aqueous
FH-RW-07-G-M-20180110	18-01-0691-4	01/10/18 14:12	1	Aqueous
FH-RW-07-G-B-20180110	18-01-0691-5	01/10/18 14:14	1	Aqueous
CM-RW-1010-G-M-20180110	18-01-0691-6	01/10/18 15:20	1	Aqueous
CM-RW-10-G-S-20180110	18-01-0691-7	01/10/18 15:15	8	Aqueous
CM-RW-10-G-M-20180110	18-01-0691-8	01/10/18 15:17	1	Aqueous
CM-RW-10-G-B-20180110	18-01-0691-9	01/10/18 15:19	1	Aqueous
CB-RW-11-G-S-20180110	18-01-0691-10	01/10/18 15:45	8	Aqueous
CB-RW-11-G-M-20180110	18-01-0691-11	01/10/18 15:47	1	Aqueous
CB-RW-11-G-B-20180110	18-01-0691-12	01/10/18 15:49	1	Aqueous
IB-RW-12-G-S-20180110	18-01-0691-13	01/10/18 09:50	8	Aqueous
IB-RW-12-G-M-20180110	18-01-0691-14	01/10/18 09:52	1	Aqueous
IB-RW-12-G-B-20180110	18-01-0691-15	01/10/18 09:55	1	Aqueous
CS-RW-01-G-S-20180110	18-01-0691-16	01/10/18 10:55	16	Aqueous
CS-RW-01-G-M-20180110	18-01-0691-17	01/10/18 10:57	1	Aqueous
CS-RW-01-G-B-20180110	18-01-0691-18	01/10/18 10:59	1	Aqueous
IA-RW-02-G-S-20180110	18-01-0691-19	01/10/18 11:30	8	Aqueous
IA-RW-02-G-M-20180110	18-01-0691-20	01/10/18 11:32	1	Aqueous
IA-RW-02-G-B-20180110	18-01-0691-21	01/10/18 11:35	1	Aqueous
IA-RW-03-G-S-20180110	18-01-0691-22	01/10/18 12:26	8	Aqueous
IA-RW-03-G-M-20180110	18-01-0691-23	01/10/18 12:22	1	Aqueous
IA-RW-03-G-B-20180110	18-01-0691-24	01/10/18 12:24	1	Aqueous
IA-RW-04-G-S-20180110	18-01-0691-25	01/10/18 13:10	8	Aqueous
IA-RW-04-G-M-20180110	18-01-0691-26	01/10/18 13:12	1	Aqueous
IA-RW-04-G-B-20180110	18-01-0691-27	01/10/18 13:14	1	Aqueous
IA-RW-05-G-S-20180110	18-01-0691-28	01/10/18 14:35	8	Aqueous
IA-RW-05-G-M-20180110	18-01-0691-29	01/10/18 14:37	1	Aqueous
IA-RW-05-G-B-20180110	18-01-0691-30	01/10/18 14:39	1	Aqueous
IA-RW-06-G-S-20180110	18-01-0691-31	01/10/18 13:40	9	Aqueous
OA-RW-08-G-S-20180110	18-01-0691-32	01/10/18 10:15	8	Aqueous
OA-RW-08-G-M-20180110	18-01-0691-33	01/10/18 10:20	1	Aqueous
OA-RW-08-G-B-20180110	18-01-0691-34	01/10/18 10:25	2	Aqueous
OA-RW-09-G-S-20180110	18-01-0691-35	01/10/18 09:35	8	Aqueous
OA-RW-09-G-M-20180110	18-01-0691-36	01/10/18 09:40	1	Aqueous
OA-RW-09-G-B-20180110	18-01-0691-37	01/10/18 09:45	1	Aqueous
OB-RW-16-G-S-20180110	18-01-0691-38	01/10/18 11:40	8	Aqueous
OB-RW-16-G-M-20180110	18-01-0691-39	01/10/18 11:45	1	Aqueous
OB-RW-16-G-B-20180110	18-01-0691-40	01/10/18 11:50	1	Aqueous
SP-RW-18-G-S-20180110	18-01-0691-41	01/10/18 12:30	8	Aqueous
SP-RW-18-G-M-20180110	18-01-0691-42	01/10/18 12:35	1	Aqueous

Sample Summary

Client: ANCHOR QEA, LLC	Work Order: 18-01-0691
27201 Puerta Real, Suite 350	Project Name: GWMA - TMDL Compliance Monitoring
Mission Viejo, CA 92691-8306	PO Number:
	Date/Time Received: 01/10/18 18:45
	Number of Containers: 201
Attn: Andrew Martin	

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SP-RW-18-G-B-20180110	18-01-0691-43	01/10/18 12:40	1	Aqueous
LE-RW-21-G-S-20180110	18-01-0691-44	01/10/18 13:05	8	Aqueous
FB-20180110	18-01-0691-45	01/10/18 14:00	4	Aqueous
OA-RW-G-B-20180110	18-01-0691-46	01/10/18 09:50	1	Aqueous
LE-RW-22-G-S-20180110	18-01-0691-47	01/10/18 13:40	8	Aqueous
IA-RW-13-G-S-20180110	18-01-0691-48	01/10/18 15:20	8	Aqueous
IA-RW-13-G-M-20180110	18-01-0691-49	01/10/18 15:25	1	Aqueous
IA-RW-13-G-B-20180110	18-01-0691-50	01/10/18 15:30	1	Aqueous
IA-RW-14-G-S-20180110	18-01-0691-51	01/10/18 16:00	8	Aqueous
IA-RW-14-G-M-20180110	18-01-0691-52	01/10/18 16:05	1	Aqueous
IA-RW-14-G-B-20180110	18-01-0691-53	01/10/18 16:10	1	Aqueous
IA-RW-1014-G-S-20180110	18-01-0691-54	01/10/18 00:00	8	Aqueous
LE-RW-22-G-S-20180110-DUP	18-01-0691-55	01/10/18 13:40	1	Aqueous

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-M-20180110	18-01-0691-1-A	01/10/18 13:42	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.5	1.0	0.83	1.00	

IA-RW-06-G-B-20180110	18-01-0691-2-A	01/10/18 13:44	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	6.1	1.0	0.83	1.00	

FH-RW-07-G-S-20180110	18-01-0691-3-A	01/10/18 14:10	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.6	1.0	0.83	1.00	

FH-RW-07-G-M-20180110	18-01-0691-4-A	01/10/18 14:12	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.4	1.0	0.83	1.00	

FH-RW-07-G-B-20180110	18-01-0691-5-A	01/10/18 14:14	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.2	1.0	0.83	1.00	

CM-RW-1010-G-M-20180110	18-01-0691-6-A	01/10/18 15:20	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.1	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D
Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20180110	18-01-0691-7-A	01/10/18 15:15	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.5	1.0	0.83	1.00	

CM-RW-10-G-M-20180110	18-01-0691-8-A	01/10/18 15:17	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.7	1.0	0.83	1.00	

CM-RW-10-G-B-20180110	18-01-0691-9-A	01/10/18 15:19	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	20	1.0	0.83	1.00	

CB-RW-11-G-S-20180110	18-01-0691-10-A	01/10/18 15:45	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.2	1.0	0.83	1.00	

CB-RW-11-G-M-20180110	18-01-0691-11-A	01/10/18 15:47	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.5	1.0	0.83	1.00	

CB-RW-11-G-B-20180110	18-01-0691-12-A	01/10/18 15:49	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.4	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20180110	18-01-0691-13-H	01/10/18 09:50	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.1	1.0	0.83	1.00	

IB-RW-12-G-M-20180110	18-01-0691-14-A	01/10/18 09:52	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.5	1.0	0.83	1.00	

IB-RW-12-G-B-20180110	18-01-0691-15-A	01/10/18 09:55	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.6	1.0	0.83	1.00	

CS-RW-01-G-S-20180110	18-01-0691-16-H	01/10/18 10:55	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	18	1.0	0.83	1.00	

CS-RW-01-G-M-20180110	18-01-0691-17-A	01/10/18 10:57	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	12	1.0	0.83	1.00	

CS-RW-01-G-B-20180110	18-01-0691-18-A	01/10/18 10:59	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.7	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D
Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-02-G-S-20180110	18-01-0691-19-H	01/10/18 11:30	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	8.8	1.0	0.83	1.00	

IA-RW-02-G-M-20180110	18-01-0691-20-A	01/10/18 11:32	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.3	1.0	0.83	1.00	

IA-RW-02-G-B-20180110	18-01-0691-21-A	01/10/18 11:35	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.0	1.0	0.83	1.00	

IA-RW-03-G-S-20180110	18-01-0691-22-H	01/10/18 12:26	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	5.0	1.0	0.83	1.00	

IA-RW-03-G-M-20180110	18-01-0691-23-A	01/10/18 12:22	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.9	1.0	0.83	1.00	

IA-RW-03-G-B-20180110	18-01-0691-24-A	01/10/18 12:24	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.0	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D
Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20180110	18-01-0691-25-H	01/10/18 13:10	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	7.4	1.0	0.83	1.00	

IA-RW-04-G-M-20180110	18-01-0691-26-A	01/10/18 13:12	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.5	1.0	0.83	1.00	

IA-RW-04-G-B-20180110	18-01-0691-27-A	01/10/18 13:14	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-05-G-S-20180110	18-01-0691-28-H	01/10/18 14:35	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.6	1.0	0.83	1.00	

IA-RW-05-G-M-20180110	18-01-0691-29-A	01/10/18 14:37	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.0	1.0	0.83	1.00	

IA-RW-05-G-B-20180110	18-01-0691-30-A	01/10/18 14:39	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20180110	18-01-0691-31-I	01/10/18 13:40	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.5	1.0	0.83	1.00	

OA-RW-08-G-S-20180110	18-01-0691-32-H	01/10/18 10:15	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	5.4	1.0	0.83	1.00	

OA-RW-08-G-M-20180110	18-01-0691-33-A	01/10/18 10:20	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.1	1.0	0.83	1.00	

OA-RW-08-G-B-20180110	18-01-0691-34-B	01/10/18 10:25	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.4	1.0	0.83	1.00	

OA-RW-09-G-S-20180110	18-01-0691-35-H	01/10/18 09:35	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.6	1.0	0.83	1.00	

OA-RW-09-G-M-20180110	18-01-0691-36-A	01/10/18 09:40	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.7	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-B-20180110	18-01-0691-37-A	01/10/18 09:45	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OB-RW-16-G-S-20180110	18-01-0691-38-H	01/10/18 11:40	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	6.6	1.0	0.83	1.00	

OB-RW-16-G-M-20180110	18-01-0691-39-A	01/10/18 11:45	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OB-RW-16-G-B-20180110	18-01-0691-40-A	01/10/18 11:50	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.4	1.0	0.83	1.00	

SP-RW-18-G-S-20180110	18-01-0691-41-H	01/10/18 12:30	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	7.7	1.0	0.83	1.00	

SP-RW-18-G-M-20180110	18-01-0691-42-A	01/10/18 12:35	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.2	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-B-20180110	18-01-0691-43-A	01/10/18 12:40	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.1	1.0	0.83	1.00	

LE-RW-21-G-S-20180110	18-01-0691-44-H	01/10/18 13:05	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	24	1.0	0.83	1.00	

OA-RW-G-B-20180110	18-01-0691-46-A	01/10/18 09:50	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.7	1.0	0.83	1.00	

LE-RW-22-G-S-20180110	18-01-0691-47-H	01/10/18 13:40	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	51	1.0	0.83	1.00	

IA-RW-13-G-S-20180110	18-01-0691-48-H	01/10/18 15:20	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.2	1.0	0.83	1.00	

IA-RW-13-G-M-20180110	18-01-0691-49-A	01/10/18 15:25	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-13-G-B-20180110	18-01-0691-50-A	01/10/18 15:30	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.6	1.0	0.83	1.00	

IA-RW-14-G-S-20180110	18-01-0691-51-H	01/10/18 16:00	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.8	1.0	0.83	1.00	

IA-RW-14-G-M-20180110	18-01-0691-52-A	01/10/18 16:05	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-14-G-B-20180110	18-01-0691-53-A	01/10/18 16:10	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-1014-G-S-20180110	18-01-0691-54-H	01/10/18 00:00	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.4	1.0	0.83	1.00	

LE-RW-22-G-S-20180110-DUP	18-01-0691-55-A	01/10/18 13:40	Aqueous	N/A	01/17/18	01/17/18 16:00	I0117TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	46	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-09-010-8828	N/A	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8829	N/A	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8830	N/A	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8831	N/A	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8832	N/A	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8835	N/A	Aqueous	N/A	01/17/18	01/17/18 16:00	I0117TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180110	18-01-0691-3-A	01/10/18 14:10	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000166	0.000500	0.000113	1.00	J

CM-RW-10-G-S-20180110	18-01-0691-7-A	01/10/18 15:15	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000235	0.000500	0.000113	1.00	J

CB-RW-11-G-S-20180110	18-01-0691-10-A	01/10/18 15:45	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000458	0.000500	0.000113	1.00	J

IB-RW-12-G-S-20180110	18-01-0691-13-A	01/10/18 09:50	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00156	0.000500	0.000113	1.00	

CS-RW-01-G-S-20180110	18-01-0691-16-A	01/10/18 10:55	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00175	0.000500	0.000113	1.00	

IA-RW-02-G-S-20180110	18-01-0691-19-A	01/10/18 11:30	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00167	0.000500	0.000113	1.00	

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

Analytical Report

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Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20180110	18-01-0691-22-A	01/10/18 12:26	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000896	0.000500	0.000113	1.00	

IA-RW-04-G-S-20180110	18-01-0691-25-A	01/10/18 13:10	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00153	0.000500	0.000113	1.00	

IA-RW-05-G-S-20180110	18-01-0691-28-A	01/10/18 14:35	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000217	0.000500	0.000113	1.00	J

IA-RW-06-G-S-20180110	18-01-0691-31-A	01/10/18 13:40	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000724	0.000500	0.000113	1.00	

OA-RW-08-G-S-20180110	18-01-0691-32-A	01/10/18 10:15	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00120	0.000500	0.000113	1.00	

OA-RW-09-G-S-20180110	18-01-0691-35-A	01/10/18 09:35	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000562	0.000500	0.000113	1.00	

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

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ANCHOR QEA, LLC
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Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 1631E Total
Method: EPA 1631E
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20180110	18-01-0691-38-A	01/10/18 11:40	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000856	0.000500	0.000113	1.00	

SP-RW-18-G-S-20180110	18-01-0691-41-A	01/10/18 12:30	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000625	0.000500	0.000113	1.00	

LE-RW-21-G-S-20180110	18-01-0691-44-A	01/10/18 13:05	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00121	0.000500	0.000113	1.00	

LE-RW-22-G-S-20180110	18-01-0691-47-A	01/10/18 13:40	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000780	0.000500	0.000113	1.00	

IA-RW-13-G-S-20180110	18-01-0691-48-A	01/10/18 15:20	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000119	0.000500	0.000113	1.00	J

IA-RW-14-G-S-20180110	18-01-0691-51-A	01/10/18 16:00	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-1014-G-S-20180110	18-01-0691-54-A	01/10/18 00:00	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00142	0.000500	0.000113	1.00	

Method Blank	099-15-224-211	N/A	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: Filtered
 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180110	18-01-0691-3-B	01/10/18 14:10	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

CM-RW-10-G-S-20180110	18-01-0691-7-B	01/10/18 15:15	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

CB-RW-11-G-S-20180110	18-01-0691-10-B	01/10/18 15:45	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

IB-RW-12-G-S-20180110	18-01-0691-13-B	01/10/18 09:50	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

CS-RW-01-G-S-20180110	18-01-0691-16-B	01/10/18 10:55	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000875	0.000500	0.000113	1.00	

IA-RW-02-G-S-20180110	18-01-0691-19-B	01/10/18 11:30	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000666	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
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Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: Filtered
Method: EPA 1631E
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20180110	18-01-0691-22-B	01/10/18 12:26	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000774	0.000500	0.000113	1.00	

IA-RW-04-G-S-20180110	18-01-0691-25-B	01/10/18 13:10	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000520	0.000500	0.000113	1.00	

IA-RW-05-G-S-20180110	18-01-0691-28-B	01/10/18 14:35	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

IA-RW-06-G-S-20180110	18-01-0691-31-B	01/10/18 13:40	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

OA-RW-08-G-S-20180110	18-01-0691-32-B	01/10/18 10:15	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000267	0.000500	0.000113	1.00	J

OA-RW-09-G-S-20180110	18-01-0691-35-B	01/10/18 09:35	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.000500	0.000113	1.00	

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

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 Method: EPA 1631E
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20180110	18-01-0691-38-B	01/10/18 11:40	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

SP-RW-18-G-S-20180110	18-01-0691-41-B	01/10/18 12:30	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

LE-RW-21-G-S-20180110	18-01-0691-44-B	01/10/18 13:05	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000933	0.000500	0.000113	1.00	

LE-RW-22-G-S-20180110	18-01-0691-47-B	01/10/18 13:40	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.000193	0.000500	0.000113	1.00	J

IA-RW-13-G-S-20180110	18-01-0691-48-B	01/10/18 15:20	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

IA-RW-14-G-S-20180110	18-01-0691-51-B	01/10/18 16:00	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: Filtered
Method: EPA 1631E
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-1014-G-S-20180110	18-01-0691-54-B	01/10/18 00:00	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	

Method Blank	099-15-226-145	N/A	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.000500	0.000113	1.00	


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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180110	18-01-0691-3-C	01/10/18 14:10	Aqueous	ICP/MS 06	01/12/18	01/18/18 00:04	180112L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0720	0.0300	0.00567	1.00	
Chromium	0.449	0.500	0.164	1.00	J
Copper	6.98	0.0300	0.00898	1.00	
Lead	0.298	0.0300	0.0135	1.00	
Zinc	18.8	0.500	0.176	1.00	

CM-RW-10-G-S-20180110	18-01-0691-7-C	01/10/18 15:15	Aqueous	ICP/MS 06	01/17/18	01/18/18 00:12	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0608	0.0300	0.00567	1.00	
Chromium	0.677	0.500	0.164	1.00	
Copper	3.41	0.0300	0.00898	1.00	
Lead	0.348	0.0300	0.0135	1.00	B
Zinc	10.9	0.500	0.176	1.00	

CB-RW-11-G-S-20180110	18-01-0691-10-C	01/10/18 15:45	Aqueous	ICP/MS 06	01/17/18	01/18/18 01:16	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0662	0.0300	0.00567	1.00	
Chromium	0.456	0.500	0.164	1.00	J
Copper	3.46	0.0300	0.00898	1.00	
Lead	0.236	0.0300	0.0135	1.00	B
Zinc	12.0	0.500	0.176	1.00	

IB-RW-12-G-S-20180110	18-01-0691-13-C	01/10/18 09:50	Aqueous	ICP/MS 06	01/17/18	01/18/18 01:24	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0857	0.0300	0.00567	1.00	
Chromium	0.662	0.500	0.164	1.00	
Lead	0.397	0.0300	0.0135	1.00	B
Zinc	86.7	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20180110	18-01-0691-13-C	01/10/18 09:50	Aqueous	ICP/MS 06	01/17/18	01/19/18 22:35	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Copper	40.7	0.300	0.0898	10.0	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180110	18-01-0691-16-C	01/10/18 10:55	Aqueous	ICP/MS 06	01/17/18	01/18/18 01:32	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.127	0.0300	0.00567	1.00	
Chromium	2.08	0.500	0.164	1.00	
Copper	17.9	0.0300	0.00898	1.00	
Lead	4.40	0.0300	0.0135	1.00	B
Zinc	75.0	0.500	0.176	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-02-G-S-20180110	18-01-0691-19-C	01/10/18 11:30	Aqueous	ICP/MS 06	01/17/18	01/18/18 01:40	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.113	0.0300	0.00567	1.00	
Chromium	0.985	0.500	0.164	1.00	
Copper	9.53	0.0300	0.00898	1.00	
Lead	1.73	0.0300	0.0135	1.00	B
Zinc	44.4	0.500	0.176	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20180110	18-01-0691-22-C	01/10/18 12:26	Aqueous	ICP/MS 06	01/17/18	01/18/18 01:48	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.121	0.0300	0.00567	1.00	
Chromium	0.586	0.500	0.164	1.00	
Copper	6.32	0.0300	0.00898	1.00	
Lead	0.552	0.0300	0.0135	1.00	B
Zinc	30.3	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20180110	18-01-0691-25-C	01/10/18 13:10	Aqueous	ICP/MS 06	01/17/18	01/18/18 01:56	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.113	0.0300	0.00567	1.00	
Chromium	0.980	0.500	0.164	1.00	
Copper	11.2	0.0300	0.00898	1.00	
Lead	1.39	0.0300	0.0135	1.00	B
Zinc	39.4	0.500	0.176	1.00	

IA-RW-05-G-S-20180110	18-01-0691-28-C	01/10/18 14:35	Aqueous	ICP/MS 06	01/17/18	01/18/18 02:04	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0480	0.0300	0.00567	1.00	
Chromium	0.452	0.500	0.164	1.00	J
Copper	1.98	0.0300	0.00898	1.00	
Lead	0.214	0.0300	0.0135	1.00	B
Zinc	5.94	0.500	0.176	1.00	

IA-RW-06-G-S-20180110	18-01-0691-31-C	01/10/18 13:40	Aqueous	ICP/MS 06	01/17/18	01/18/18 02:12	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0893	0.0300	0.00567	1.00	
Chromium	0.553	0.500	0.164	1.00	
Copper	4.93	0.0300	0.00898	1.00	
Lead	0.387	0.0300	0.0135	1.00	B
Zinc	21.7	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-S-20180110	18-01-0691-32-C	01/10/18 10:15	Aqueous	ICP/MS 06	01/17/18	01/18/18 02:19	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0670	0.0300	0.00567	1.00	
Chromium	0.673	0.500	0.164	1.00	
Copper	2.38	0.0300	0.00898	1.00	
Lead	0.793	0.0300	0.0135	1.00	B
Zinc	10.6	0.500	0.176	1.00	

OA-RW-09-G-S-20180110	18-01-0691-35-C	01/10/18 09:35	Aqueous	ICP/MS 06	01/17/18	01/18/18 02:59	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0556	0.0300	0.00567	1.00	
Chromium	0.441	0.500	0.164	1.00	J
Copper	1.77	0.0300	0.00898	1.00	
Lead	0.337	0.0300	0.0135	1.00	B
Zinc	9.90	0.500	0.176	1.00	

OB-RW-16-G-S-20180110	18-01-0691-38-C	01/10/18 11:40	Aqueous	ICP/MS 06	01/17/18	01/18/18 03:07	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0647	0.0300	0.00567	1.00	
Chromium	0.583	0.500	0.164	1.00	
Copper	2.14	0.0300	0.00898	1.00	
Lead	0.607	0.0300	0.0135	1.00	B
Zinc	11.0	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180110	18-01-0691-41-C	01/10/18 12:30	Aqueous	ICP/MS 06	01/17/18	01/18/18 03:15	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0692	0.0300	0.00567	1.00	
Chromium	0.716	0.500	0.164	1.00	
Copper	3.37	0.0300	0.00898	1.00	
Lead	0.939	0.0300	0.0135	1.00	B
Zinc	15.3	0.500	0.176	1.00	

LE-RW-21-G-S-20180110	18-01-0691-44-C	01/10/18 13:05	Aqueous	ICP/MS 06	01/17/18	01/18/18 03:23	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.126	0.0300	0.00567	1.00	
Chromium	1.39	0.500	0.164	1.00	
Copper	6.13	0.0300	0.00898	1.00	
Lead	2.08	0.0300	0.0135	1.00	B
Zinc	22.7	0.500	0.176	1.00	

FB-20180110	18-01-0691-45-C	01/10/18 14:00	Aqueous	ICP/MS 06	01/17/18	01/18/18 03:31	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	5.90	0.0300	0.00898	1.00	
Lead	0.0194	0.0300	0.0135	1.00	B,J
Zinc	0.516	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20180110	18-01-0691-47-C	01/10/18 13:40	Aqueous	ICP/MS 06	01/17/18	01/18/18 03:39	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.176	0.0300	0.00567	1.00	
Chromium	2.42	0.500	0.164	1.00	
Copper	9.65	0.0300	0.00898	1.00	
Lead	3.97	0.0300	0.0135	1.00	B
Zinc	26.6	0.500	0.176	1.00	

IA-RW-13-G-S-20180110	18-01-0691-48-C	01/10/18 15:20	Aqueous	ICP/MS 06	01/17/18	01/18/18 03:47	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0623	0.0300	0.00567	1.00	
Chromium	0.581	0.500	0.164	1.00	
Copper	2.57	0.0300	0.00898	1.00	
Lead	0.388	0.0300	0.0135	1.00	B
Zinc	12.8	0.500	0.176	1.00	

IA-RW-14-G-S-20180110	18-01-0691-51-C	01/10/18 16:00	Aqueous	ICP/MS 06	01/17/18	01/18/18 03:55	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0457	0.0300	0.00567	1.00	
Chromium	0.398	0.500	0.164	1.00	J
Copper	1.42	0.0300	0.00898	1.00	
Lead	0.146	0.0300	0.0135	1.00	B
Zinc	8.05	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-1014-G-S-20180110	18-01-0691-54-C	01/10/18 00:00	Aqueous	ICP/MS 06	01/17/18	01/18/18 04:03	180117L02

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0475	0.0300	0.00567	1.00	
Chromium	0.401	0.500	0.164	1.00	J
Copper	1.50	0.0300	0.00898	1.00	
Lead	0.155	0.0300	0.0135	1.00	B
Zinc	7.46	0.500	0.176	1.00	

Method Blank	099-13-067-757	N/A	Aqueous	ICP/MS 06	01/12/18	01/12/18 17:12	180112L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	ND	0.500	0.176	1.00	

Method Blank	099-13-067-758	N/A	Aqueous	ICP/MS 06	01/17/18	01/23/18 16:44	180117L02
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	0.0144	0.0300	0.0135	1.00	J
Zinc	ND	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180110	18-01-0691-3-D	01/10/18 14:10	Aqueous	ICP/MS 06	01/17/18	01/19/18 18:44	180117L01F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0657	0.0300	0.00567	1.00	
Chromium	0.522	0.500	0.164	1.00	
Copper	5.83	0.0300	0.00898	1.00	
Lead	0.148	0.0300	0.0135	1.00	
Zinc	18.3	0.500	0.0736	1.00	B

CM-RW-10-G-S-20180110	18-01-0691-7-D	01/10/18 15:15	Aqueous	ICP/MS 06	01/17/18	01/19/18 18:52	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0648	0.0300	0.00567	1.00	
Chromium	0.496	0.500	0.164	1.00	J
Copper	2.43	0.0300	0.00898	1.00	
Lead	0.170	0.0300	0.0135	1.00	
Zinc	10.8	0.500	0.0736	1.00	B

CB-RW-11-G-S-20180110	18-01-0691-10-D	01/10/18 15:45	Aqueous	ICP/MS 06	01/17/18	01/23/18 18:28	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0633	0.0300	0.00567	1.00	
Chromium	0.561	0.500	0.164	1.00	
Copper	6.74	0.0300	0.00898	1.00	
Lead	0.194	0.0300	0.0135	1.00	
Zinc	10.7	0.500	0.0736	1.00	B

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20180110	18-01-0691-13-D	01/10/18 09:50	Aqueous	ICP/MS 06	01/17/18	01/23/18 18:36	180117L01F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0814	0.0300	0.00567	1.00	
Chromium	0.505	0.500	0.164	1.00	
Copper	10.7	0.0300	0.00898	1.00	
Lead	0.201	0.0300	0.0135	1.00	
Zinc	54.4	0.500	0.0736	1.00	B

CS-RW-01-G-S-20180110	18-01-0691-16-O	01/10/18 10:55	Aqueous	ICP/MS 06	01/17/18	01/19/18 19:31	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.113	0.0300	0.00567	1.00	
Chromium	1.27	0.500	0.164	1.00	
Copper	12.2	0.0300	0.00898	1.00	
Lead	1.54	0.0300	0.0135	1.00	
Zinc	63.2	0.500	0.0736	1.00	B

IA-RW-02-G-S-20180110	18-01-0691-19-D	01/10/18 11:30	Aqueous	ICP/MS 06	01/17/18	01/23/18 18:43	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.106	0.0300	0.00567	1.00	
Chromium	0.718	0.500	0.164	1.00	
Copper	7.29	0.0300	0.00898	1.00	
Lead	0.485	0.0300	0.0135	1.00	
Zinc	42.0	0.500	0.0736	1.00	B

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Filt.
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20180110	18-01-0691-22-D	01/10/18 12:26	Aqueous	ICP/MS 06	01/17/18	01/23/18 18:51	180117L01F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.119	0.0300	0.00567	1.00	
Chromium	0.578	0.500	0.164	1.00	
Copper	5.76	0.0300	0.00898	1.00	
Lead	0.319	0.0300	0.0135	1.00	
Zinc	32.0	0.500	0.0736	1.00	B

IA-RW-04-G-S-20180110	18-01-0691-25-D	01/10/18 13:10	Aqueous	ICP/MS 06	01/17/18	01/19/18 20:27	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.105	0.0300	0.00567	1.00	
Chromium	0.681	0.500	0.164	1.00	
Copper	7.11	0.0300	0.00898	1.00	
Lead	0.372	0.0300	0.0135	1.00	
Zinc	36.9	0.500	0.0736	1.00	B

IA-RW-05-G-S-20180110	18-01-0691-28-D	01/10/18 14:35	Aqueous	ICP/MS 06	01/17/18	01/19/18 20:35	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0456	0.0300	0.00567	1.00	
Chromium	0.493	0.500	0.164	1.00	J
Copper	1.56	0.0300	0.00898	1.00	
Lead	0.118	0.0300	0.0135	1.00	
Zinc	5.43	0.500	0.0736	1.00	B

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20180110	18-01-0691-31-D	01/10/18 13:40	Aqueous	ICP/MS 06	01/17/18	01/19/18 20:43	180117L01F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0868	0.0300	0.00567	1.00	
Chromium	0.561	0.500	0.164	1.00	
Copper	4.42	0.0300	0.00898	1.00	
Lead	0.189	0.0300	0.0135	1.00	
Zinc	21.6	0.500	0.0736	1.00	B

OA-RW-08-G-S-20180110	18-01-0691-32-D	01/10/18 10:15	Aqueous	ICP/MS 06	01/17/18	01/19/18 20:51	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0618	0.0300	0.00567	1.00	
Chromium	0.602	0.500	0.164	1.00	
Copper	1.60	0.0300	0.00898	1.00	
Lead	0.270	0.0300	0.0135	1.00	
Zinc	9.30	0.500	0.0736	1.00	B

OA-RW-09-G-S-20180110	18-01-0691-35-D	01/10/18 09:35	Aqueous	ICP/MS 06	01/17/18	01/19/18 20:59	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0497	0.0300	0.00567	1.00	
Chromium	0.561	0.500	0.164	1.00	
Copper	1.48	0.0300	0.00898	1.00	
Lead	0.194	0.0300	0.0135	1.00	
Zinc	8.70	0.500	0.0736	1.00	B

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20180110	18-01-0691-38-D	01/10/18 11:40	Aqueous	ICP/MS 06	01/17/18	01/19/18 21:07	180117L01F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0600	0.0300	0.00567	1.00	
Chromium	0.604	0.500	0.164	1.00	
Copper	1.76	0.0300	0.00898	1.00	
Lead	0.300	0.0300	0.0135	1.00	
Zinc	10.0	0.500	0.0736	1.00	B

SP-RW-18-G-S-20180110	18-01-0691-41-D	01/10/18 12:30	Aqueous	ICP/MS 06	01/17/18	01/19/18 21:15	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0973	0.0300	0.00567	1.00	
Chromium	0.734	0.500	0.164	1.00	
Copper	3.41	0.0300	0.00898	1.00	
Lead	0.402	0.0300	0.0135	1.00	
Zinc	16.0	0.500	0.0736	1.00	B

LE-RW-21-G-S-20180110	18-01-0691-44-D	01/10/18 13:05	Aqueous	ICP/MS 06	01/17/18	01/19/18 21:23	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.107	0.0300	0.00567	1.00	
Chromium	0.692	0.500	0.164	1.00	
Copper	2.62	0.0300	0.00898	1.00	
Lead	0.301	0.0300	0.0135	1.00	
Zinc	17.2	0.500	0.0736	1.00	B

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FB-20180110	18-01-0691-45-D	01/10/18 14:00	Aqueous	ICP/MS 06	01/17/18	01/19/18 21:31	180117L01F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	5.71	0.0300	0.00898	1.00	
Lead	0.0229	0.0300	0.0135	1.00	J
Zinc	0.150	0.500	0.0736	1.00	B,J

LE-RW-22-G-S-20180110	18-01-0691-47-D	01/10/18 13:40	Aqueous	ICP/MS 06	01/17/18	01/17/18 23:32	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.140	0.0300	0.00567	1.00	
Chromium	0.682	0.500	0.164	1.00	
Copper	3.68	0.0300	0.00898	1.00	
Lead	0.569	0.0300	0.0135	1.00	
Zinc	14.5	0.500	0.0736	1.00	B

IA-RW-13-G-S-20180110	18-01-0691-48-D	01/10/18 15:20	Aqueous	ICP/MS 06	01/17/18	01/17/18 23:40	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0604	0.0300	0.00567	1.00	
Chromium	0.353	0.500	0.164	1.00	J
Copper	1.90	0.0300	0.00898	1.00	
Lead	0.184	0.0300	0.0135	1.00	
Zinc	11.0	0.500	0.0736	1.00	B

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-14-G-S-20180110	18-01-0691-51-D	01/10/18 16:00	Aqueous	ICP/MS 06	01/17/18	01/17/18 23:48	180117L01F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0454	0.0300	0.00567	1.00	
Chromium	0.355	0.500	0.164	1.00	J
Copper	1.20	0.0300	0.00898	1.00	
Lead	0.111	0.0300	0.0135	1.00	
Zinc	6.74	0.500	0.0736	1.00	B

IA-RW-1014-G-S-20180110	18-01-0691-54-D	01/10/18 00:00	Aqueous	ICP/MS 06	01/17/18	01/17/18 23:56	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0459	0.0300	0.00567	1.00	
Chromium	0.341	0.500	0.164	1.00	J
Copper	1.27	0.0300	0.00898	1.00	
Lead	0.106	0.0300	0.0135	1.00	
Zinc	6.51	0.500	0.0736	1.00	B

Method Blank	099-15-823-303	N/A	Aqueous	ICP/MS 06	01/17/18	01/23/18 16:36	180117L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	ND	0.0300	0.0135	1.00	
Zinc	0.178	0.500	0.0736	1.00	J

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180110	18-01-0691-3-EF	01/10/18 14:10	Aqueous	GC 44	01/15/18	01/19/18 15:22	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	75	50-150	
2,4,5,6-Tetrachloro-m-Xylene	57	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20180110	18-01-0691-7-EF	01/10/18 15:15	Aqueous	GC 44	01/15/18	01/19/18 15:36	180115L01

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	68	50-150			
2,4,5,6-Tetrachloro-m-Xylene	51	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-RW-11-G-S-20180110	18-01-0691-10-EF	01/10/18 15:45	Aqueous	GC 44	01/15/18	01/23/18 09:35	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	73	50-150	
2,4,5,6-Tetrachloro-m-Xylene	50	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20180110	18-01-0691-13-EF	01/10/18 09:50	Aqueous	GC 44	01/15/18	01/23/18 09:49	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	76	50-150			
2,4,5,6-Tetrachloro-m-Xylene	51	50-150			

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180110	18-01-0691-16-EF	01/10/18 10:55	Aqueous	GC 44	01/15/18	01/23/18 10:04	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	8.6	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	87	50-150	
2,4,5,6-Tetrachloro-m-Xylene	61	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-02-G-S-20180110	18-01-0691-19-EF	01/10/18 11:30	Aqueous	GC 44	01/15/18	01/23/18 10:18	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	66	50-150	
2,4,5,6-Tetrachloro-m-Xylene	51	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20180110	18-01-0691-22-EF	01/10/18 12:26	Aqueous	GC 44	01/15/18	01/23/18 10:32	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	50-150	
2,4,5,6-Tetrachloro-m-Xylene	56	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20180110	18-01-0691-25-EF	01/10/18 13:10	Aqueous	GC 44	01/15/18	01/23/18 10:46	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	50-150	
2,4,5,6-Tetrachloro-m-Xylene	71	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-05-G-S-20180110	18-01-0691-28-EF	01/10/18 14:35	Aqueous	GC 44	01/15/18	01/23/18 11:00	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	72	50-150	
2,4,5,6-Tetrachloro-m-Xylene	64	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20180110	18-01-0691-31-EF	01/10/18 13:40	Aqueous	GC 44	01/15/18	01/23/18 11:15	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	60	50-150	
2,4,5,6-Tetrachloro-m-Xylene	56	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-S-20180110	18-01-0691-32-EF	01/10/18 10:15	Aqueous	GC 44	01/15/18	01/23/18 11:29	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	64	50-150			
2,4,5,6-Tetrachloro-m-Xylene	59	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-S-20180110	18-01-0691-35-EF	01/10/18 09:35	Aqueous	GC 44	01/15/18	01/23/18 11:43	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	73	50-150			
2,4,5,6-Tetrachloro-m-Xylene	59	50-150			

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20180110	18-01-0691-38-EF	01/10/18 11:40	Aqueous	GC 44	01/15/18	01/23/18 12:38	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	0.75	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	50-150	
2,4,5,6-Tetrachloro-m-Xylene	62	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180110	18-01-0691-41-EF	01/10/18 12:30	Aqueous	GC 44	01/15/18	01/23/18 12:53	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	68	50-150	
2,4,5,6-Tetrachloro-m-Xylene	61	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-21-G-S-20180110	18-01-0691-44-EF	01/10/18 13:05	Aqueous	GC 44	01/15/18	01/23/18 13:08	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	1.1	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	50-150	
2,4,5,6-Tetrachloro-m-Xylene	65	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20180110	18-01-0691-47-EF	01/10/18 13:40	Aqueous	GC 44	01/15/18	01/23/18 13:22	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	2.6	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	77	50-150	
2,4,5,6-Tetrachloro-m-Xylene	66	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-13-G-S-20180110	18-01-0691-48-EF	01/10/18 15:20	Aqueous	GC 44	01/15/18	01/23/18 13:36	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	2.7	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	83	50-150	
2,4,5,6-Tetrachloro-m-Xylene	75	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-14-G-S-20180110	18-01-0691-51-EF	01/10/18 16:00	Aqueous	GC 44	01/15/18	01/23/18 13:50	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	74	50-150	
2,4,5,6-Tetrachloro-m-Xylene	70	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-1014-G-S-20180110	18-01-0691-54-EF	01/10/18 00:00	Aqueous	GC 44	01/15/18	01/23/18 14:04	180115L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	76	50-150	
2,4,5,6-Tetrachloro-m-Xylene	74	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-704-19	N/A	Aqueous	GC 44	01/15/18	01/19/18 14:11	180115L01

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Decachlorobiphenyl	59	50-150	
2,4,5,6-Tetrachloro-m-Xylene	60	50-150	

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180110	18-01-0691-3-G	01/10/18 14:10	Aqueous	GC/MS HHH	01/15/18	01/18/18 12:35	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	82	50-150			
p-Terphenyl-d14	82	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20180110	18-01-0691-7-G	01/10/18 15:15	Aqueous	GC/MS HHH	01/15/18	01/18/18 12:59	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00071	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	102	50-150			
p-Terphenyl-d14	110	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-RW-11-G-S-20180110	18-01-0691-10-G	01/10/18 15:45	Aqueous	GC/MS HHH	01/15/18	01/18/18 13:23	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306	Date Received: 01/10/18 Work Order: 18-01-0691 Preparation: EPA 3510C Method: EPA 8270C SIM PCB Congeners Units: ug/L
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Project: GWMA - TMDL Compliance Monitoring Page 6 of 40

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00071	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	108	50-150			
p-Terphenyl-d14	106	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20180110	18-01-0691-13-G	01/10/18 09:50	Aqueous	GC/MS HHH	01/15/18	01/19/18 03:52	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00071	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	86	50-150			
p-Terphenyl-d14	79	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180110	18-01-0691-16-I	01/10/18 10:55	Aqueous	GC/MS HHH	01/15/18	01/18/18 14:11	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00071	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	103	50-150			
p-Terphenyl-d14	105	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-02-G-S-20180110	18-01-0691-19-G	01/10/18 11:30	Aqueous	GC/MS HHH	01/15/18	01/18/18 14:35	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	105	50-150			
p-Terphenyl-d14	100	50-150			

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20180110	18-01-0691-22-G	01/10/18 12:26	Aqueous	GC/MS HHH	01/15/18	01/18/18 14:58	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	115	50-150			
p-Terphenyl-d14	117	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20180110	18-01-0691-25-G	01/10/18 13:10	Aqueous	GC/MS HHH	01/15/18	01/18/18 15:22	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	105	50-150			
p-Terphenyl-d14	110	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-05-G-S-20180110	18-01-0691-28-G	01/10/18 14:35	Aqueous	GC/MS HHH	01/15/18	01/18/18 15:46	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00047	1.00	
PCB028	ND	0.0020	0.00054	1.00	
PCB037	ND	0.0020	0.00031	1.00	
PCB044	ND	0.0020	0.00073	1.00	
PCB049	ND	0.0020	0.00054	1.00	
PCB052	ND	0.0020	0.00057	1.00	
PCB066	ND	0.0020	0.00041	1.00	
PCB070	ND	0.0020	0.00042	1.00	
PCB074	ND	0.0020	0.00050	1.00	
PCB077	ND	0.0020	0.00063	1.00	
PCB081	ND	0.0020	0.00049	1.00	
PCB087	ND	0.0020	0.00072	1.00	
PCB099	ND	0.0020	0.00062	1.00	
PCB101	ND	0.0020	0.00051	1.00	
PCB105	ND	0.0020	0.00048	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00048	1.00	
PCB118	ND	0.0020	0.00051	1.00	
PCB119	ND	0.0020	0.00018	1.00	
PCB123	ND	0.0020	0.00085	1.00	
PCB126	ND	0.0020	0.00026	1.00	
PCB128	ND	0.0020	0.00044	1.00	
PCB132/153	ND	0.0041	0.00071	1.00	
PCB138/158	ND	0.0041	0.00061	1.00	
PCB149	ND	0.0020	0.00024	1.00	
PCB151	ND	0.0020	0.00041	1.00	
PCB156	ND	0.0020	0.00041	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00082	1.00	
PCB168	ND	0.0020	0.00053	1.00	
PCB169	ND	0.0020	0.00041	1.00	
PCB170	ND	0.0020	0.00043	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00061	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00053	1.00	
PCB187	ND	0.0020	0.00044	1.00	
PCB189	ND	0.0020	0.00050	1.00	
PCB194	ND	0.0020	0.00026	1.00	
PCB195	ND	0.0020	0.00076	1.00	
PCB201	ND	0.0020	0.00048	1.00	
PCB206	ND	0.0020	0.00044	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	104	50-150			
p-Terphenyl-d14	102	50-150			



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20180110	18-01-0691-31-G	01/10/18 13:40	Aqueous	GC/MS HHH	01/15/18	01/18/18 16:10	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	111	50-150			
p-Terphenyl-d14	112	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-S-20180110	18-01-0691-32-G	01/10/18 10:15	Aqueous	GC/MS HHH	01/15/18	01/18/18 16:34	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	83	50-150			
p-Terphenyl-d14	94	50-150			

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-S-20180110	18-01-0691-35-G	01/10/18 09:35	Aqueous	GC/MS HHH	01/15/18	01/18/18 18:04	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	115	50-150			
p-Terphenyl-d14	110	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20180110	18-01-0691-38-G	01/10/18 11:40	Aqueous	GC/MS HHH	01/15/18	01/18/18 18:28	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	109	50-150			
p-Terphenyl-d14	100	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180110	18-01-0691-41-G	01/10/18 12:30	Aqueous	GC/MS HHH	01/15/18	01/18/18 18:52	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	94	50-150			
p-Terphenyl-d14	92	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-21-G-S-20180110	18-01-0691-44-G	01/10/18 13:05	Aqueous	GC/MS HHH	01/15/18	01/18/18 19:16	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00045	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00069	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00054	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00069	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00033	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00081	1.00	
PCB126	ND	0.0019	0.00025	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0039	0.00067	1.00	
PCB138/158	ND	0.0039	0.00058	1.00	
PCB149	ND	0.0019	0.00023	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00051	1.00	
PCB187	ND	0.0019	0.00042	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00073	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00042	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	101	50-150			
p-Terphenyl-d14	99	50-150			



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20180110	18-01-0691-47-G	01/10/18 13:40	Aqueous	GC/MS HHH	01/15/18	01/18/18 19:39	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	95	50-150			
p-Terphenyl-d14	90	50-150			

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-13-G-S-20180110	18-01-0691-48-G	01/10/18 15:20	Aqueous	GC/MS HHH	01/15/18	01/18/18 20:03	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	117	50-150			
p-Terphenyl-d14	107	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-14-G-S-20180110	18-01-0691-51-G	01/10/18 16:00	Aqueous	GC/MS HHH	01/15/18	01/18/18 20:27	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	107	50-150			
p-Terphenyl-d14	100	50-150			



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-1014-G-S-20180110	18-01-0691-54-G	01/10/18 00:00	Aqueous	GC/MS HHH	01/15/18	01/18/18 20:51	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB195	ND	0.0019	0.00072	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	103	50-150			
p-Terphenyl-d14	99	50-150			



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-414-117	N/A	Aqueous	GC/MS HHH	01/15/18	01/18/18 10:34	180115L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 01/10/18
 Work Order: 18-01-0691
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB195	ND	0.0020	0.00075	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	105	50-150			
p-Terphenyl-d14	107	50-150			



 Return to Contents

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



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CS-RW-01-G-S-20180110	Sample	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112S01
CS-RW-01-G-S-20180110	Matrix Spike	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112S01
CS-RW-01-G-S-20180110	Matrix Spike Duplicate	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.001753	0.02000	0.01691	76	0.01700	76	71-125	1	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IA-RW-1014-G-S-20180110	Sample	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112S01A
IA-RW-1014-G-S-20180110	Matrix Spike	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112S01A
IA-RW-1014-G-S-20180110	Matrix Spike Duplicate	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112S01A

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.001424	0.02000	0.02213	104	0.01948	90	71-125	13	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
CS-RW-01-G-S-20180110	Sample	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116S02				
CS-RW-01-G-S-20180110	Matrix Spike	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116S02				
CS-RW-01-G-S-20180110	Matrix Spike Duplicate	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116S02				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.0008747	0.02000	0.01749	83	0.01755	83	71-125	0	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IA-RW-1014-G-S-20180110	Sample	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116S02A
IA-RW-1014-G-S-20180110	Matrix Spike	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116S02A
IA-RW-1014-G-S-20180110	Matrix Spike Duplicate	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116S02A

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.02000	0.02150	107	0.02147	107	71-125	0	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-01-0794-1	Sample	Aqueous	ICP/MS 06	01/17/18	01/18/18 00:20	180117S02
18-01-0794-1	Matrix Spike	Aqueous	ICP/MS 06	01/17/18	01/18/18 00:28	180117S02
18-01-0794-1	Matrix Spike Duplicate	Aqueous	ICP/MS 06	01/17/18	01/18/18 00:36	180117S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.03636	0.5000	0.5602	105	0.5616	105	50-150	0	0-20	
Chromium	ND	5.000	6.585	132	6.564	131	50-150	0	0-20	
Copper	0.3656	0.5000	0.9629	119	0.9764	122	50-150	1	0-20	
Lead	0.05753	0.5000	0.4803	85	0.4860	86	50-150	1	0-20	
Zinc	1.246	5.000	6.465	104	6.536	106	50-150	1	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-01-0421-6	Sample	Aqueous	ICP/MS 06	01/12/18	01/12/18 23:35	180112S02
18-01-0421-6	Matrix Spike	Aqueous	ICP/MS 06	01/12/18	01/12/18 23:43	180112S02
18-01-0421-6	Matrix Spike Duplicate	Aqueous	ICP/MS 06	01/12/18	01/12/18 23:51	180112S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.09354	0.5000	0.6136	104	0.6112	104	50-150	0	0-20	
Chromium	0.6256	5.000	5.925	106	5.683	101	50-150	4	0-20	
Copper	10.47	0.5000	11.02	4X	10.94	4X	50-150	4X	0-20	Q
Lead	0.4621	0.5000	1.012	110	1.098	127	50-150	8	0-20	
Zinc	33.90	5.000	39.51	4X	39.44	4X	50-150	4X	0-20	Q

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CS-RW-01-G-S-20180110	Sample	Aqueous	ICP/MS 06	01/17/18	01/19/18 19:31	180117S01
CS-RW-01-G-S-20180110	Matrix Spike	Aqueous	ICP/MS 06	01/17/18	01/19/18 19:39	180117S01
CS-RW-01-G-S-20180110	Matrix Spike Duplicate	Aqueous	ICP/MS 06	01/17/18	01/19/18 19:47	180117S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.1132	0.5000	0.6402	105	0.6685	111	50-150	4	0-20	
Chromium	1.269	5.000	7.676	128	7.315	121	50-150	5	0-20	
Copper	12.20	0.5000	11.50	4X	12.16	4X	50-150	4X	0-20	Q
Lead	1.537	0.5000	1.782	49	1.837	60	50-150	3	0-20	3
Zinc	63.19	5.000	68.39	4X	72.89	4X	50-150	4X	0-20	Q

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
CS-RW-01-G-S-20180110	Sample	Aqueous	GC 44	01/15/18	01/23/18 10:04	180115S01				
CS-RW-01-G-S-20180110	Matrix Spike	Aqueous	GC 44	01/15/18	01/19/18 14:54	180115S01				
CS-RW-01-G-S-20180110	Matrix Spike Duplicate	Aqueous	GC 44	01/15/18	01/19/18 15:08	180115S01				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	33.35	32.46	97	29.86	90	50-150	8	0-25	
4,4'-DDD	ND	33.35	52.04	156	47.61	143	50-150	9	0-25	3
4,4'-DDE	8.571	33.35	41.49	99	36.77	85	50-150	12	0-25	
4,4'-DDT	ND	33.35	49.27	148	43.43	130	50-150	13	0-25	
Alpha Chlordane	ND	33.35	37.45	112	34.74	104	50-150	8	0-25	
Dieldrin	ND	33.35	43.23	130	41.05	123	50-150	5	0-25	
Gamma Chlordane	ND	33.35	32.77	98	29.72	89	50-150	10	0-25	
Endrin	ND	33.35	40.29	121	36.44	109	50-150	10	0-25	
Gamma-BHC	ND	33.35	38.18	114	32.43	97	50-150	16	0-25	
Heptachlor	ND	33.35	40.37	121	35.82	107	50-150	12	0-25	
Heptachlor Epoxide	ND	33.35	35.66	107	31.40	94	50-150	13	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CS-RW-01-G-S-20180110	Sample	Aqueous	GC/MS HHH	01/15/18	01/18/18 14:11	180115S07
CS-RW-01-G-S-20180110	Matrix Spike	Aqueous	GC/MS HHH	01/15/18	01/18/18 11:46	180115S07
CS-RW-01-G-S-20180110	Matrix Spike Duplicate	Aqueous	GC/MS HHH	01/15/18	01/18/18 12:10	180115S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB018	ND	0.5000	0.3787	76	0.3148	63	50-150	18	0-25	
PCB028	ND	0.5000	0.4330	87	0.3554	71	50-150	20	0-25	
PCB044	ND	0.5000	0.3890	78	0.3220	64	50-150	19	0-25	
PCB052	ND	0.5000	0.3844	77	0.3111	62	50-150	21	0-25	
PCB066	ND	0.5000	0.4752	95	0.3884	78	50-150	20	0-25	
PCB077	ND	0.5000	0.4205	84	0.3469	69	50-150	19	0-25	
PCB101	ND	0.5000	0.4006	80	0.3286	66	50-150	20	0-25	
PCB105	ND	0.5000	0.4351	87	0.3559	71	50-150	20	0-25	
PCB118	ND	0.5000	0.4338	87	0.3494	70	50-150	22	0-25	
PCB126	ND	0.5000	0.4153	83	0.3376	68	50-150	21	0-25	
PCB128	ND	0.5000	0.3996	80	0.3228	65	50-150	21	0-25	
PCB170	ND	0.5000	0.4172	83	0.3477	70	50-150	18	0-25	
PCB180	ND	0.5000	0.4418	88	0.3624	72	50-150	20	0-25	
PCB187	ND	0.5000	0.4324	86	0.3544	71	50-150	20	0-25	
PCB195	ND	0.5000	0.3641	73	0.3024	60	50-150	19	0-25	
PCB206	ND	0.5000	0.4167	83	0.3454	69	50-150	19	0-25	
PCB209	ND	0.5000	0.3361	67	0.2803	56	50-150	18	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	01/10/18
27201 Puerta Real, Suite 350	Work Order:	18-01-0691
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
CM-RW-10-G-B-20180110	Sample	Aqueous	N/A	01/15/18 00:00	01/15/18 15:00	I0115TSSD3
CM-RW-10-G-B-20180110	Sample Duplicate	Aqueous	N/A	01/15/18 00:00	01/15/18 15:00	I0115TSSD3

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	20.40	20.20	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	01/10/18
27201 Puerta Real, Suite 350	Work Order:	18-01-0691
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
CS-RW-01-G-S-20180110	Sample	Aqueous	N/A	01/15/18 00:00	01/15/18 15:00	I0115TSSD4
CS-RW-01-G-S-20180110	Sample Duplicate	Aqueous	N/A	01/15/18 00:00	01/15/18 15:00	I0115TSSD4

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	18.40	19.20	4	0-20	



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Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	01/10/18
27201 Puerta Real, Suite 350	Work Order:	18-01-0691
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
IA-RW-06-G-S-20180110	Sample	Aqueous	N/A	01/15/18 00:00	01/15/18 17:00	I0115TSSD5
IA-RW-06-G-S-20180110	Sample Duplicate	Aqueous	N/A	01/15/18 00:00	01/15/18 17:00	I0115TSSD5
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		2.500	2.600	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	01/10/18
27201 Puerta Real, Suite 350	Work Order:	18-01-0691
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
OA-RW-08-G-B-20180110	Sample	Aqueous	N/A	01/15/18 00:00	01/15/18 17:00	I0115TSSD6
OA-RW-08-G-B-20180110	Sample Duplicate	Aqueous	N/A	01/15/18 00:00	01/15/18 17:00	I0115TSSD6

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	1.400	1.400	0	0-20	



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Quality Control - Sample Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-01-1005-4	Sample	Aqueous	N/A	01/15/18 00:00	01/15/18 22:00	I0115TSSD7
18-01-1005-4	Sample Duplicate	Aqueous	N/A	01/15/18 00:00	01/15/18 22:00	I0115TSSD7

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	3350	3470	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Sample Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-01-1029-1	Sample	Aqueous	N/A	01/15/18 00:00	01/15/18 22:00	I0115TSSD8
18-01-1029-1	Sample Duplicate	Aqueous	N/A	01/15/18 00:00	01/15/18 22:00	I0115TSSD8

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	182.5	191.5	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - Sample Duplicate

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 01/10/18 Work Order: 18-01-0691 Preparation: N/A Method: SM 2540 D Page 7 of 7
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-01-0849-2	Sample	Aqueous	N/A	01/17/18 00:00	01/17/18 16:00	I0117TSSD2
18-01-0849-2	Sample Duplicate	Aqueous	N/A	01/17/18 00:00	01/17/18 16:00	I0117TSSD2
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		974.0	954.0	2	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8828	LCS	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2			
099-09-010-8828	LCSD	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	93.00	93	95.00	95	80-120	2	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8829	LCS	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2			
099-09-010-8829	LCSD	Aqueous	N/A	01/15/18	01/15/18 15:00	I0115TSSL2			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	93.00	93	95.00	95	80-120	2	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8830	LCS	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3			
099-09-010-8830	LCSD	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	92.00	92	93.00	93	80-120	1	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8831	LCS	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3			
099-09-010-8831	LCSD	Aqueous	N/A	01/15/18	01/15/18 17:00	I0115TSSL3			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	92.00	92	93.00	93	80-120	1	0-20	



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Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8832	LCS	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4			
099-09-010-8832	LCSD	Aqueous	N/A	01/15/18	01/15/18 22:00	I0115TSSL4			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	100.0	93.00	93	92.00	92	80-120	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8835	LCS	Aqueous	N/A	01/17/18	01/17/18 16:00	I0117TSSL1			
099-09-010-8835	LCSD	Aqueous	N/A	01/17/18	01/17/18 16:00	I0117TSSL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	87.00	87	85.00	85	80-120	2	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-224-211	LCS	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01			
099-15-224-211	LCSD	Aqueous	Hg/AF 1	01/12/18	01/23/18 00:00	180112L01			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02000	0.01643	82	0.01651	83	71-125	0	0-20	

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-226-145	LCS	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F			
099-15-226-145	LCSD	Aqueous	Hg/AF 1	01/16/18	01/16/18 00:00	180116L02F			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.02000	0.01905	95	0.01867	93	71-125	2	0-20	



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Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-067-757	LCS	Aqueous	ICP/MS 06	01/12/18	01/12/18 18:08	180112L02
099-13-067-757	LCSD	Aqueous	ICP/MS 06	01/12/18	01/12/18 18:16	180112L02

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5150	103	0.5115	102	70-130	1	0-20	
Chromium	5.000	5.117	102	5.059	101	70-130	1	0-20	
Copper	0.5000	0.5420	108	0.5337	107	70-130	2	0-20	
Lead	0.5000	0.5200	104	0.5044	101	70-130	3	0-20	
Zinc	5.000	5.307	106	5.156	103	70-130	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-13-067-758	LCS	Aqueous	ICP/MS 06	01/17/18	01/23/18 17:00	180117L02			
099-13-067-758	LCSD	Aqueous	ICP/MS 06	01/17/18	01/23/18 17:24	180117L02			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5236	105	0.5214	104	70-130	0	0-20	
Chromium	5.000	5.207	104	5.095	102	70-130	2	0-20	
Copper	0.5000	0.5630	113	0.5506	110	70-130	2	0-20	
Lead	0.5000	0.4592	92	0.4433	89	70-130	4	0-20	
Zinc	5.000	4.991	100	4.924	98	70-130	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-823-303	LCS	Aqueous	ICP/MS 06	01/17/18	01/23/18 17:56	180117L01F
099-15-823-303	LCSD	Aqueous	ICP/MS 06	01/17/18	01/23/18 18:04	180117L01F

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5327	107	0.5194	104	70-130	3	0-20	
Chromium	5.000	5.323	106	5.128	103	70-130	4	0-20	
Copper	0.5000	0.5946	119	0.5794	116	70-130	3	0-20	
Lead	0.5000	0.5216	104	0.4308	86	70-130	19	0-20	
Zinc	5.000	5.617	112	5.419	108	70-130	4	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

Page 12 of 13

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-704-19	LCS	Aqueous	GC 44	01/15/18	01/19/18 14:25	180115L01
099-16-704-19	LCSD	Aqueous	GC 44	01/15/18	01/19/18 14:39	180115L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	33.35	27.75	83	26.01	78	50-150	33-167	7	0-25	
4,4'-DDD	33.35	37.62	113	32.64	98	50-150	33-167	14	0-25	
4,4'-DDE	33.35	36.63	110	31.60	95	50-150	33-167	15	0-25	
4,4'-DDT	33.35	42.49	127	37.45	112	50-150	33-167	13	0-25	
Alpha Chlordane	33.35	34.17	102	30.13	90	50-150	33-167	13	0-25	
Dieldrin	33.35	39.37	118	35.34	106	50-150	33-167	11	0-25	
Gamma Chlordane	33.35	31.92	96	28.83	86	50-150	33-167	10	0-25	
Endrin	33.35	35.04	105	30.69	92	50-150	33-167	13	0-25	
Gamma-BHC	33.35	34.50	103	30.94	93	50-150	33-167	11	0-25	
Heptachlor	33.35	33.14	99	35.66	107	50-150	33-167	7	0-25	
Heptachlor Epoxide	33.35	32.07	96	32.67	98	50-150	33-167	2	0-25	

Total number of LCS compounds: 11

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 01/10/18
Work Order: 18-01-0691
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

Page 13 of 13

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-414-117	LCS	Aqueous	GC/MS HHH	01/15/18	01/18/18 10:58	180115L07
099-16-414-117	LCSD	Aqueous	GC/MS HHH	01/15/18	01/18/18 11:22	180115L07

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB018	0.5000	0.3678	74	0.4145	83	50-150	33-167	12	0-25	
PCB028	0.5000	0.4026	81	0.4523	90	50-150	33-167	12	0-25	
PCB044	0.5000	0.3761	75	0.4225	84	50-150	33-167	12	0-25	
PCB052	0.5000	0.3640	73	0.4038	81	50-150	33-167	10	0-25	
PCB066	0.5000	0.4557	91	0.5022	100	50-150	33-167	10	0-25	
PCB077	0.5000	0.4068	81	0.4541	91	50-150	33-167	11	0-25	
PCB101	0.5000	0.3864	77	0.4292	86	50-150	33-167	11	0-25	
PCB105	0.5000	0.4173	83	0.4597	92	50-150	33-167	10	0-25	
PCB118	0.5000	0.4076	82	0.4555	91	50-150	33-167	11	0-25	
PCB126	0.5000	0.3964	79	0.4317	86	50-150	33-167	9	0-25	
PCB128	0.5000	0.3812	76	0.4158	83	50-150	33-167	9	0-25	
PCB170	0.5000	0.3827	77	0.4285	86	50-150	33-167	11	0-25	
PCB180	0.5000	0.4180	84	0.4596	92	50-150	33-167	9	0-25	
PCB187	0.5000	0.4087	82	0.4542	91	50-150	33-167	11	0-25	
PCB195	0.5000	0.3405	68	0.3768	75	50-150	33-167	10	0-25	
PCB206	0.5000	0.3929	79	0.4304	86	50-150	33-167	9	0-25	
PCB209	0.5000	0.3111	62	0.3490	70	50-150	33-167	11	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Sample Analysis Summary Report

Work Order: 18-01-0691

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 1631E	Filtered	1080	Hg/AF 1	1
EPA 1631E	EPA 1631E Total	1080	Hg/AF 1	1
EPA 1640	EPA 3005A Total	110	ICP/MS 06	1
EPA 1640	EPA 3005A Filt.	110	ICP/MS 06	1
EPA 8081A	EPA 3510C	669	GC 44	1
EPA 8270C SIM PCB Congeners	EPA 3510C	907	GC/MS HHH	1
SM 2540 D	N/A	1009	N/A	1
SM 2540 D	N/A	1136	N/A	1


Glossary of Terms and Qualifiers

Work Order: 18-01-0691

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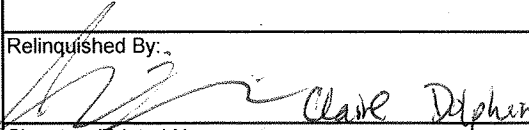
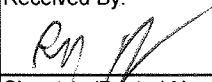
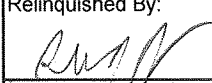

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: _____ Date: <u>1/10/2018</u> Project Name: GWMA-TMDL Compliance Monitoring Project Number: 141205-01.03 Project Manager: Andy Martin Phone Number: (949) 334-9630 Shipment Method: Courier Field Team: LA Harbor	<div style="text-align: right; font-size: 2em; font-weight: bold;">0691</div> <div style="text-align: right;">  </div>
--	---

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	TSS	Total and dissolved metals	Total and dissolved mercury	Organochlorine pesticides	PCB Congeners	MS/MSD										Comments/Preservation
1	CS-RW-01-G-S-20180110	1/10/2018 1055	Water	15	X	X	X	X	X	X										Chemistry MS/MSD
2	CS-RW-01-G-M-20180110	1/10/2018 1057	Water	1	X															
3	CS-RW-01-G-B-20180110	1/10/2018 1059	Water	1	X															
4	IA-RW-02-G-S-20180110	1/10/2018 1130	Water	8	X	X	X	X	X											
5	IA-RW-02-G-M-20180110	1/10/2018 1132	Water	1	X															
6	IA-RW-02-G-B-20180110	1/10/2018 1135	Water	1	X															
7	IA-RW-03-G-S-20180110	1/10/2018 1226	Water	8	X	X	X	X	X											
8	IA-RW-03-G-M-20180110	1/10/2018 1222	Water	1	X															
9	IA-RW-03-G-B-20180110	1/10/2018 1224	Water	1	X															
10	IA-RW-04-G-S-20180110	1/10/2018 1310	Water	8	X	X	X	X	X	X										
11	IA-RW-04-G-M-20180110	1/10/2018 1312	Water	1	X															
12	IA-RW-04-G-B-20180110	1/10/2018 1314	Water	1	X															
13	IA-RW-05-G-S-20180110	1/10/2018 1435	Water	8	X	X	X	X	X											
14	IA-RW-05-G-M-20180110	1/10/2018 1437	Water	1	X															
15	IA-RW-05-G-B-20180110	1/10/2018 1439	Water	1	X															
16	IA-RW-06-G-S-20180110	1/10/2018 1340	Water	9	X	X	X	X	X											Lab dup TSS

Notes: Please send lab report to amartin@anchorqea.com, cfields@anchorqea.com and labdata@anchorqea.com

Relinquished By:  Signature/Printed Name: <u>Claude Delphen</u> Company: <u>Anchor OEA</u> Date/Time: <u>1/10/18 1725</u>	Received By:  Signature/Printed Name: _____ Company: <u>ECI</u> Date/Time: <u>1/10/18 1725</u>
Relinquished By:  Signature/Printed Name: _____ Company: <u>ECI</u> Date/Time: <u>1/10/18 1845</u>	Received By:  Signature/Printed Name: _____ Company: <u>ECI</u> Date/Time: <u>1/10/18 1845</u>

Laboratory Number:

Date: 1/10/2018
Project Name: GWMA-TMDL Compliance Monitoring
Project Number: 141205-01.03
Project Manager: Andy Martin
Phone Number: (949) 334-9630
Shipment Method: Courier
Field Team: Outer Harbor

Test Parameters

0691

ANCHOR
QEA

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	TSS	Total and dissolved metals	Total and dissolved mercury	Organochlorine pesticides	PCB Congeners	MS/MSD	Comments/Preservation
1	OA-RW-08-G-S-20180110	1/10/2018 1025	Water	8	X	X	X	X	X		
2	OA-RW-08-G-M-20180110	1/10/2018 1030	Water	1	X						
3	OA-RW-08-G-B-20180110	1/10/2018 1035	Water	1	X						
4	OA-RW-09-G-S-20180110	1/10/2018 0935	Water	8	X	X	X	X	X		
5	OA-RW-09-G-M-20180110	1/10/2018 0940	Water	1	X						
6	OA-RW-09-G-B-20180110	1/10/2018 0945	Water	1	X						
7	OB-RW-12-G-S-20180110	1/10/2018 1140	Water	8	X	X	X	X	X		
8	OB-RW-12-G-M-20180110	1/10/2018 1145	Water	1	X						
9	OB-RW-12-G-B-20180110	1/10/2018 1150	Water	1	X						
10	SP-RW-12-G-S-20180110	1/10/2018 1230	Water	8	X	X	X	X	X		
11	SP-RW-12-G-M-20180110	1/10/2018 1235	Water	1	X						
12	SP-RW-12-G-B-20180110	1/10/2018 1240	Water	1	X						
13	SP-RW-20-G-S-20180110	1/10/2018 1305	Water	8	X	X	X	X	X		
14	SP-RW-20-G-M-20180110	1/10/2018	Water	1	X						
15	SP-RW-20-G-B-20180110	1/10/2018 1305	Water	8	X	X	X	X	X		
16	FB-20180110	1/10/2018 1400	Water	2		X					Field blank

Notes: Please send lab report to amartin@anchorqea.com, cfields@anchorqea.com and labdata@anchorqea.com

Relinquished By: Clare Dolphin
Signature/Printed Name

Company: Anchor QEA
Date/Time: 1/10/18 1725

Relinquished By: R. Martin
Signature/Printed Name

Company: ECI
Date/Time: 1/10/18 1845

Received By: R. Martin
Signature/Printed Name

Company: ECI
Date/Time: 1/10/18 1725

Received By: R. Martin
Signature/Printed Name


Company: ECI
Date/Time: 1/10/18 1845


Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:					
Date:					
Project Name:	GWMA-TMDL Compliance Monitoring				
Project Number:	141205-01.03				
Project Manager:	Andy Martin				
Phone Number:	(949) 334-9630				
Shipment Method:	Courier				
Field Team:	Outer Harbor				
No.	Name	Type	Location	Depth	Time
Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	TSS Total and dissolved metals Total and dissolved mercury Organochlorine pesticides PCB Congeners MS/MSD
1	OA-RW-1009-G-S-20180110	1/10/2018 0950	Water	1 X	
2	SP-RVW-1020-G-M-20180110	1/10/2018	Water	1 X	
3	LE-RW-22-B-J-20180110	1/10/18 1340	Water	8 X	X X X X X
4	IA-RW-13-G-S-20180110	1520		8 X	X X X X X
5	IA-RW-13-G-M-20180110	1525		1 X	
6	IA-RW-13-G-B-20180110	1530		1 X	
7	IA-RW-14-G-S-20180110	1600		8 X	X X X X X
8	IA-RW-14-G-M-20180110	1605		1 X	
9	IA-RW-14-G-B-20180110	1610		1 X	
10	IA-RW-14-G-A-20180110			8 X	X X X X X
11					
12					
13					
14					
15					
16					



ANCHOR OEA

Notes: Please send lab report to amartin@anchorqea.com, cfields@anchorqea.com and labdata@anchorqea.com

Relinquished By: 	Company: <u>Anchor DEA</u>
Signature/Printed Name <u>Claire Dolphin</u>	Date/Time <u>4/2/13 1725</u>

Received By:	Company: <u>ECI</u>
	<u>1/10/18 1725</u>
Signature/Printed Name	Date/Time

Relinquished By:	Company: <u>GC1</u>
	<u>1/10/18</u> <u>1845</u>
Signature/Printed Name	Date/Time

Received By:	Company:
	 1/10/8 1845
Signature/Printed Name	Date/Time

Linda Ta

From: Andy Martin <amartin@anchoragea.com>
Sent: Wednesday, January 17, 2018 10:40 AM
To: Linda Ta; Cheronne Oreiro; Cindy Fields
Cc: Richard Villafania
Subject: RE: GWMA - TMDL Compliance Monitoring - 18-01-0691 - Sample Receipt Confirmation & COC Document

Hi Linda,

In this case, please add -DUP to the end of the sample ID listed below.

Thank you,

Andy

Andrew Martin
 Managing Environmental Scientist

ANCHOR QEA, LLC

This electronic message transmission contains information that may be confidential and/or privileged work product prepared in anticipation of litigation. The information is intended for the use of the individual or entity named above. If you are not the intended recipient, please be aware that any disclosure, copying distribution or use of the contents of this information is prohibited. If you have received this electronic transmission in error, please notify us by telephone at (206) 287-9130.

From: Linda Ta [mailto:LindaTa@eurofinsUS.com]
Sent: Wednesday, January 17, 2018 10:30 AM
To: Cheronne Oreiro <coreiro@anchoragea.com>; Andy Martin <amartin@anchoragea.com>; Cindy Fields <cfields@anchoragea.com>
Cc: Richard Villafania <RichardVillafania@eurofinsUS.com>
Subject: RE: GWMA - TMDL Compliance Monitoring - 18-01-0691 - Sample Receipt Confirmation & COC Document

Hi Cheronne,

The TSS analysis have already been completed for this SDG. We will have the lab analyze sample -55 and rename it as LE-RW-22-G-S-20180110. Thank you.

Thanks!

Linda Ta
 Project Manager Assistant

From: Cheronne Oreiro [mailto:coreiro@anchoragea.com]
Sent: Wednesday, January 17, 2018 10:20 AM
To: Linda Ta; Andy Martin; Cindy Fields
Cc: Richard Villafania
Subject: RE: GWMA - TMDL Compliance Monitoring - 18-01-0691 - Sample Receipt Confirmation & COC Document

Hi Linda,

The extra bottle (-55) was extra volume for a TSS lab duplicate for sample ID LE-RW-22-G-S-20180110 (-47). The COC should have had 9 containers instead of 8.

Please revise the sample receipt and let me know if you have any other questions.

Thanks!

-C

Cheronne Oreiro | ANCHOR QEA, LLC

Environmental Scientist

D: 206.903.3310

coreiro@anchorage.com

ANCHOR QEA, LLC

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From: Linda Ta [<mailto:LindaTa@eurofinsUS.com>]

Sent: Tuesday, January 16, 2018 9:24 AM

To: Cheronne Oreiro <coreiro@anchorage.com>; Andy Martin <amartin@anchorage.com>; Cindy Fields <cfields@anchorage.com>

Cc: Richard Villafania <RichardVillafania@eurofinsUS.com>

Subject: RE: GWMA - TMDL Compliance Monitoring - 18-01-0691 - Sample Receipt Confirmation & COC Document

Correction: 1 container for sample -55.

Thanks!

Linda Ta

Project Manager Assistant

From: Linda Ta

Sent: Tuesday, January 16, 2018 9:22 AM

To: 'Cheronne Oreiro'; Andy Martin; Cindy Fields

Cc: Richard Villafania

Subject: RE: GWMA - TMDL Compliance Monitoring - 18-01-0691 - Sample Receipt Confirmation & COC Document

Good Morning Cheronne,

I checked and we did received 8 containers for sample -47 and 1 container for sample -57, please see pictures below. Unless otherwise instructed sample -57 has been placed on hold.



Thanks!

Linda Ta
Project Manager Assistant

From: Cheronne Oreiro [<mailto:coreiro@anchoragea.com>]

Sent: Monday, January 15, 2018 4:09 PM

To: Linda Ta; Andy Martin; Cindy Fields

Cc: Richard Villafania

Subject: RE: GWMA - TMDL Compliance Monitoring - 18-01-0691 - Sample Receipt Confirmation & COC Document

Hi Linda,

See below.

- 55: We think this extra sample bottle corresponds with sample LE-RW-22-G-S-20180110. However, we didn't see an anomaly for -47. Will you please check the bottle count for -47 and confirm you received 8 bottles (not 7)?
- 46: The sample ID should be OA-RW-G-B-20180110. The COC is incorrect, please revise sample receipt.
- 6: The bottle labels are incorrect, all samples were collected on 1/10.
- 17: The COC correct, the sample was collected at 10:57.
- 18: The COC is correct, the sample was collected at 10:5.
- 13: The bottle labels are correct, the sample ID should be IB-RW-12-G-S-20180110. Please revise the sample receipt.
- 14: The bottle labels are correct, the sample ID should be IB-RW-12-G-M-20180110. Please revise the sample receipt.
- 15: The bottle labels are correct, the sample ID should be IB-RW-12-G-B-20180110. Please revise the sample receipt.

Please let me know if you have any other questions.

-C

Cheronne Oreiro | ANCHOR QEA, LLC

Environmental Scientist

D: 206.903.3310

coreiro@anchoragea.com

ANCHOR QEA, LLC

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From: Linda Ta [<mailto:LindaTa@eurofinsUS.com>]

Sent: Friday, January 12, 2018 10:36 AM

To: Andy Martin <amartin@anchoragea.com>; Cindy Fields <cfields@anchoragea.com>; Lab Data Attachments <LabDataAttachments@anchoragea.com>

Cc: Richard Villafania <RichardVillafania@eurofinsUS.com>

Subject: GWMA - TMDL Compliance Monitoring - 18-01-0691 - Sample Receipt Confirmation & COC Document

Good Morning,

Please review the sample anomaly form and advise soonest of any corrections.

Thanks!

Linda Ta
Project Manager Assistant

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 12

CLIENT: ANCHOR QEA

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.2 °C; ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☐ Yes ☒ No ☐ N/A

☐ Sampling date ☒ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☒ Yes ☐ No ☐ N/A

Sample container label(s) consistent with COC ☐ Yes ☒ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOAn₂ ☐ 100PJ ☐ 100PJn₂ ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PBznna (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBn₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBn (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 826

* Collection time on label @ 1615, PS 11/10/18

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 12

CLIENT: ANCHOR GEA

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.2 °C; ☐ Blank ☒ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__2)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 802

SAMPLE RECEIPT CHECKLIST

COOLER 3 OF 12

CLIENT: ANCHOR QEA

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.1 °C (w/ CF): 2.3 °C; ☐ Blank ☒ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

	Yes	No	N/A
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Aqueous samples for certain analyses received within 15-minute holding time

	Yes	No	N/A
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No	N/A
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved Metals

	Yes	No	N/A
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No	N/A
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

	Yes	No	N/A
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznna (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☐ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH Reviewed by: 826

SAMPLE RECEIPT CHECKLIST

COOLER 4 OF 12

CLIENT: ANCHOR REA

DATE: 01/10/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)
 Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.1 °C (w/ CF): 2.3 °C; ☐ Blank ☒ Sample
☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)
☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling
☐ Sample(s) received at ambient temperature; placed on ice for transport by courier
 Ambient Temperature: ☐ Air ☐ Filter
 Checked by: 676

CUSTODY SEAL:
 Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: 676
 Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers <input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500) <input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE: (Trip Blank Lot Number: _____)
 Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)
☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB
☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____
 Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____
 Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____
 Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag
 Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: Suk
 s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH Reviewed by: 802

SAMPLE RECEIPT CHECKLIST

COOLER 5 OF 12

CLIENT: ANCHOR QEA

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.2 °C; ☐ Blank ☒ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by:)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☒ Yes ☐ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☒ Yes ☐ No ☐ N/A

Sample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number:)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ ☐ ☐

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve () ☐ EnCores® () ☐ TerraCores® () ☐ ☐ ☐

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ ☐ Other Matrix (): ☐ ☐ ☐

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 826

SAMPLE RECEIPT CHECKLIST

COOLER 6 OF 12

CLIENT: ANCHOR QEA

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.1 °C (w/ CF): 2.3 °C; ☐ Blank ☒ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 836

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 836

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 836

SAMPLE RECEIPT CHECKLIST

COOLER 7 OF 12

CLIENT: ANCHOR BEA

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.1 °C (w/ CF): 2.3 °C; ☐ Blank ☒ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

	Yes	No	N/A
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Aqueous samples for certain analyses received within 15-minute holding time

	Yes	No	N/A
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No	N/A
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved Metals

	Yes	No	N/A
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No	N/A
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

	Yes	No	N/A
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBz₂na (pH_9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH_2) ☒ 250PB ☐ 250PBn (pH_2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH_2) ☐ 500PB

☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH_2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH_12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z₂na = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 826

SAMPLE RECEIPT CHECKLIST

COOLER 9 OF 12

CLIENT: ANCHOR BEA

DATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.1 °C (w/ CF): 2.3 °C; ☐ Blank ☒ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

	Yes	No	N/A
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Aqueous samples for certain analyses received within 15-minute holding time

	Yes	No	N/A
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No	N/A
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved Metals

	Yes	No	N/A
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No	N/A
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

	Yes	No	N/A
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☐ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH Reviewed by: 826

SAMPLE RECEIPT CHECKLIST

COOLER 9 OF 12CLIENT: ANCHOR QEADATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.0°C (w/ CF): 2.2°C; ☐ Blank ☒ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 676Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 826

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ Yes ☐ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH_9)☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH_2) ☒ 250PB ☐ 250PB_n (pH_2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH_2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH_2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH_12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 826

SAMPLE RECEIPT CHECKLIST

COOLER 10 OF 12CLIENT: ANCHOR BEADATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.1 °C (w/ CF): 2.3 °C; ☐ Blank ☒ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 676Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 826

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ Yes ☐ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄·H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 826

SAMPLE RECEIPT CHECKLIST

COOLER 11 OF 12

CLIENT: ANCHOR BEA

DATE: 01/10/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)
 Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.1 °C (w/ CF): 2.3 °C; ☐ Blank ☒ Sample
☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)
☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling
☐ Sample(s) received at ambient temperature; placed on ice for transport by courier
 Ambient Temperature: ☐ Air ☐ Filter
 Checked by: 676

CUSTODY SEAL:
 Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: 676
 Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A Checked by: 876

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers <input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500) <input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)
☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB
☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag
 Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 876
 s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH Reviewed by: 876

SAMPLE RECEIPT CHECKLIST

COOLER 12 OF 12CLIENT: ANCHOR BEADATE: 01/10/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.2 °C; ☐ Blank ☒ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 676Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 836

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ Yes ☐ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 836s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 836

SAMPLE ANOMALY REPORT

DATE: **01/10/2018**

SAMPLES, CONTAINERS, AND LABELS:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☒ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☒ Client sample label(s) do not match COC (comment)
 - ☐ Project information
 - ☐ Client sample ID
 - ☒ Sampling date and/or time
 - ☒ Number of container(s)
 - ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
 - ☐ Broken
 - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
 - ☐ Flat
 - ☐ Very low in volume
 - ☐ Leaking (not transferred; duplicate bag submitted)
 - ☐ Leaking (transferred into ECI Tedlar™ bags*)
 - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

MISCELLANEOUS: (Describe)

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

Comments

(55) Received 1-liter plastic container unpreserved, labeled as SP-RW-22-S-20180110, 1/10/18 @ 1340, not on COC.

(46) Labeled as OA-RW-1009-G-B-20180110, date/time matched.

(6) Collection date per label, 1/11/18.

(13) Received 8 containers instead of 1, see container type on sample receipt checklist, cooler 1.

(16) Received 16 containers instead of 15, see container type on sample receipt checklist, cooler 2.

Collection time per label:

(17) 10:59

(18) 10:57

Comments

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: _____

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

Reported by: 836
Reviewed by: 802

SAMPLE ANOMALY REPORT

DATE: 01/10/2018

SAMPLES, CONTAINERS, AND LABELS:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☒ Client sample label(s) do not match COC (comment)
 - ☐ Project information
 - ☒ Client sample ID
 - ☐ Sampling date and/or time
 - ☒ Number of container(s)
 - ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
 - ☐ Broken
 - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
 - ☐ Flat
 - ☐ Very low in volume
 - ☐ Leaking (not transferred; duplicate bag submitted)
 - ☐ Leaking (transferred into ECI Tedlar™ bags*)
 - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

MISCELLANEOUS: (Describe)

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

Comments

^{11/1/18}
(-44) Received 2 containers instead of 1
2 - 1 liter plastic container, unpreserved.

(-45) Received 4 containers instead of 2
2 - 250 ml clear glass container, unpreserved.
2 - 250 ml plastic container, unpreserved.

(13) Labeled as IB-RW-12-G-S - 20180110, date/time matched.

(14-15) Labeled as IB-RW-....., date/time matched.

Comments

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: _____

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

Reported by: 836

Reviewed by: 802

RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 07:46
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072018030720

1 **CLIENT SAMPLE NUMBER:** IB-RW-13-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	7.60	5.07	1.00	1.3	Y	164%	2	51.5
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

```
Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030720.d
Lab Smp Id:
Inj Date  : 07-MAR-2018 07:46
Operator  : UHHN                      Inst ID: GC_44.i
Smp Info  : 18-02-1868-1
Misc Info :
Comment   :
Method     : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn    Quant Type: ESTD
Cal Date  : 05-MAR-2018 11:34         Cal File: a18030502.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP Genie                  Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4
```

Cpnd Variable	Local Compound Variable
---------------	-------------------------

						CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$	1 2,4,5,6-Tetrachloro-m-xylene	3.040	3.036	0.004	6918207866	69.4000	69.399
	2 Hexachlorobenzene	Compound Not Detected.					
	3 Alpha-BHC	Compound Not Detected.					
	4 Gamma-BHC	Compound Not Detected.					
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordane	Compound Not Detected.					
	11 2,4'-DDE	5.199	5.198	0.001	742406037	7.60299	7.602 (MH)
	12 Heptachlor Epoxide	Compound Not Detected.					
	13 Gamma Chlordane	Compound Not Detected.					
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 4,4'-DDE	Compound Not Detected.					
	17 Endosulfan I	Compound Not Detected.					
	18 2,4'-DDD	Compound Not Detected.					
	19 Dieldrin	Compound Not Detected.					
	20 2,4'-DDT	Compound Not Detected.					
	21 Endrin	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.			
23 4,4'-DDD					Compound Not Detected.			
24 Endosulfan II					Compound Not Detected.			
25 4,4'-DDT					Compound Not Detected.			
26 Endrin Aldehyde					Compound Not Detected.			
27 Methoxychlor					Compound Not Detected.			
28 Mirex					Compound Not Detected.			
29 Endosulfan Sulfate					Compound Not Detected.			
30 Endrin Ketone					Compound Not Detected.			
\$ 31 Decachlorobiphenyl	8.286	8.284	0.002	7745827195		74.2043	74.204	
M 32 Chlordane					Compound Not Detected.			
33 CHLD (1)					Compound Not Detected.			
34 CHLD (2)					Compound Not Detected.			
35 CHLD (3)					Compound Not Detected.			
36 CHLD (4)					Compound Not Detected.			
37 CHLD (5)					Compound Not Detected.			
M 38 Toxaphene					Compound Not Detected.			
39 TOXAPHENE (1)					Compound Not Detected.			
40 TOXAPHENE (2)					Compound Not Detected.			
41 TOXAPHENE (3)					Compound Not Detected.			
42 TOXAPHENE (4)					Compound Not Detected.			
43 TOXAPHENE (5)					Compound Not Detected.			

QC Flag Legend

M - Compound response manually integrated.
 H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030720.d

Page 1

Date : 07-MAR-2018 07:46

Client ID:

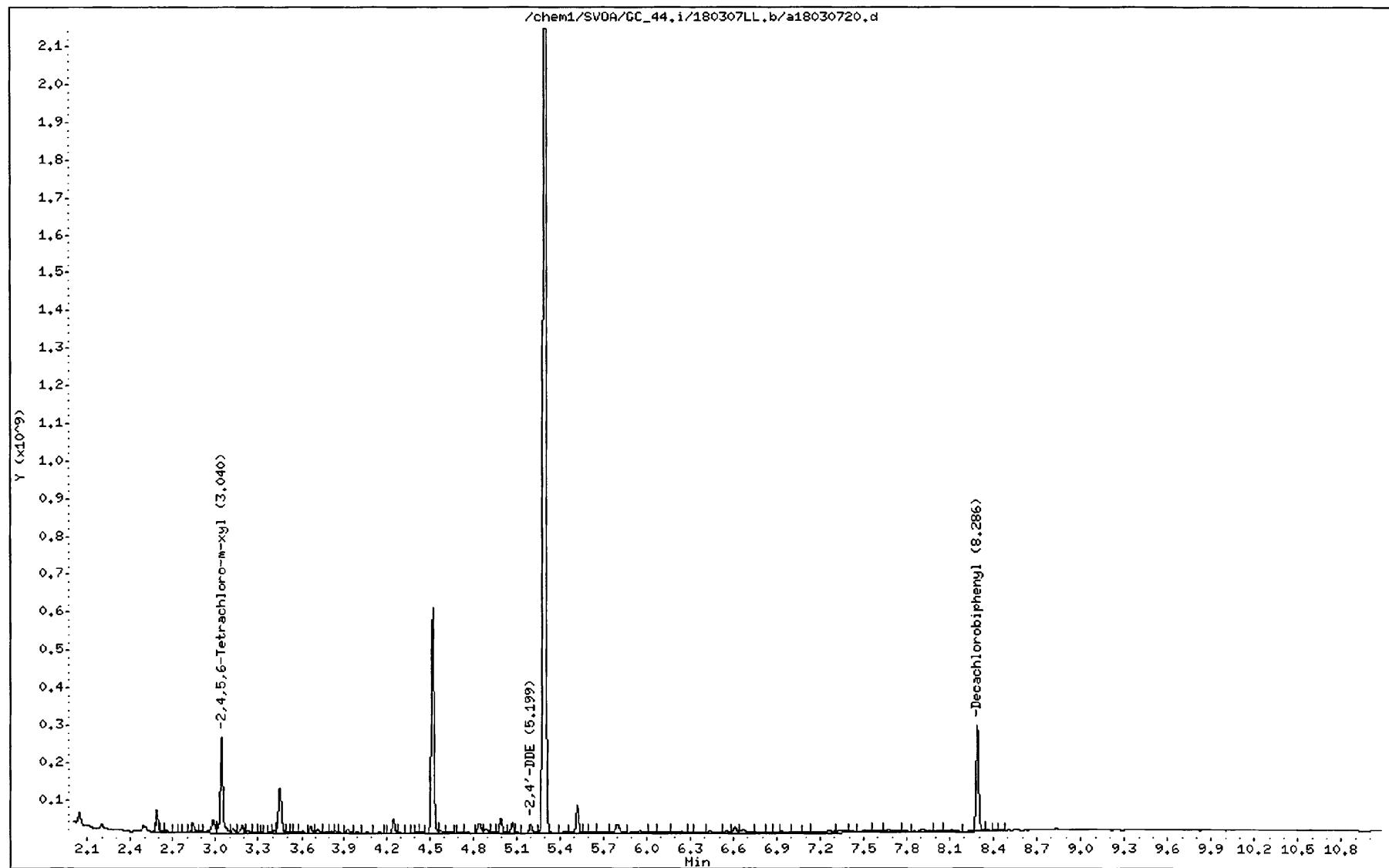
Instrument: GC_44.i

Sample Info: 18-02-1868-1

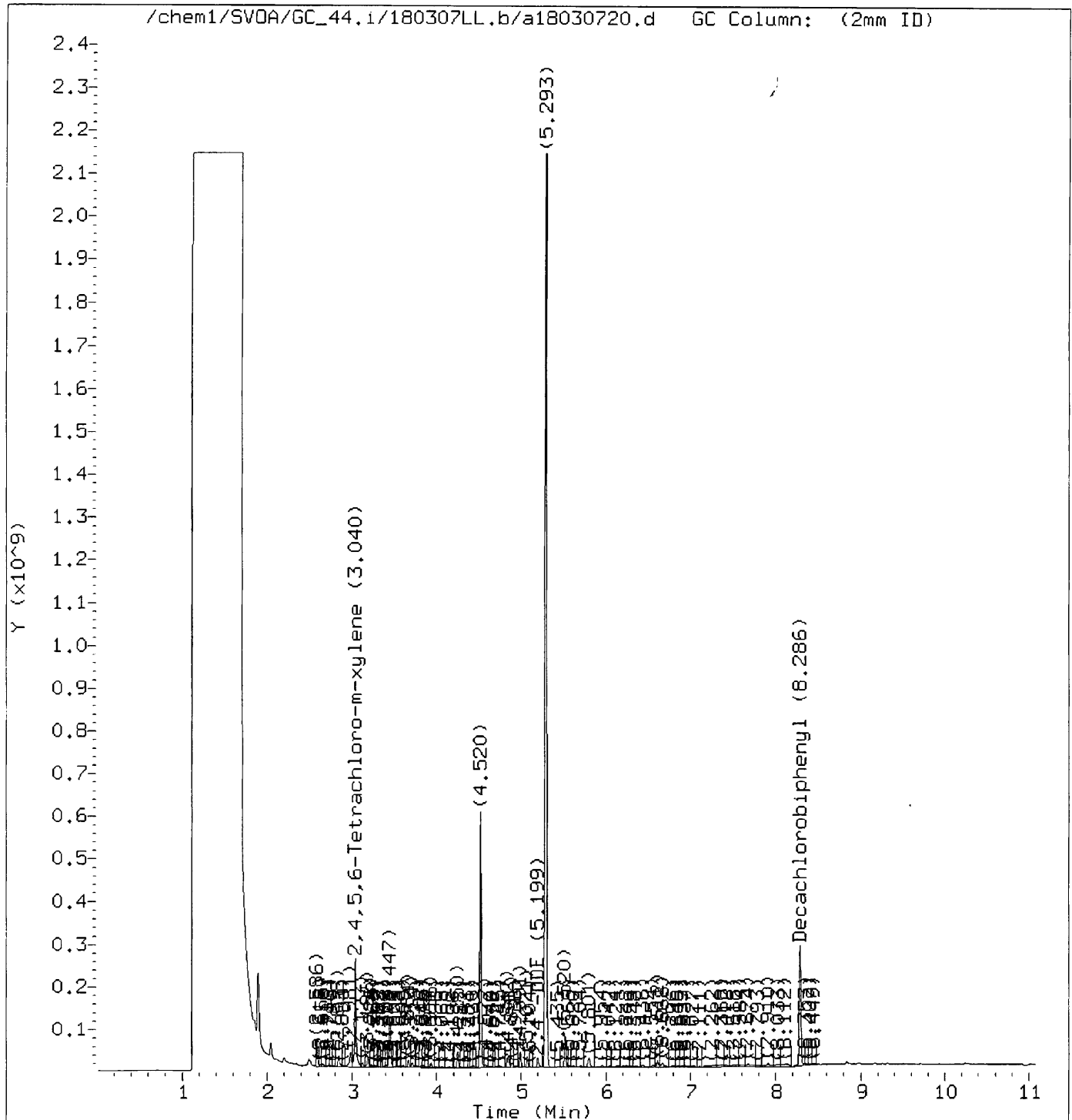
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File



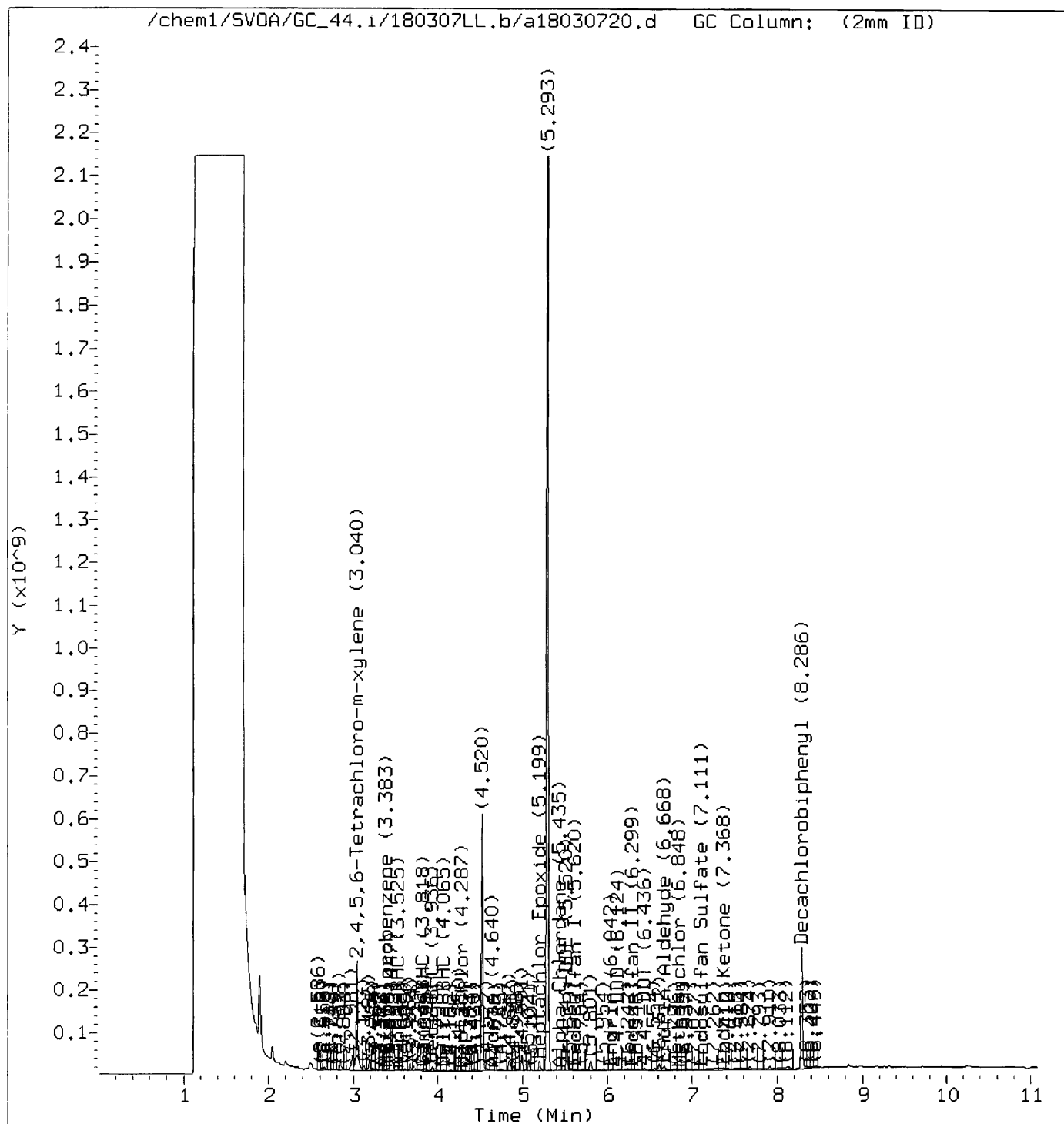
Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:02.

Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

142



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030720.d
Lab Smp Id:
Inj Date : 07-MAR-2018 07:46
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-1
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene		2.847	2.842	0.005	8883274411	83.5671	83.567
2 Hexachlorobenzene		3.225	3.226	-0.001	443871465	2.86520	2.865
3 Alpha-BHC		Compound Not Detected.					
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		Compound Not Detected.					
10 Oxychlordane		4.877	4.886	-0.009	391223472	2.91396	2.913 (M)
11 Heptachlor Epoxide		Compound Not Detected.					
12 2,4'-DDE		5.161	5.155	0.006	6877389383	77.2039	77.203 (M)
13 Gamma Chlordane		5.161	5.162	-0.001	6877389383	52.7337	52.733 (H)
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 Endosulfan I		5.380	5.366	0.014	386691743	3.29172	3.291
17 4,4'-DDE		Compound Not Detected.					
18 Dieldrin		Compound Not Detected.					
19 2,4'-DDD		Compound Not Detected.					
20 Endrin		Compound Not Detected.					
21 2,4'-DDT		Compound Not Detected.					

							CONCENTRATIONS	
							ON-COLUMN	FINAL
Compounds	RT	EXP	RT	DLT	RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====		=====		=====	=====	=====
22 Cis-Nonachlor		Compound	Not	Detected.				
23 4,4'-DDD		Compound	Not	Detected.				
24 Endosulfan II		Compound	Not	Detected.				
25 4,4'-DDT		Compound	Not	Detected.				
26 Endrin Aldehyde	6.455	6.450	0.005	558653764		6.21230		6.212
27 Endosulfan Sulfate		Compound	Not	Detected.				
28 Mirex		Compound	Not	Detected.				
29 Methoxychlor		Compound	Not	Detected.				
30 Endrin Ketone		Compound	Not	Detected.				
T 31 Decachlorobiphenyl	8.327	8.325	0.002	7043491013		72.8921		72.892
M 32 Chlordane		Compound	Not	Detected.				
33 CHLD (1)		Compound	Not	Detected.				
34 CHLD (2)		Compound	Not	Detected.				
35 CHLD (3)		Compound	Not	Detected.				
36 CHLD (4)		Compound	Not	Detected.				
37 CHLD (5)		Compound	Not	Detected.				
M 38 Toxaphene		Compound	Not	Detected.				
39 TOXAPHENE (1)		Compound	Not	Detected.				
40 TOXAPHENE (2)		Compound	Not	Detected.				
41 TOXAPHENE (3)		Compound	Not	Detected.				
42 TOXAPHENE (4)		Compound	Not	Detected.				
43 TOXAPHENE (5)		Compound	Not	Detected.				

QC Flag Legend

M - Compound response manually integrated.
 H - Operator selected an alternate compound hit.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/b18030720.d

Page 1

Date : 07-MAR-2018 07:46

Client ID:

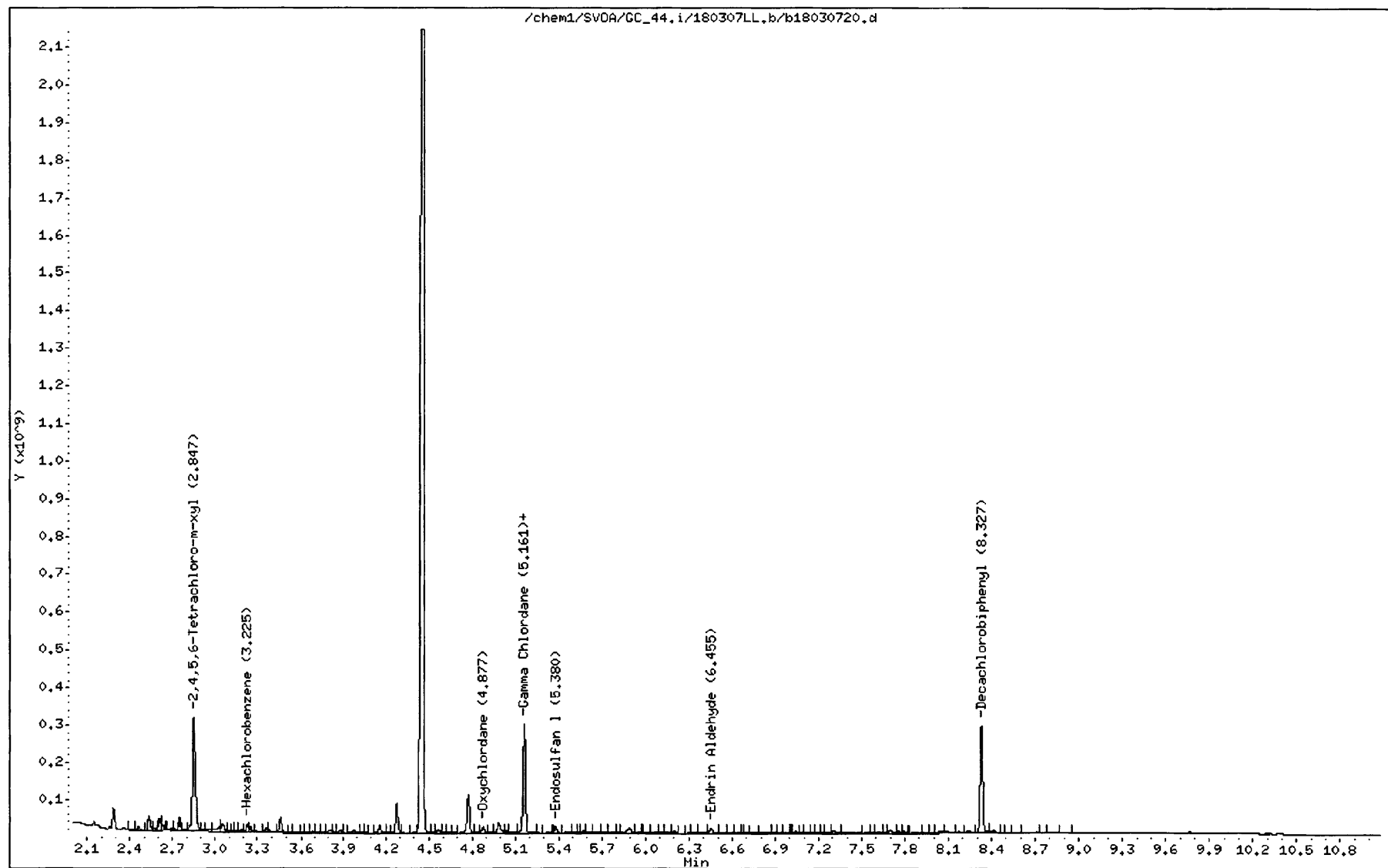
Instrument: GC_44.i

Sample Info: 18-02-1868-1

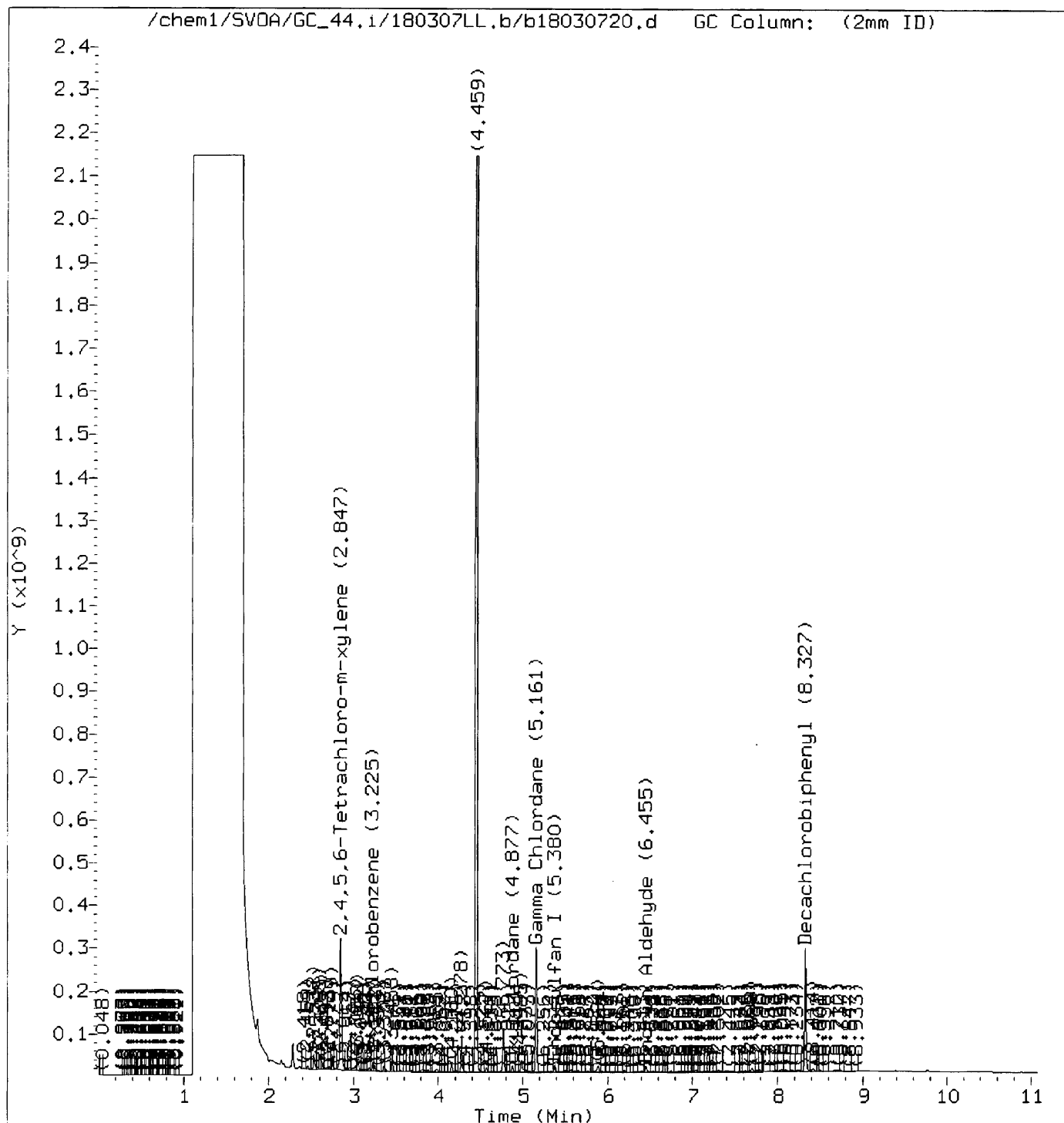
Operator: UHHN

Column phase:

Column diameter: 2.00



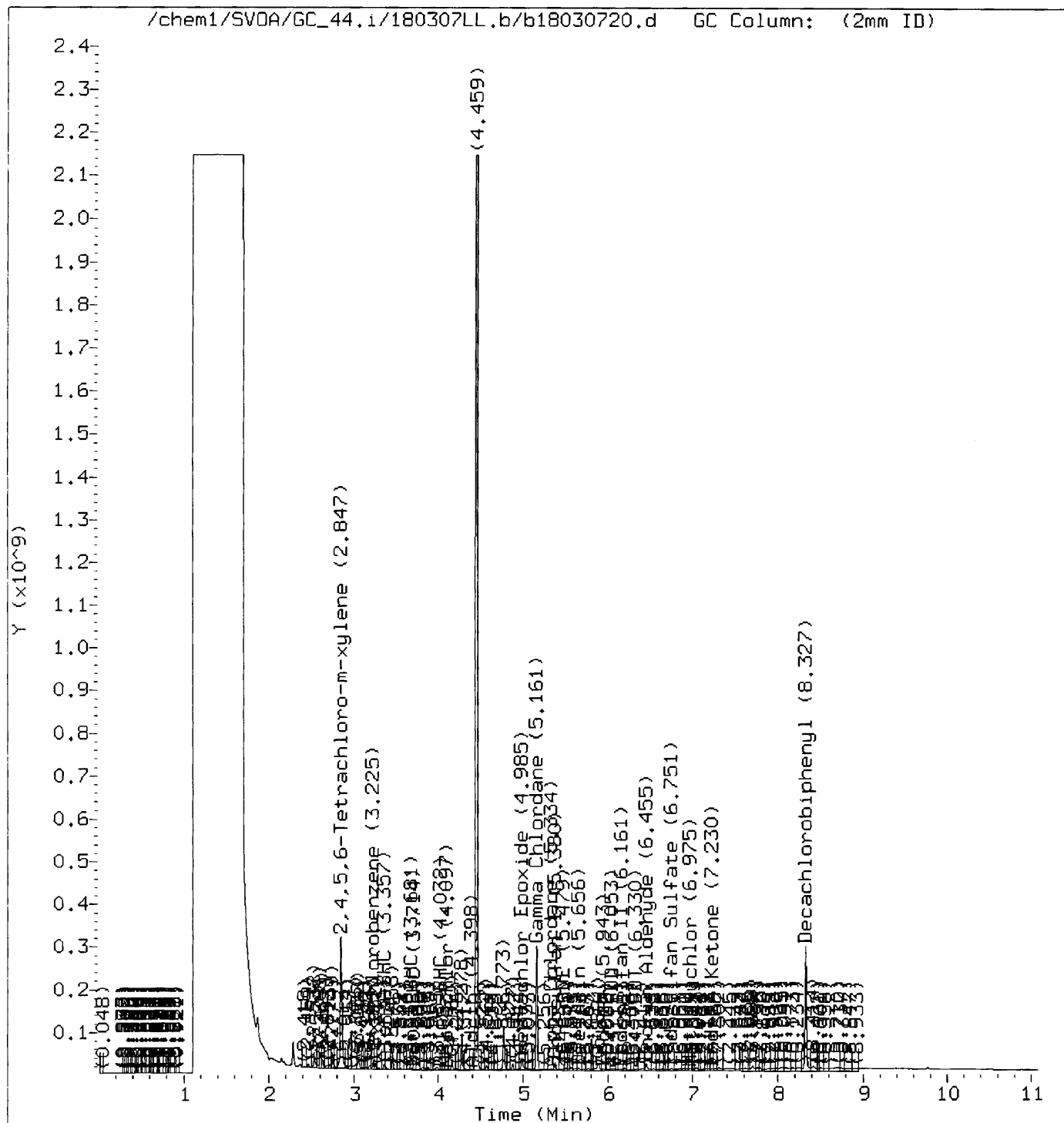
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:02.
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____ 142



Data File: /chem1/SVOA/GC_44.i/180307DDMU.b/a18030720.d
Report Date: 09-Mar-2018 17:58

Page 1

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030720.d
Lab Smp Id:
Inj Date : 07-MAR-2018 07:46
Operator : UHHN
Smp Info : 18-02-1868-1
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4

Inst ID: GC_44.i

Quant Type: ESTD

Cal File: a18030530.d

Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON COLUMN (ppb)	FINAL (ug/Kg)
2,4,4'-DDMU								

Compound Not Detected.

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030720.d

Page 1

Date : 07-MAR-2018 07:46

Client ID:

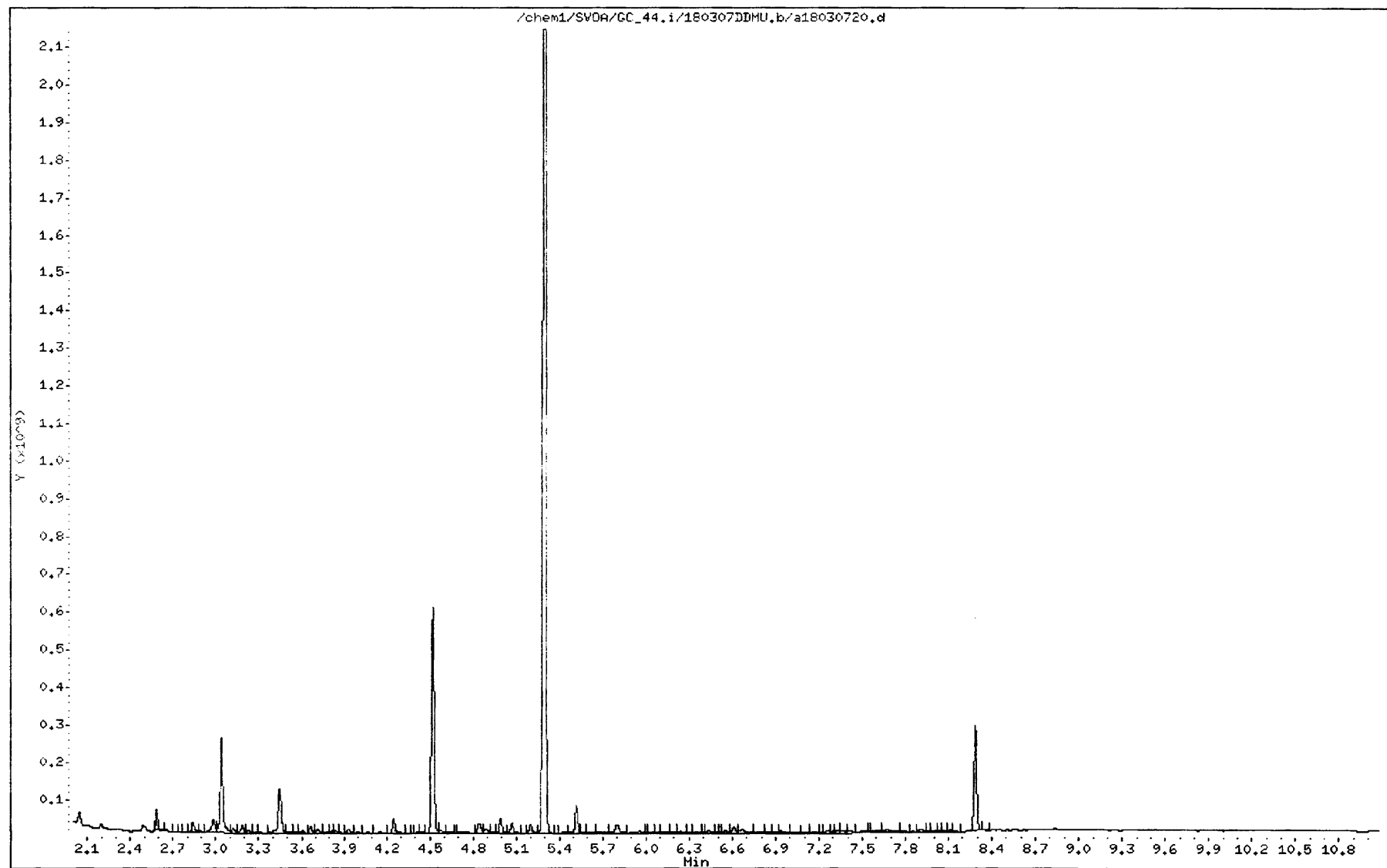
Instrument: GC_44.i

Sample Info: 18-02-1868-1

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030720.d
Lab Smp Id:
Inj Date : 07-MAR-2018 07:46
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-1
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN	FINAL
					(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU	5.161	5.122	0.039	7079745026	162.665	162.664 (A)

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/b18030720.d

Page 1

Date : 07-MAR-2018 07:46

Client ID:

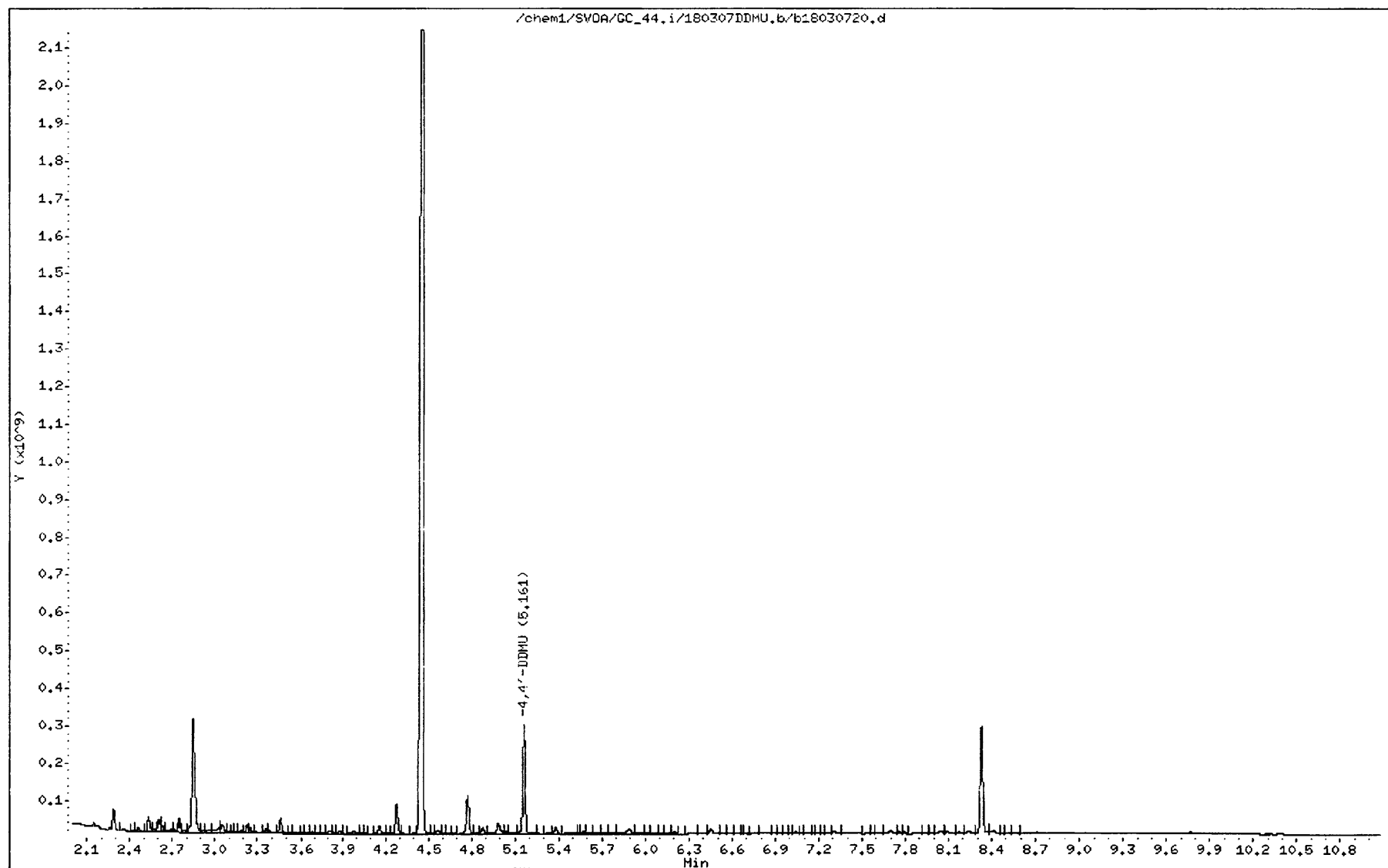
Instrument: GC_44.i

Sample Info: 18-02-1868-1

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 08:00
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072118030721

4 **CLIENT SAMPLE NUMBER:** IB-RW-14-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030721.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:00
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-4
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	ON-COLUMN	FINAL
				RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.039	3.036	0.003	8698500824	87.2590	87.258
2 Hexachlorobenzene	Compound Not Detected.					
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	Compound Not Detected.					
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 4,4'-DDE	Compound Not Detected.					
17 Endosulfan I	Compound Not Detected.					
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	Compound Not Detected.					

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====		=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.		
23 4,4'-DDD					Compound Not Detected.		
24 Endosulfan II					Compound Not Detected.		
25 4,4'-DDT					Compound Not Detected.		
26 Endrin Aldehyde					Compound Not Detected.		
27 Methoxychlor					Compound Not Detected.		
28 Mirex					Compound Not Detected.		
29 Endosulfan Sulfate					Compound Not Detected.		
30 Endrin Ketone					Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.285	8.284	0.001	10720566882		102.702	102.701
M 32 Chlordane					Compound Not Detected.		
33 CHLD (1)					Compound Not Detected.		
34 CHLD (2)					Compound Not Detected.		
35 CHLD (3)					Compound Not Detected.		
36 CHLD (4)					Compound Not Detected.		
37 CHLD (5)					Compound Not Detected.		
M 38 Toxaphene					Compound Not Detected.		
39 TOXAPHENE (1)					Compound Not Detected.		
40 TOXAPHENE (2)					Compound Not Detected.		
41 TOXAPHENE (3)					Compound Not Detected.		
42 TOXAPHENE (4)					Compound Not Detected.		
43 TOXAPHENE (5)					Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030721.d

Page 1

Date : 07-MAR-2018 08:00

Client ID:

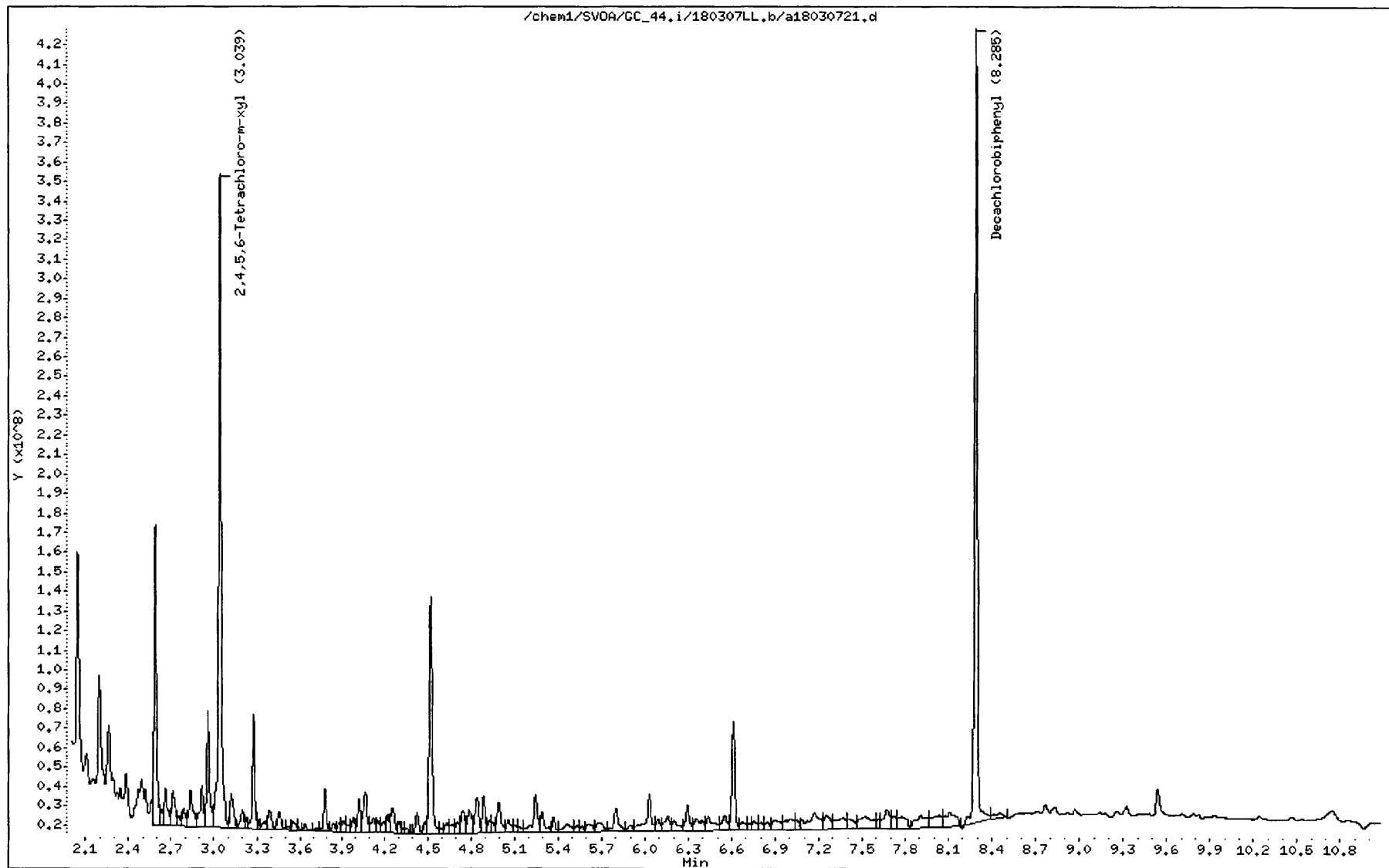
Instrument: GC_44.i

Sample Info: 18-02-1868-4

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030721.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:00
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-4
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS				
		ON-COLUMN			FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene	2.846	2.842	0.004	8423507739	79.2419	79.241
2 Hexachlorobenzene	3.233	3.226	0.007	234756421	1.51536	1.515 (a)
3 Alpha-BHC	3.340	3.337	0.003	227130921	1.25095	1.250 (a)
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordane	Compound Not Detected.					
11 Heptachlor Epoxide	Compound Not Detected.					
12 2,4'-DDE	5.161	5.155	0.006	1322185708	14.8425	14.842 (M)
13 Gamma Chlordane	5.161	5.162	-0.001	1322185708	10.1381	10.138
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 Endosulfan I	5.379	5.366	0.013	217956342	1.85536	1.855 (a)
17 4,4'-DDE	5.461	5.463	-0.002	142434885	1.20266	1.202 (a)
18 Dieldrin	Compound Not Detected.					
19 2,4'-DDD	Compound Not Detected.					
20 Endrin	Compound Not Detected.					
21 2,4'-DDT	Compound Not Detected.					

						CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
	22 Cis-Nonachlor		Compound Not Detected.				
	23 4,4'-DDD		Compound Not Detected.				
	24 Endosulfan II		Compound Not Detected.				
	25 4,4'-DDT	6.336	6.325	0.011	315671278	3.15989	3.159
	26 Endrin Aldehyde	6.455	6.450	0.005	1637497035	18.2092	18.209
	27 Endosulfan Sulfate		Compound Not Detected.				
	28 Mirex		Compound Not Detected.				
	29 Methoxychlor		Compound Not Detected.				
	30 Endrin Ketone		Compound Not Detected.				
T	31 Decachlorobiphenyl	8.327	8.325	0.002	9669234465	100.065	100.065 (A)
M	32 Chlordane		Compound Not Detected.				
	33 CHLD (1)		Compound Not Detected.				
	34 CHLD (2)		Compound Not Detected.				
	35 CHLD (3)		Compound Not Detected.				
	36 CHLD (4)		Compound Not Detected.				
	37 CHLD (5)		Compound Not Detected.				
M	38 Toxaphene		Compound Not Detected.				
	39 TOXAPHENE (1)		Compound Not Detected.				
	40 TOXAPHENE (2)		Compound Not Detected.				
	41 TOXAPHENE (3)		Compound Not Detected.				
	42 TOXAPHENE (4)		Compound Not Detected.				
	43 TOXAPHENE (5)		Compound Not Detected.				

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030721.d

Page 1

Date : 07-MAR-2018 08:00

Client ID:

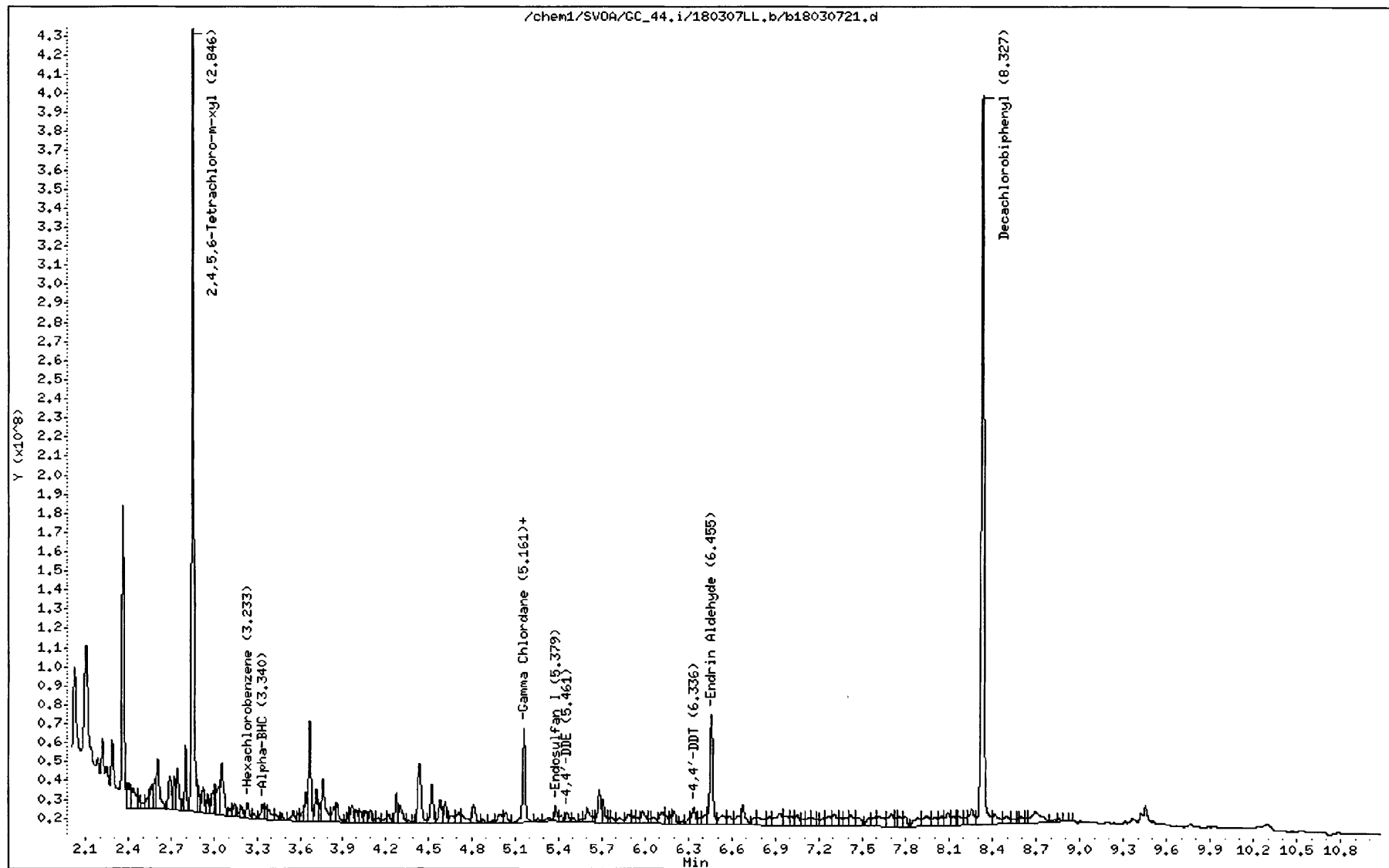
Instrument: GC_44.i

Sample Info: 18-02-1868-4

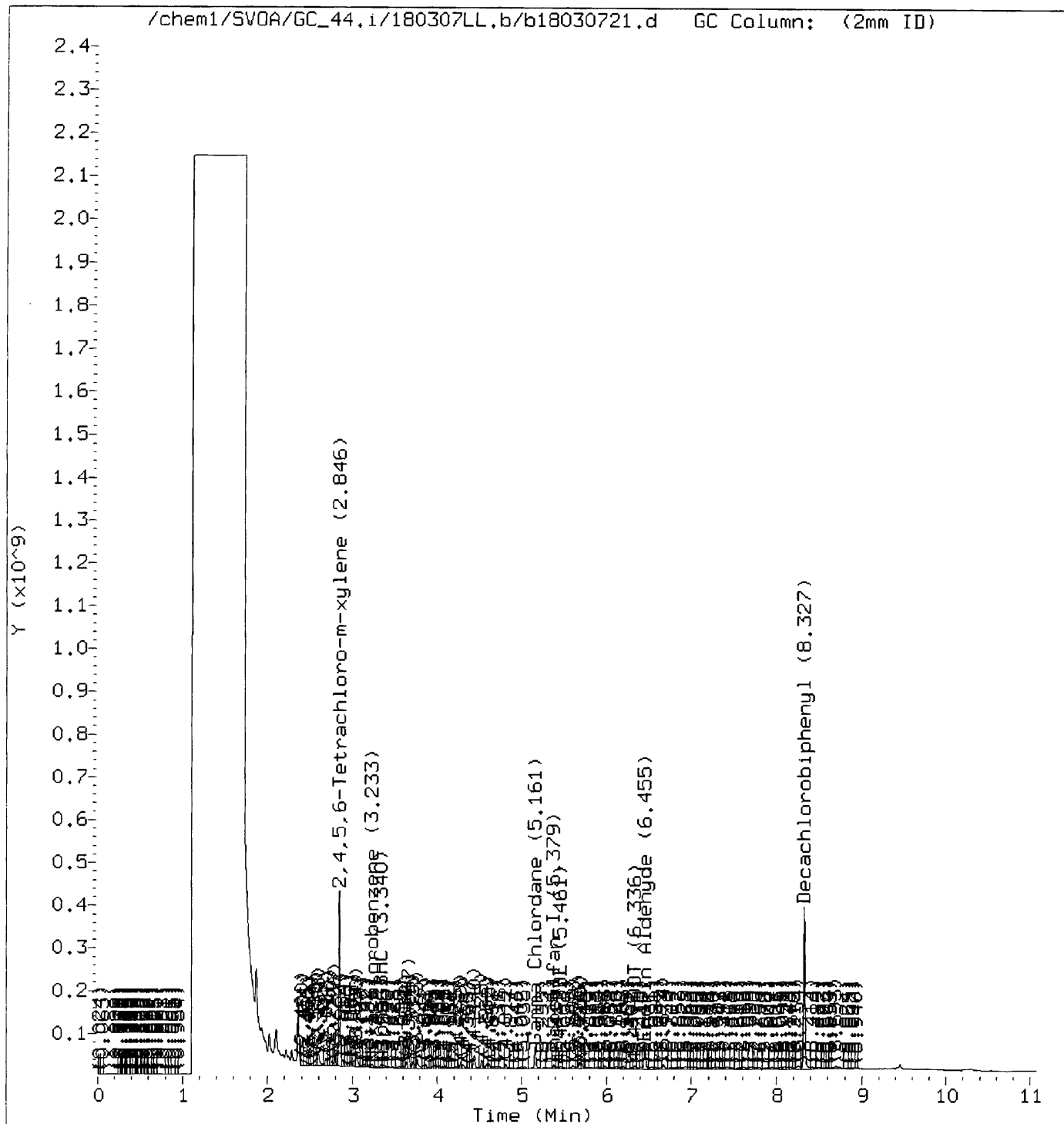
Operator: UHHN

Column phase:

Column diameter: 2.00



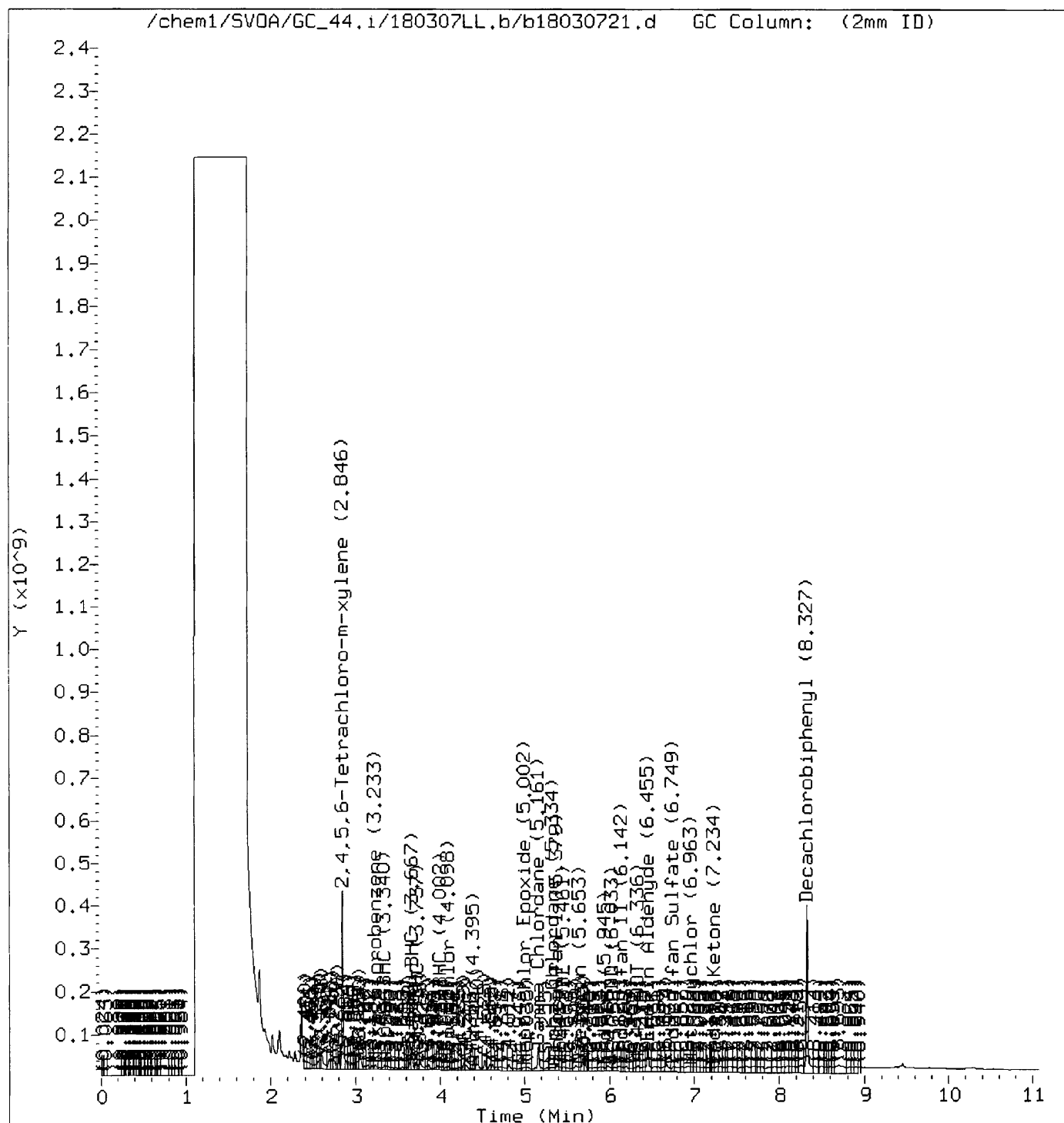
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:02.
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____ 142



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030721.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:00
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-4
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE		ON-COLUMN	FINAL
				(ppb)		(ug/Kg)	
=====	==	=====	=====	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.			

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030721.d

Page 1

Date : 07-MAR-2018 08:00

Client ID:

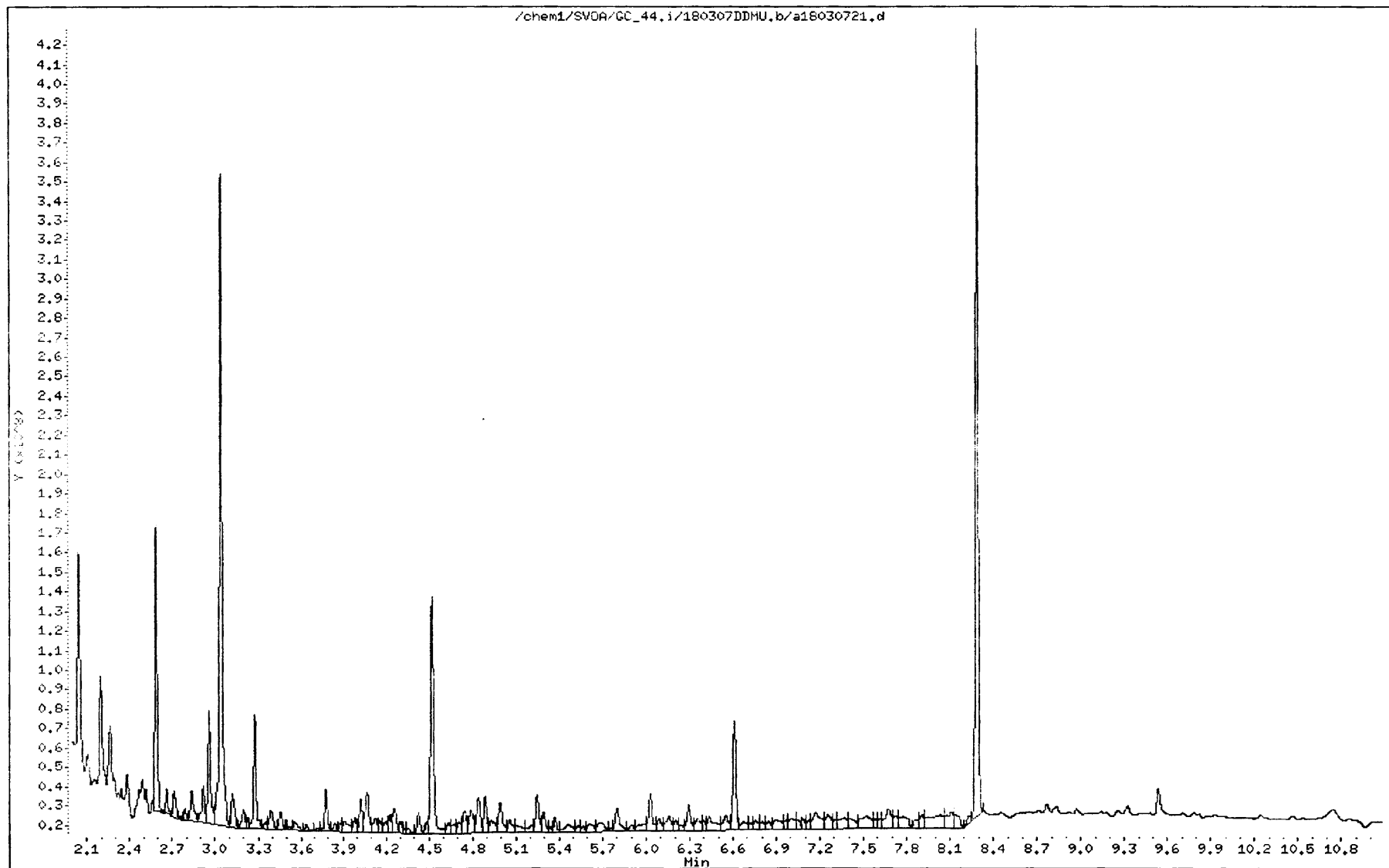
Instrument: GC_44.i

Sample Info: 18-02-1868-4

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030721.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:00
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-4
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL
					(ppo)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.161	5.122	0.039	1433032032	32.9255	32.925

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030721.d

Page 1

Date : 07-MAR-2018 08:00

Client ID:

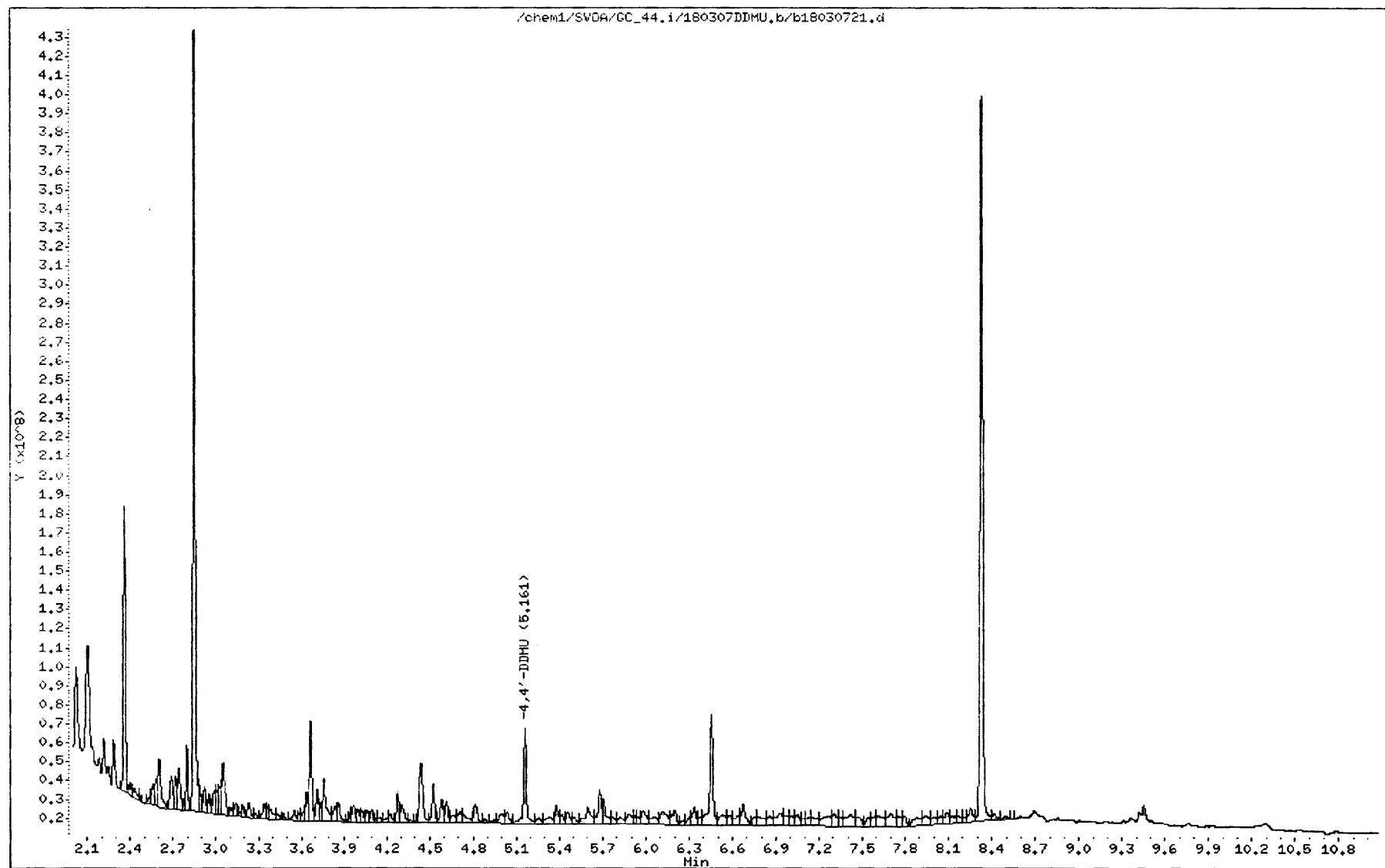
Instrument: GC_44.i

Sample Info: 18-02-1868-4

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 08:14
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072218030722

7 **CLIENT SAMPLE NUMBER:** IB-RW-1014-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030722.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:14
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-7
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds		CONCENTRATIONS					
		ON-COLUMN		FINAL			
		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$ 1	2,4,5,6-Tetrachloro-m-xylene	3.042	3.036	0.006	7991403539	80.1657	80.165
2	Hexachlorobenzene	Compound Not Detected.					
3	Alpha-BHC	Compound Not Detected.					
4	Gamma-BHC	Compound Not Detected.					
5	Beta-BHC	Compound Not Detected.					
6	Delta-BHC	Compound Not Detected.					
7	Heptachlor	Compound Not Detected.					
8	Aldrin	Compound Not Detected.					
9	4,4'-Dichlorobenzophenone	Compound Not Detected.					
10	Oxychlordane	Compound Not Detected.					
11	2,4'-DDE	Compound Not Detected.					
12	Heptachlor Epoxide	Compound Not Detected.					
13	Gamma Chlordane	Compound Not Detected.					
14	Trans-Nonachlor	Compound Not Detected.					
15	Alpha Chlordane	Compound Not Detected.					
16	4,4'-DDE	Compound Not Detected.					
17	Endosulfan I	Compound Not Detected.					
18	2,4'-DDD	Compound Not Detected.					
19	Dieldrin	Compound Not Detected.					
20	2,4'-DDT	Compound Not Detected.					
21	Endrin	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT						Compound Not Detected.		
26 Endrin Aldehyde						Compound Not Detected.		
27 Methoxychlor						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Endosulfan Sulfate						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.285	8.284	0.001	9392950511			89.9835	89.983
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030722.d

Date : 07-MAR-2018 08:14

Client ID:

Sample Info: 18-02-1868-7

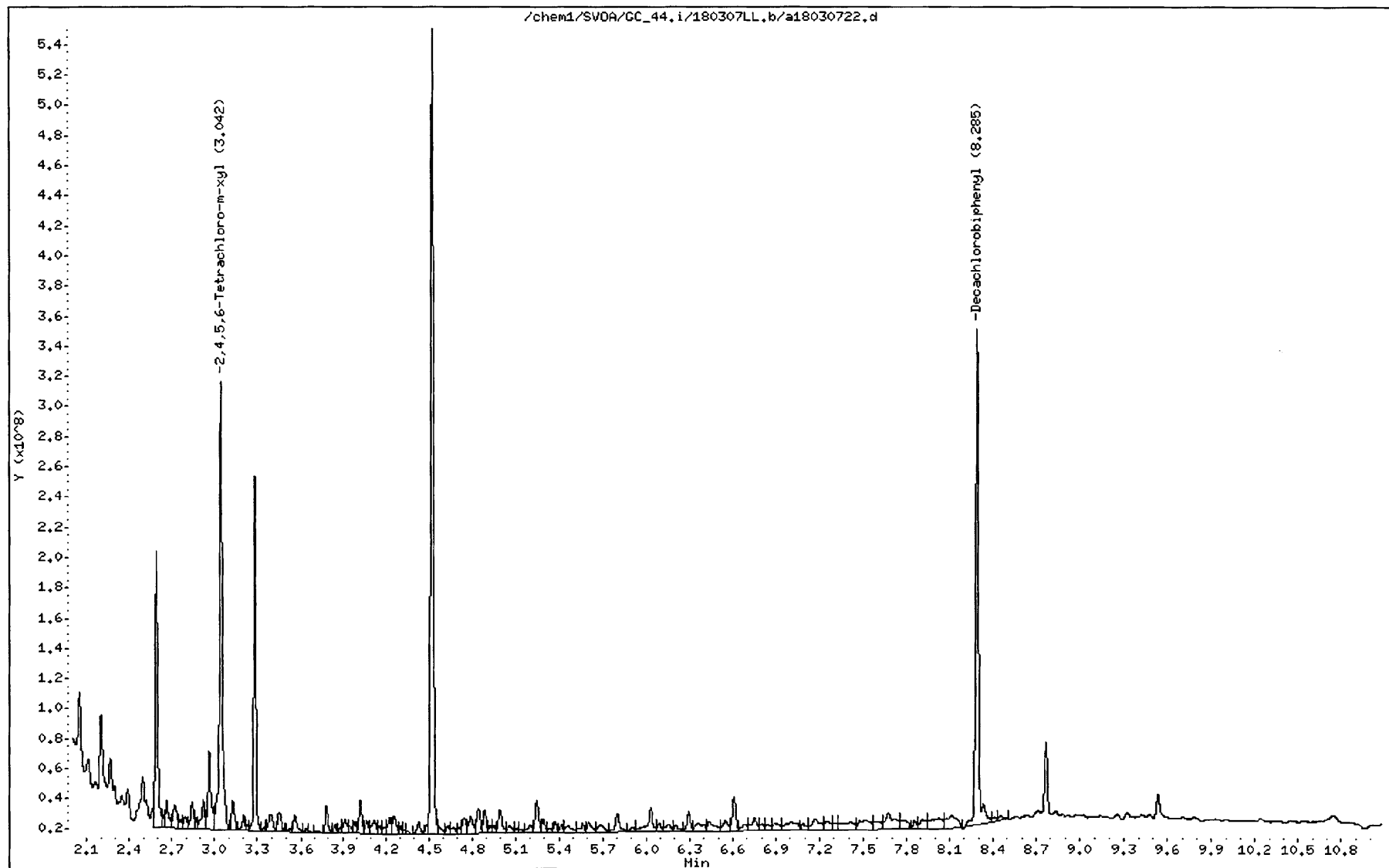
Page 1

Instrument: GC_44.i

Operator: UHHN

Column diameter: 2.00

Column phase:



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030722.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:14
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-7
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds							CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE		ON-COLUMN	FINAL
=====		==	=====	=====	=====		(ppb)	(ug/Kg)
T	1 2,4,5,6-Tetrachloro-m-xylene	2.848	2.842	0.006	7320751308		68.8680	68.868
	2 Hexachlorobenzene	3.233	3.226	0.007	277442003		1.79089	1.790 (a)
	3 Alpha-BHC	3.342	3.337	0.005	252185764		1.38895	1.388 (a)
	4 Gamma-BHC				Compound Not Detected.			
	5 Beta-BHC				Compound Not Detected.			
	6 Delta-BHC	4.003	4.008	-0.005	179764595	1.11318		1.113 (a)
	7 Heptachlor				Compound Not Detected.			
	8 Aldrin				Compound Not Detected.			
	9 4,4'-Dichlorobenzophenone				Compound Not Detected.			
	10 Oxychlordan				Compound Not Detected.			
	11 Heptachlor Epoxide				Compound Not Detected.			
	12 2,4'-DDE	5.161	5.155	0.006	5968666706	67.0028		67.002 (M)
	13 Gamma Chlordane	5.161	5.162	-0.001	5968666706	45.7659		45.765
	14 Trans-Nonachlor				Compound Not Detected.			
	15 Alpha Chlordane				Compound Not Detected.			
	16 Endosulfan I	5.379	5.366	0.013	236505758	2.01326		2.013
	17 4,4'-DDE	5.462	5.463	-0.001	154538206	1.30485		1.304 (a)
	18 Dieldrin				Compound Not Detected.			
	19 2,4'-DDD				Compound Not Detected.			
	20 Endrin				Compound Not Detected.			
	21 2,4'-DDT				Compound Not Detected.			

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT	6.336	6.325	0.011	294900334	2.95197	2.951 (M)		
26 Endrin Aldehyde	6.454	6.450	0.004	867277280	9.64423	9.644		
27 Endosulfan Sulfate						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Methoxychlor						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
T 31 Decachlorobiphenyl	8.327	8.325	0.002	8564086567	88.6285	88.628 (A)		
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/b18030722.d

Date : 07-MAR-2018 08:14

Client ID:

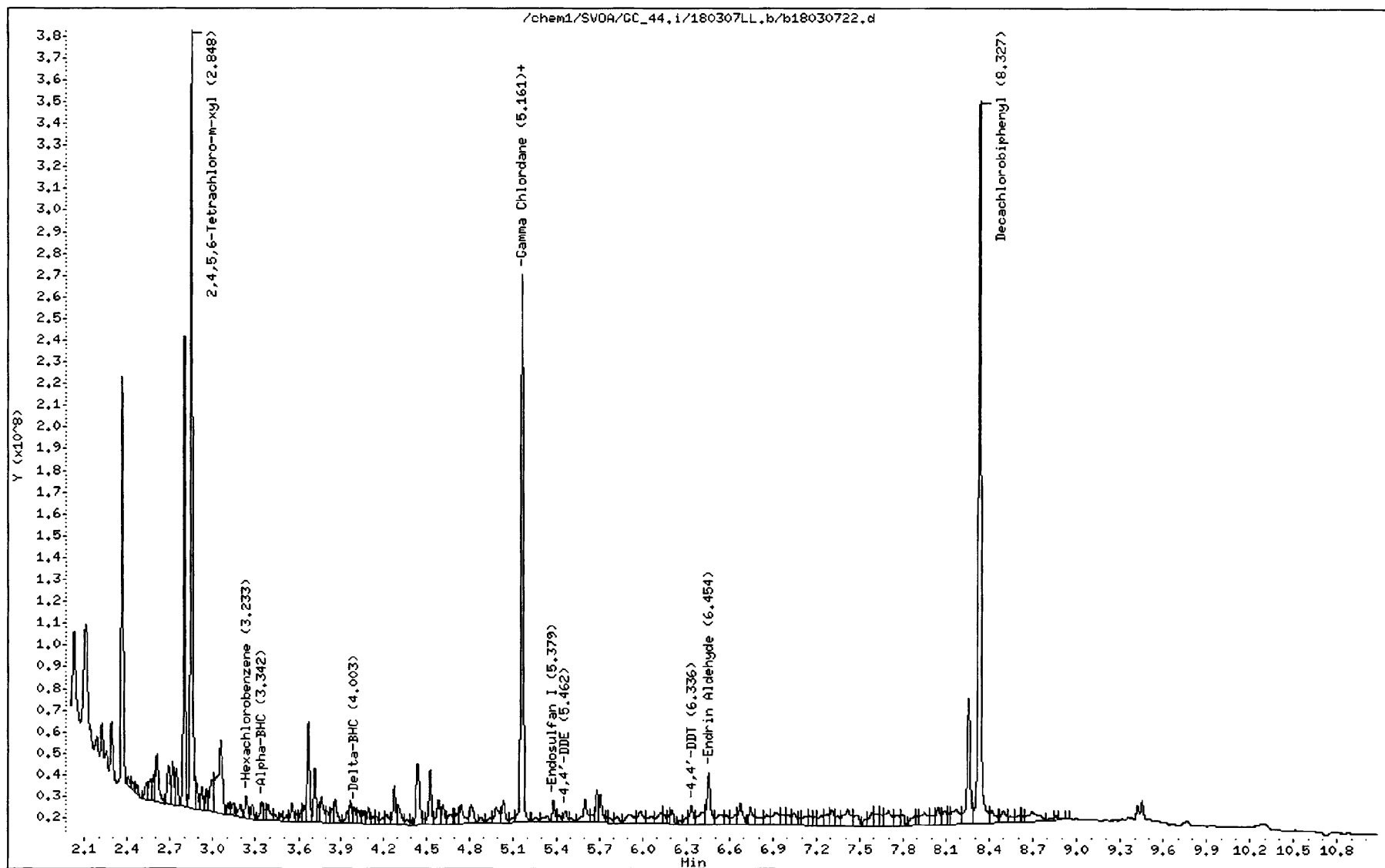
Sample Info: 18-02-1868-7

Instrument: GC_44.i

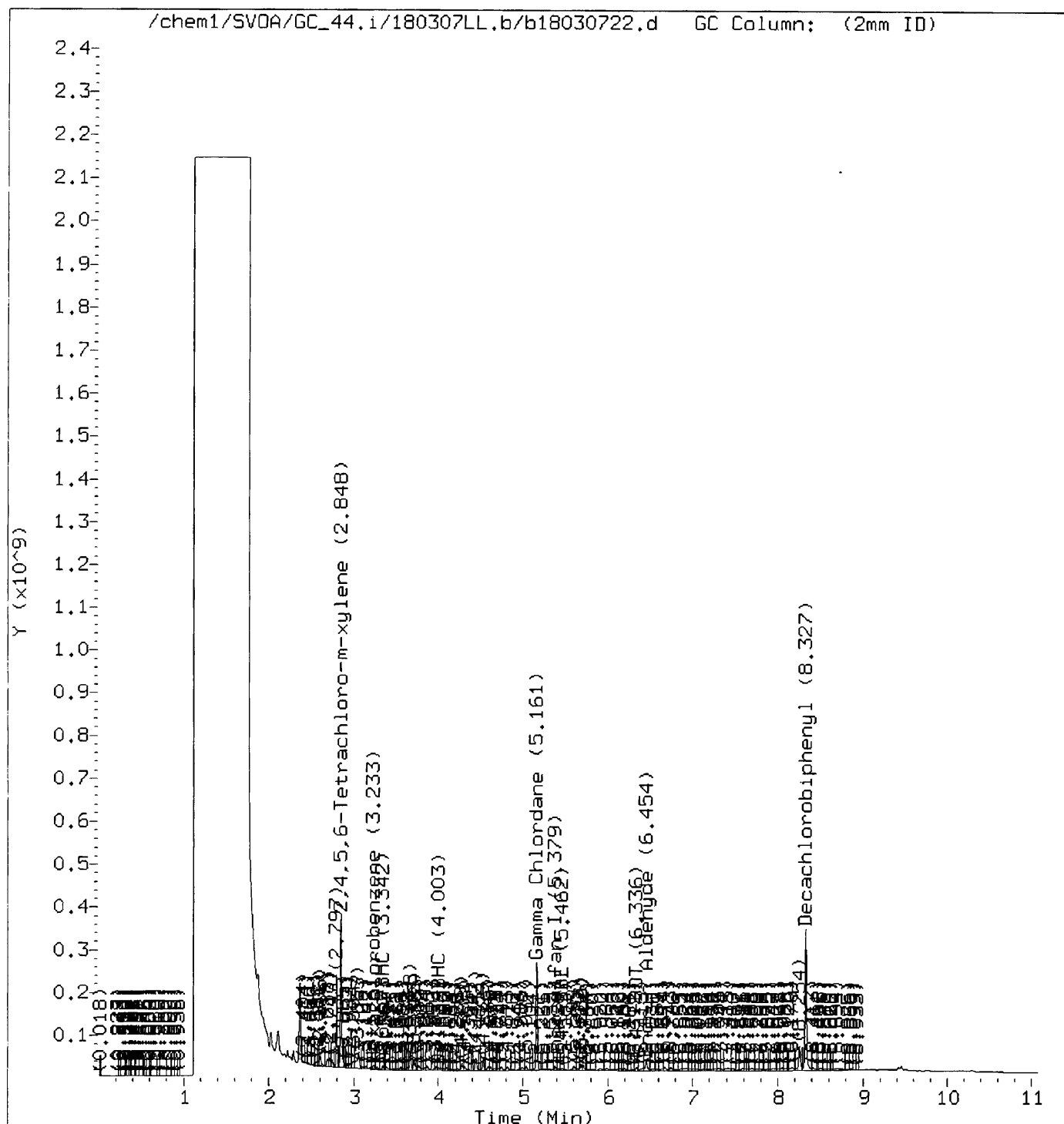
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File



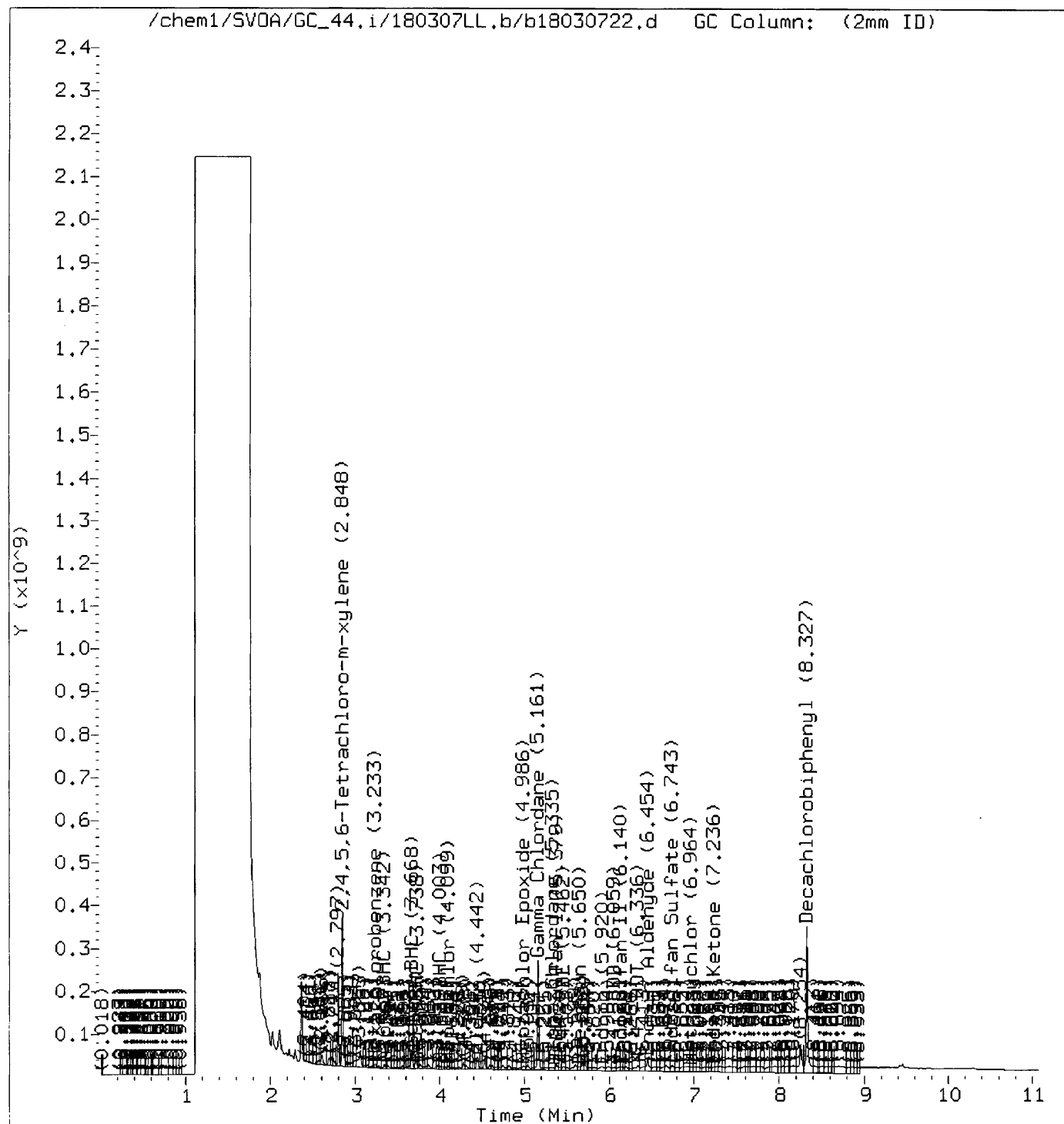
Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:02.

Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

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Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030722.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:14
Operator : UHHN
Smp Info : 18-02-1868-7
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4
Inst ID: GC_44.i
Quant Type: ESTD
Cal File: a18030530.d
Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON COLUMN (µg/g)	FINAL (µg/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030722.d

Page 1

Date : 07-MAR-2018 08:14

Client ID:

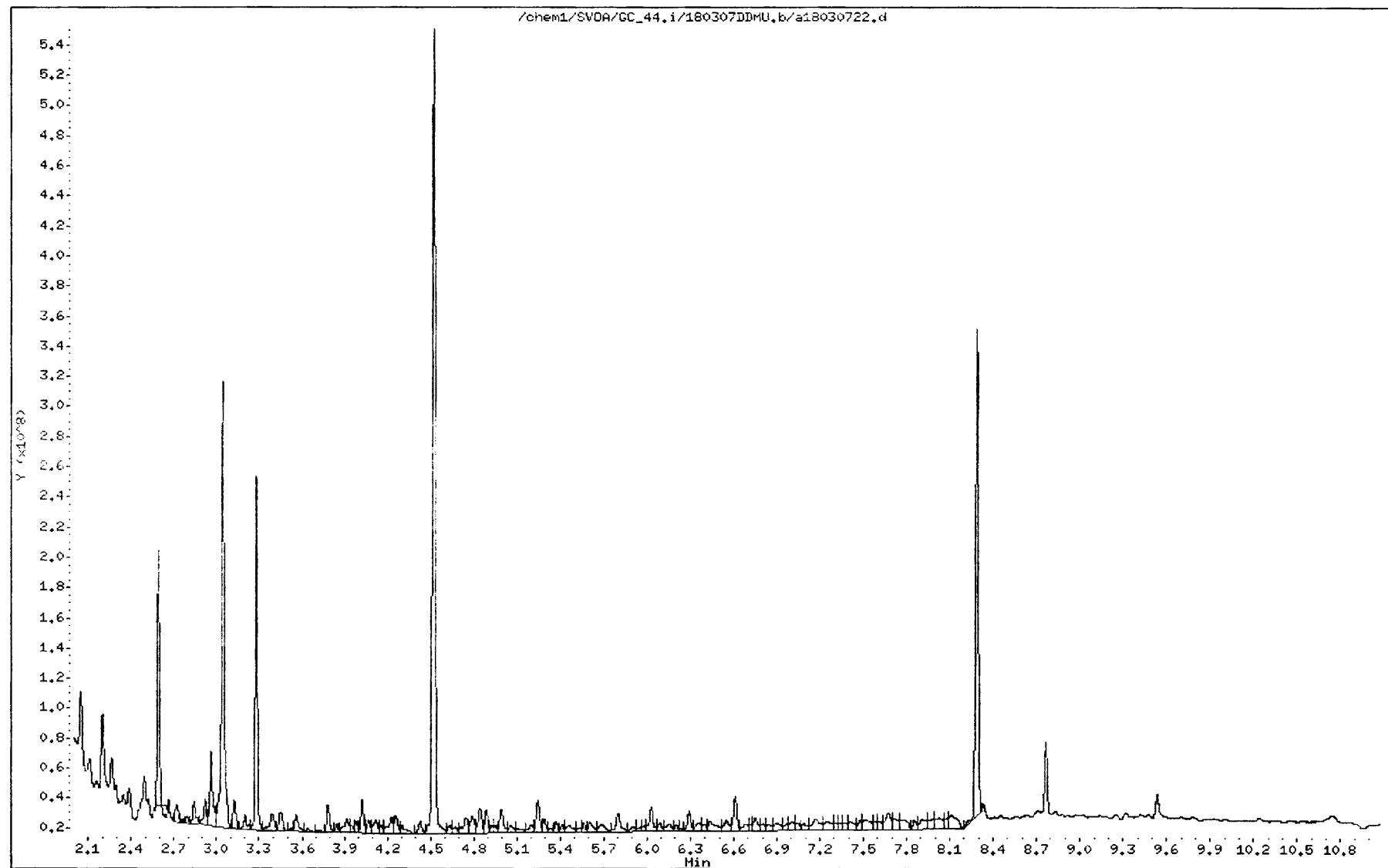
Instrument: GC_44.i

Sample Info: 18-02-1868-7

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030722.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:14
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-7
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	ON-COLUMN	FINAL
				RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU	5.161	5.122	0.039	6336469660	145.587	145.587 (A)

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030722.d

Page 1

Date : 07-MAR-2018 08:14

Client ID:

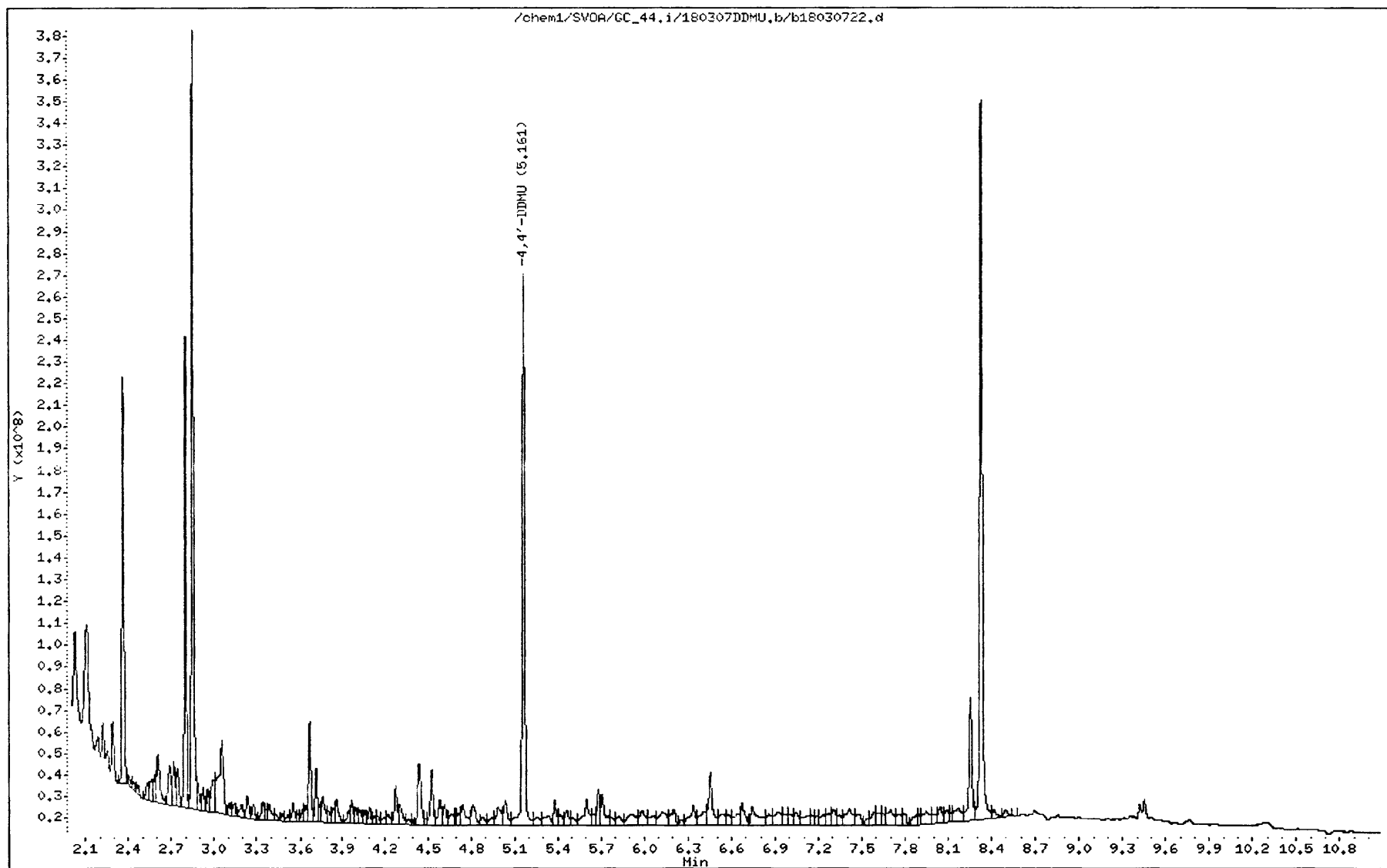
Instrument: GC_44.i

Sample Info: 18-02-1868-7

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 08:29
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072318030723

8 **CLIENT SAMPLE NUMBER:** IB-RW-15-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030723.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:29
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-8
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL
=====		==	=====	=====	=====	(ppb)	(ug/Kg)
\$	1 2,4,5,6-Tetrachloro-m-xylene	3.042	3.036	0.006	7786916993	78.1144	78.114
	2 Hexachlorobenzene	Compound Not Detected.					
	3 Alpha-BHC	Compound Not Detected.					
	4 Gamma-BHC	Compound Not Detected.					
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordan	Compound Not Detected.					
	11 2,4'-DDE	Compound Not Detected.					
	12 Heptachlor Epoxide	Compound Not Detected.					
	13 Gamma Chlordane	Compound Not Detected.					
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 4,4'-DDE	Compound Not Detected.					
	17 Endosulfan I	Compound Not Detected.					
	18 2,4'-DDD	Compound Not Detected.					
	19 Dieldrin	Compound Not Detected.					
	20 2,4'-DDT	Compound Not Detected.					
	21 Endrin	Compound Not Detected.					

							CONCENTRATIONS		
		RT	EXP	RT	DLT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
Compounds		RT	EXP	RT	DLT	RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====	=====	=====
	22 Cis-Nonachlor		Compound	Not	Detected.				
	23 4,4'-DDD		Compound	Not	Detected.				
	24 Endosulfan II		Compound	Not	Detected.				
	25 4,4'-DDT		Compound	Not	Detected.				
	26 Endrin Aldehyde		Compound	Not	Detected.				
	27 Methoxychlor		Compound	Not	Detected.				
	28 Mirex		Compound	Not	Detected.				
	29 Endosulfan Sulfate		Compound	Not	Detected.				
	30 Endrin Ketone		Compound	Not	Detected.				
\$	31 Decachlorobiphenyl	8.286	8.284	0.002	9939563532			95.2200	95.220
M	32 Chlordane		Compound	Not	Detected.				
	33 CHLD (1)		Compound	Not	Detected.				
	34 CHLD (2)		Compound	Not	Detected.				
	35 CHLD (3)		Compound	Not	Detected.				
	36 CHLD (4)		Compound	Not	Detected.				
	37 CHLD (5)		Compound	Not	Detected.				
M	38 Toxaphene		Compound	Not	Detected.				
	39 TOXAPHENE (1)		Compound	Not	Detected.				
	40 TOXAPHENE (2)		Compound	Not	Detected.				
	41 TOXAPHENE (3)		Compound	Not	Detected.				
	42 TOXAPHENE (4)		Compound	Not	Detected.				
	43 TOXAPHENE (5)		Compound	Not	Detected.				

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030723.d

Page 1

Date : 07-MAR-2018 08:29

Client ID:

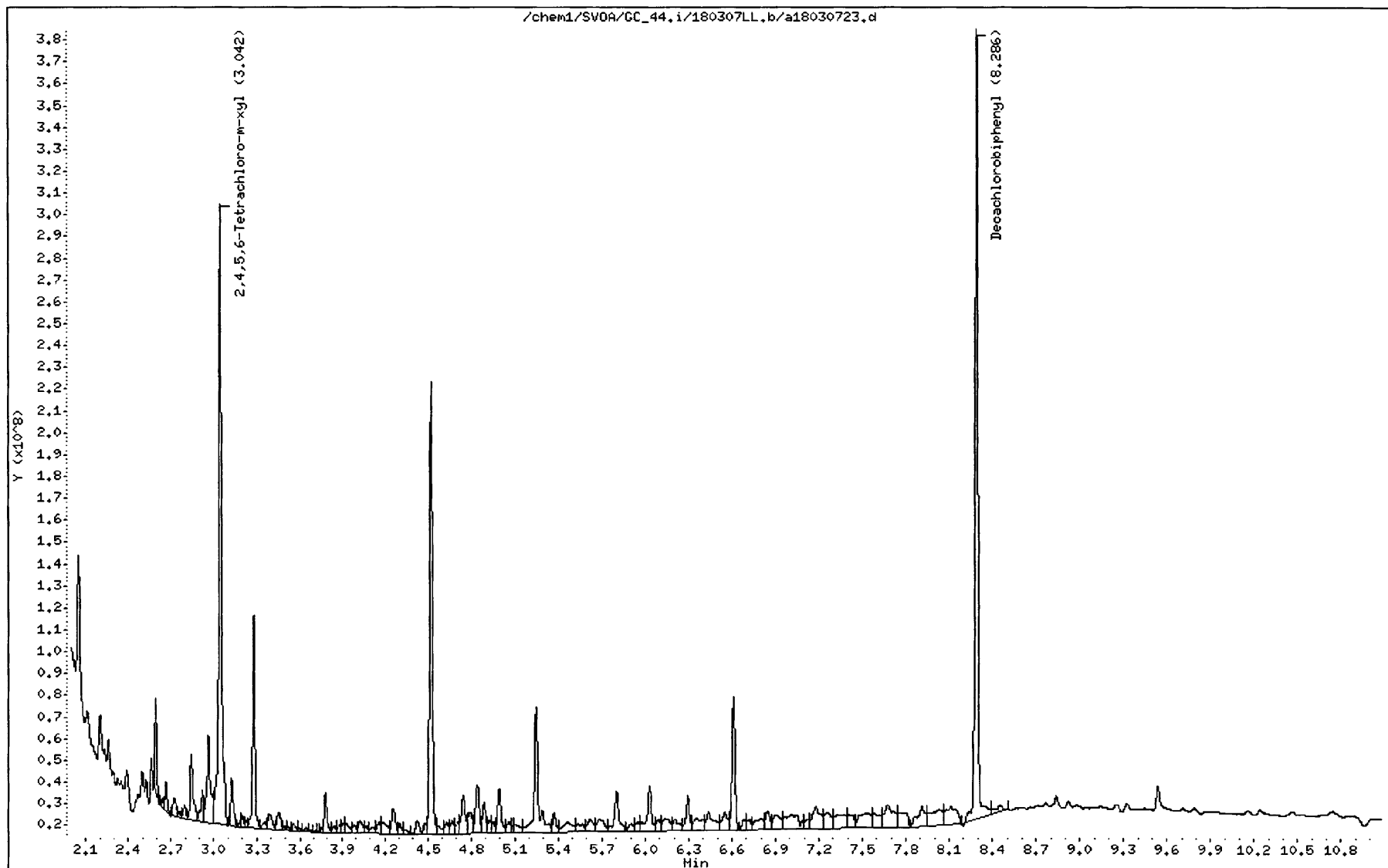
Instrument: GC_44.i

Sample Info: 18-02-1868-8

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030723.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:29
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-8
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL
=====		==	=====	=====	=====	(ppb)	(ug/Kg)
T	1 2,4,5,6-Tetrachloro-m-xylene	2.848	2.842	0.006	7336106323	69.0125	69.012
	2 Hexachlorobenzene	Compound Not Detected.					
	3 Alpha-BHC	Compound Not Detected.					
	4 Gamma-BHC	Compound Not Detected.					
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordan	Compound Not Detected.					
	11 Heptachlor Epoxide	Compound Not Detected.					
	12 2,4'-DDE	5.161	5.155	0.006	2282042605	25.6177	25.617 (M)
	13 Gamma Chlordane	5.161	5.162	-0.001	2282042605	17.4980	17.498
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	Compound Not Detected.					
	17 4,4'-DDE	5.462	5.463	-0.001	150097281	1.26736	1.267 (a)
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT	6.335	6.325	0.010	334956331	3.35293	3.352		
26 Endrin Aldehyde	6.454	6.450	0.004	1727642028	19.2116	19.211		
27 Endosulfan Sulfate						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Methoxychlor						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
T 31 Decachlorobiphenyl	8.327	8.325	0.002	8959356274	92.7191	92.719 (A)		
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030723.d

Date : 07-MAR-2018 08:29

Client ID:

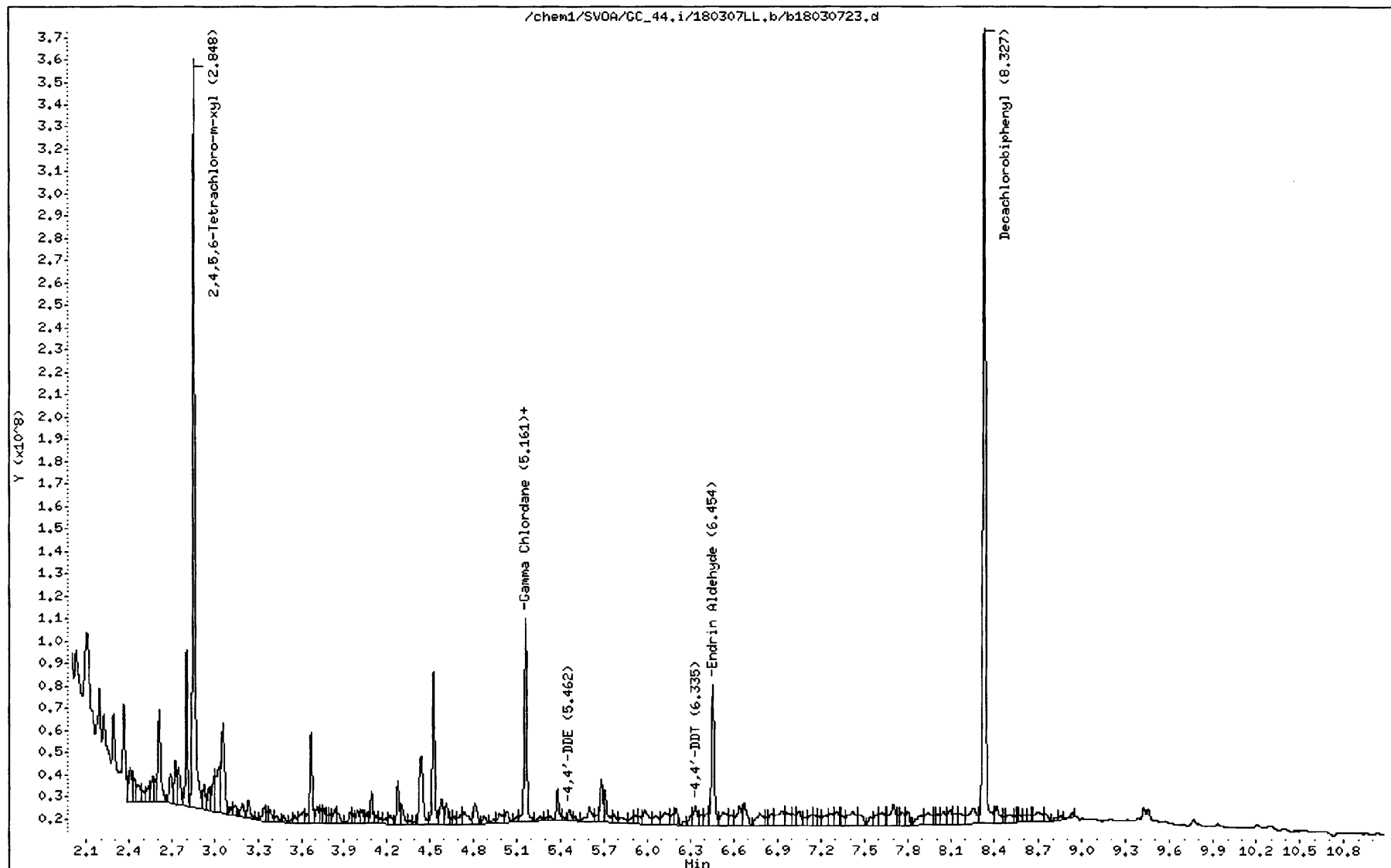
Sample Info: 18-02-1868-8

Instrument: GC_44.i

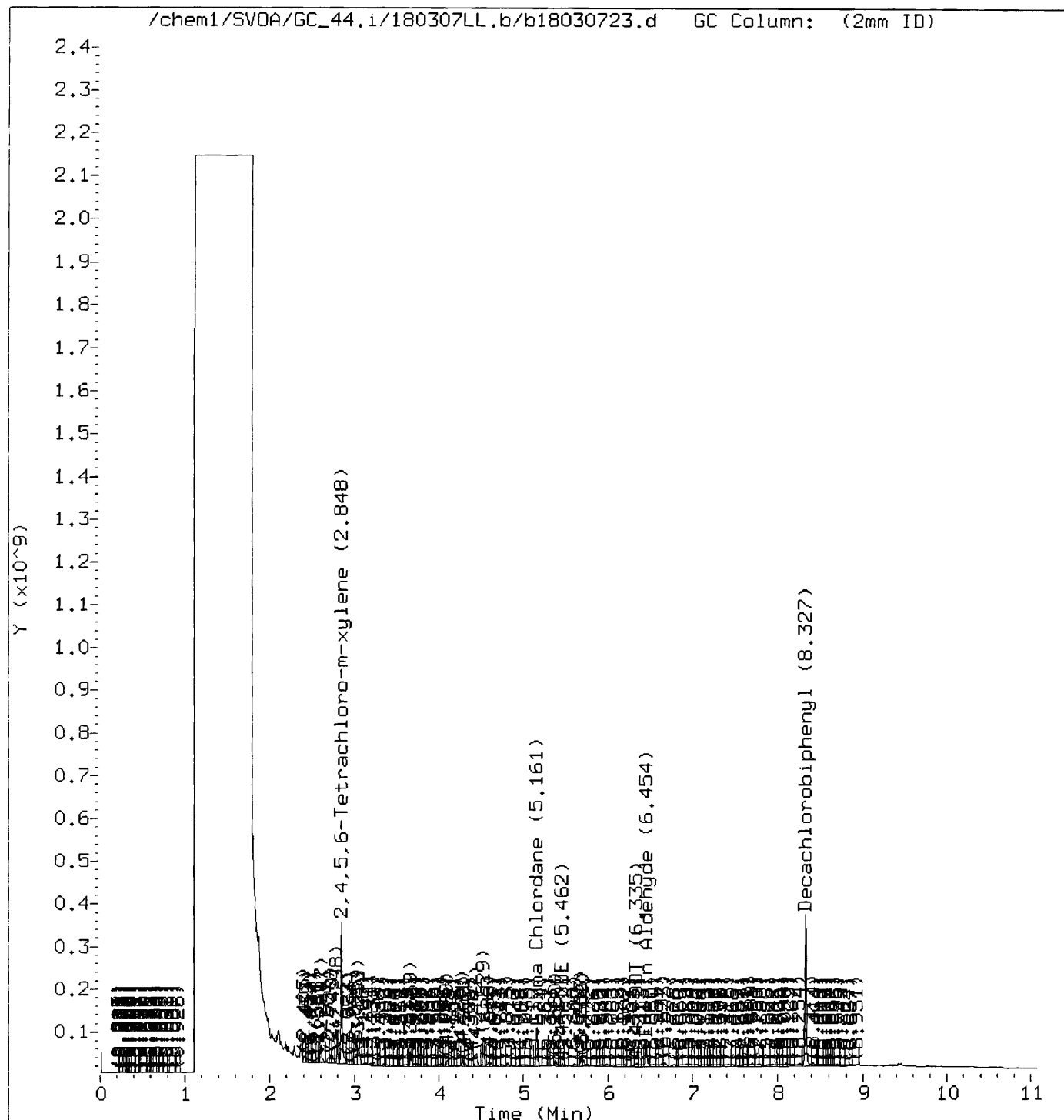
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File



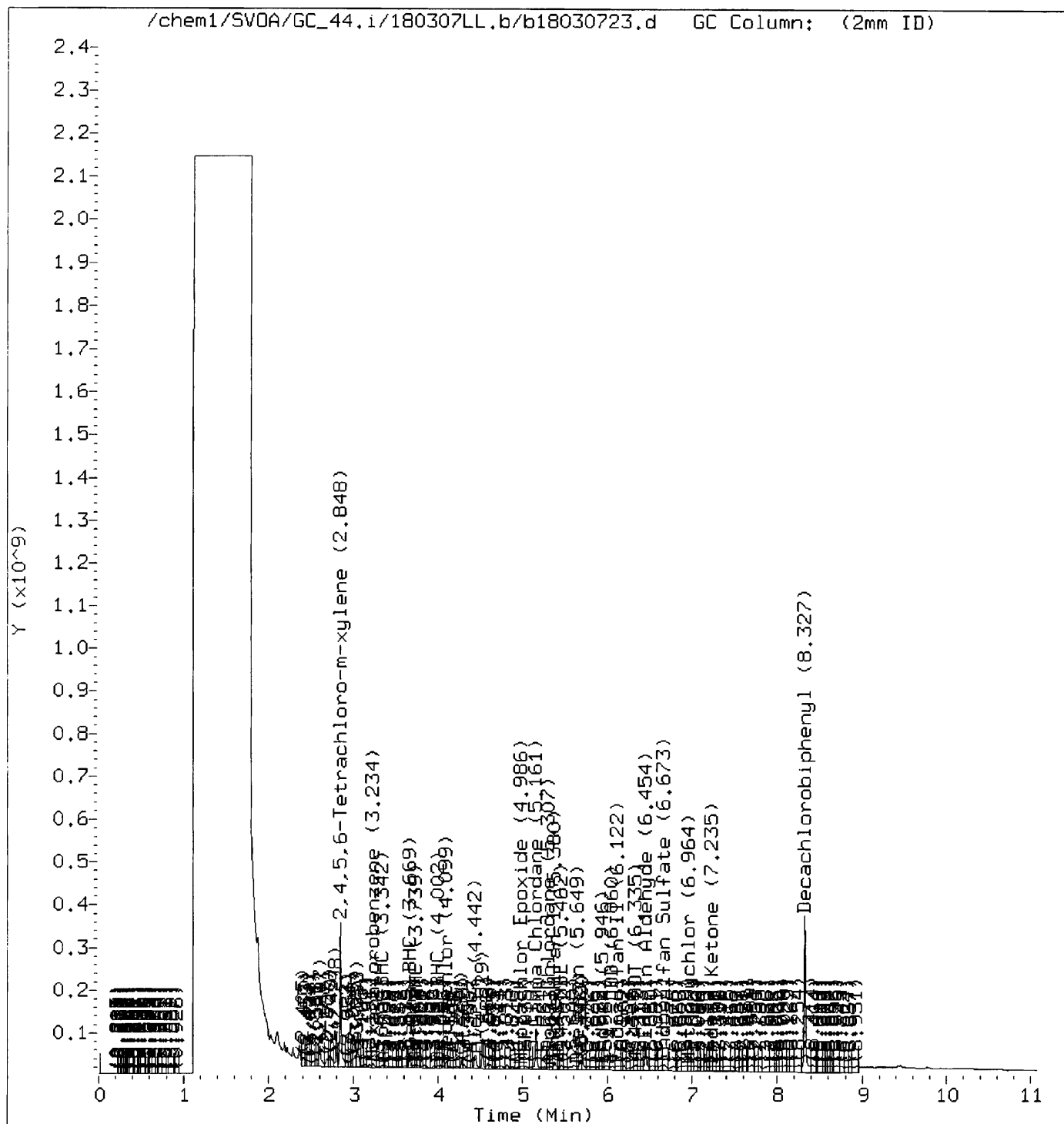
Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:03.

Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

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Data File: /chem1/SVOA/GC_44.i/180307DDMU.b/a18030723.d
Report Date: 09-Mar-2018 17:58

Page 1

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030723.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:29
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-8
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	====	=====	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SV0A/GC_44.i/180307DDMU,b/a18030723.d

Page 1

Date : 07-MAR-2018 08:29

Client ID:

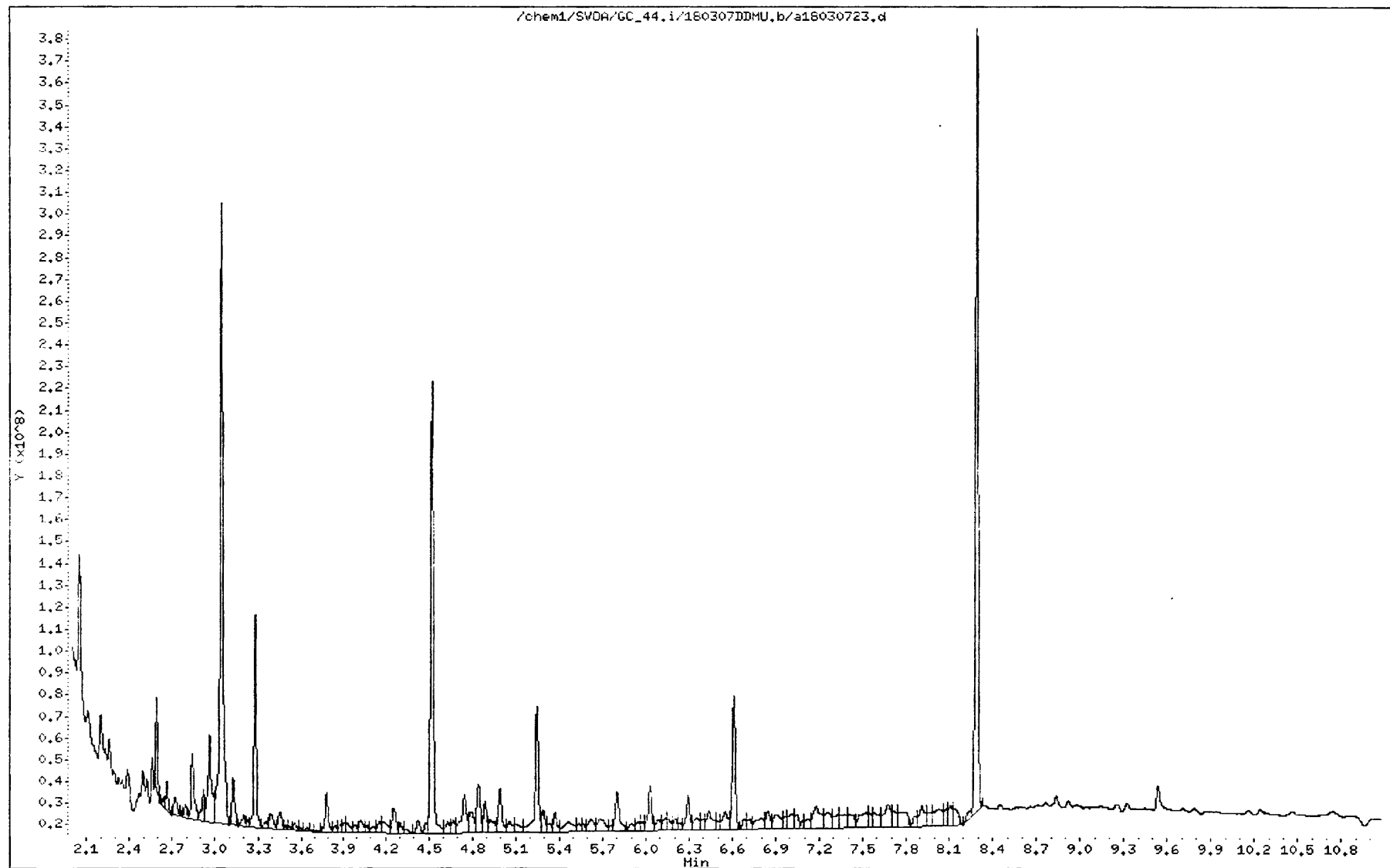
Instrument: GC_44.i

Sample Info: 18-02-1868-8

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030723.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:29
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-8
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.161	5.122	0.039	3383171869	77.7320	77.732

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030723.d

Page 1

Date : 07-MAR-2018 08:29

Client ID:

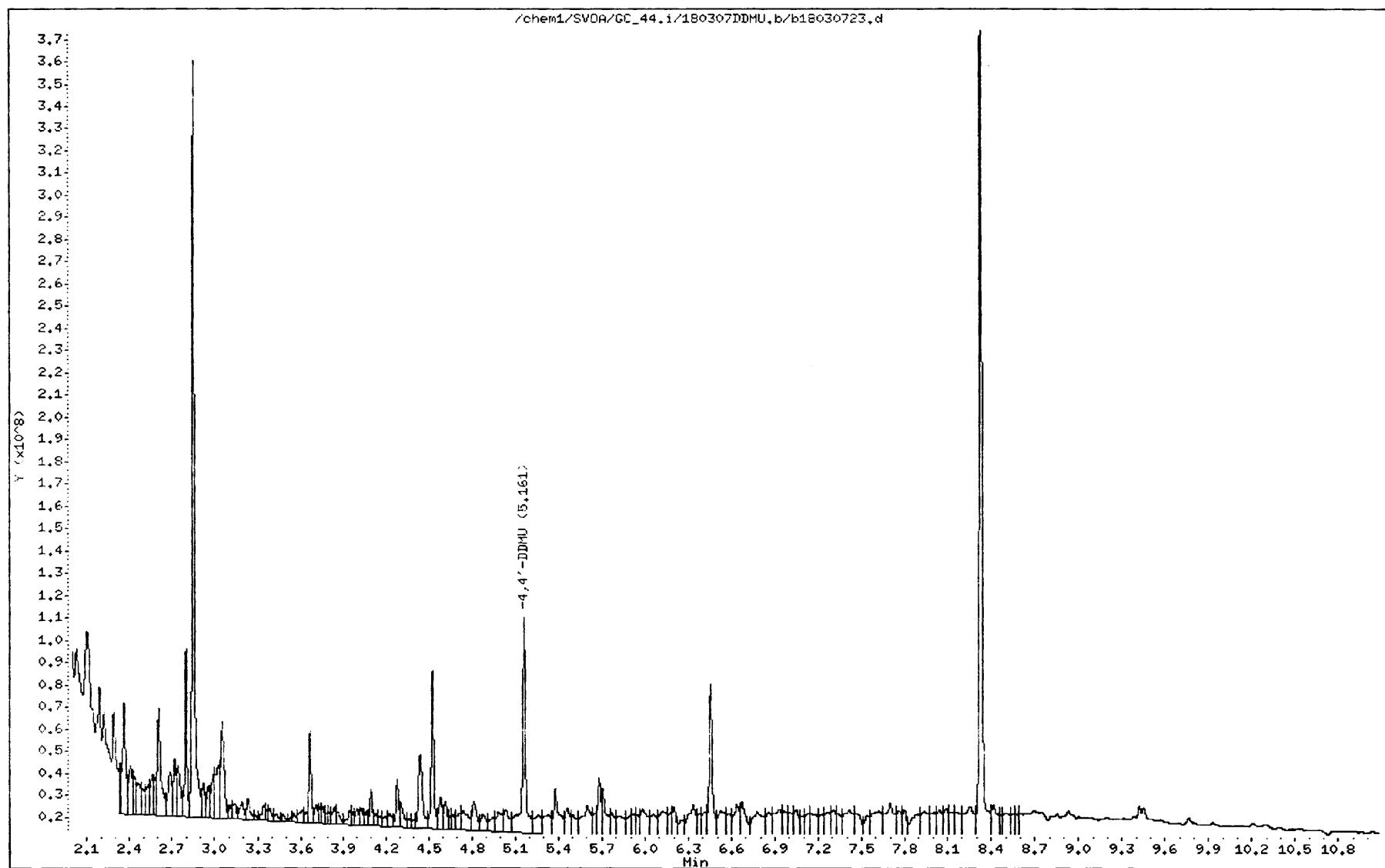
Instrument: GC_44.i

Sample Info: 18-02-1868-8

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 08:43
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072418030724

11 **CLIENT SAMPLE NUMBER:** OB-RW-16-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

```
Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030724.d
Lab Smp Id:
Inj Date  : 07-MAR-2018 08:43
Operator  : UHHN                               Inst ID: GC_44.i
Smp Info  : 18-02-1868-11
Misc Info :
Comment   :
Method    : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn             Quant Type: ESTD
Cal Date  : 05-MAR-2018 11:34                 Cal File: a18030502.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP Genie                           Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4
```

Cpnd Variable	Local Compound Variable
1	1
2	2
3	3
4	4
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90	90
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94	94
95	95
96	96
97	97
98	98
99	99
100	100

						CONCENTRATIONS	
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$	1 2,4,5,6-Tetrachloro-m-xylene	3.041	3.036	0.005	7357691165	73.8087	73.808
	2 Hexachlorobenzene	3.386	3.382	0.004	1089193536	7.50377	7.503
	3 Alpha-BHC		Compound	Not Detected.			
	4 Gamma-BHC		Compound	Not Detected.			
	5 Beta-BHC		Compound	Not Detected.			
	6 Delta-BHC		Compound	Not Detected.			
	7 Heptachlor		Compound	Not Detected.			
	8 Aldrin		Compound	Not Detected.			
	9 4,4'-Dichlorobenzophenone		Compound	Not Detected.			
	10 Oxychlordane		Compound	Not Detected.			
	11 2,4'-DDE		Compound	Not Detected.			
	12 Heptachlor Epoxide		Compound	Not Detected.			
	13 Gamma Chlordane		Compound	Not Detected.			
	14 Trans-Nonachlor		Compound	Not Detected.			
	15 Alpha Chlordane		Compound	Not Detected.			
	16 4,4'-DDE		Compound	Not Detected.			
	17 Endosulfan I		Compound	Not Detected.			
	18 2,4'-DDD		Compound	Not Detected.			
	19 Dieldrin		Compound	Not Detected.			
	20 2,4'-DDT		Compound	Not Detected.			
	21 Endrin		Compound	Not Detected.			

							CONCENTRATIONS	
							ON-COLUMN	FINAL
Compounds	RT	EXP	RT	DLT	RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor		Compound	Not	Detected.				
23 4,4'-DDD		Compound	Not	Detected.				
24 Endosulfan II		Compound	Not	Detected.				
25 4,4'-DDT		Compound	Not	Detected.				
26 Endrin Aldehyde		Compound	Not	Detected.				
27 Methoxychlor		Compound	Not	Detected.				
28 Mirex		Compound	Not	Detected.				
29 Endosulfan Sulfate		Compound	Not	Detected.				
30 Endrin Ketone		Compound	Not	Detected.				
\$ 31 Decachlorobiphenyl	8.285	8.284	0.001	9849525007		94.3575	94.357	
M 32 Chlordane		Compound	Not	Detected.				
33 CHLD (1)		Compound	Not	Detected.				
34 CHLD (2)		Compound	Not	Detected.				
35 CHLD (3)		Compound	Not	Detected.				
36 CHLD (4)		Compound	Not	Detected.				
37 CHLD (5)		Compound	Not	Detected.				
M 38 Toxaphene		Compound	Not	Detected.				
39 TOXAPHENE (1)		Compound	Not	Detected.				
40 TOXAPHENE (2)		Compound	Not	Detected.				
41 TOXAPHENE (3)		Compound	Not	Detected.				
42 TOXAPHENE (4)		Compound	Not	Detected.				
43 TOXAPHENE (5)		Compound	Not	Detected.				

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030724.d

Page 1

Date : 07-MAR-2018 08:43

Client ID:

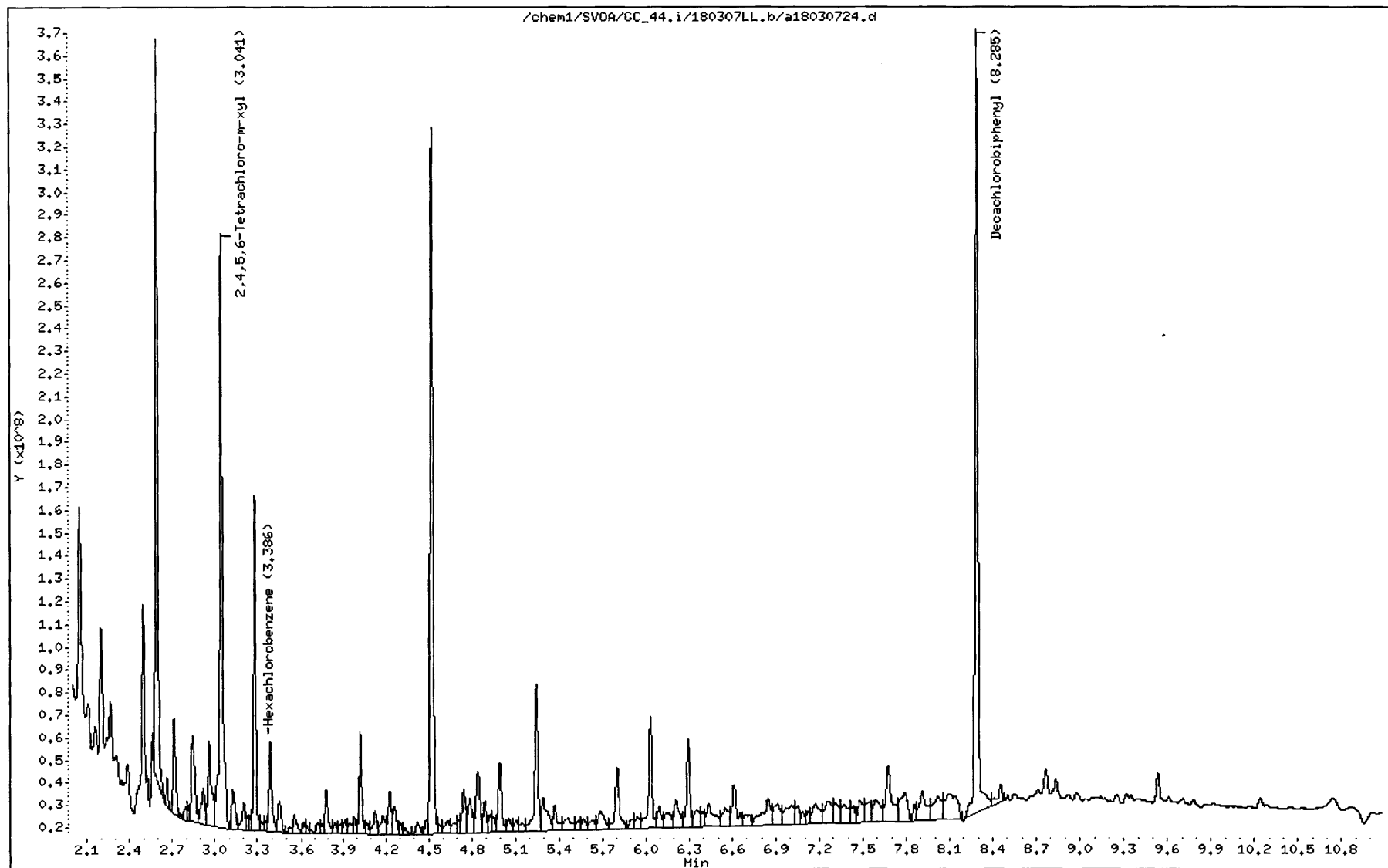
Instrument: GC_44.i

Sample Info: 18-02-1868-11

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030724.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:43
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-11
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS				
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene	2.847	2.842	0.005	6812802672	64.0897	64.089
2 Hexachlorobenzene	3.231	3.226	0.005	1073116249	6.92698	6.926
3 Alpha-BHC	3.341	3.337	0.004	333972113	1.83939	1.839 (aH)
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordane	Compound Not Detected.					
11 Heptachlor Epoxide	Compound Not Detected.					
12 2,4'-DDE	5.161	5.155	0.006	3646589458	40.9357	40.935 (M)
13 Gamma Chlordane	5.161	5.162	-0.001	3646589458	27.9609	27.960
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 Endosulfan I	5.380	5.366	0.014	597776122	5.08858	5.088
17 4,4'-DDE	5.462	5.463	-0.001	263985113	2.22898	2.228
18 Dieldrin	Compound Not Detected.					
19 2,4'-DDD	Compound Not Detected.					
20 Endrin	Compound Not Detected.					
21 2,4'-DDT	Compound Not Detected.					

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor				Compound Not Detected.		
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT	6.336	6.325	0.011	396054275	3.96453	3.964
26 Endrin Aldehyde	6.453	6.450	0.003	1056303407	11.7462	11.746 (H)
27 Endosulfan Sulfate				Compound Not Detected.		
28 Mirex				Compound Not Detected.		
29 Methoxychlor				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
T 31 Decachlorobiphenyl	8.326	8.325	0.001	8702808314	90.0641	90.064 (A)
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030724.d

Page 1

Date : 07-MAR-2018 08:43

Client ID:

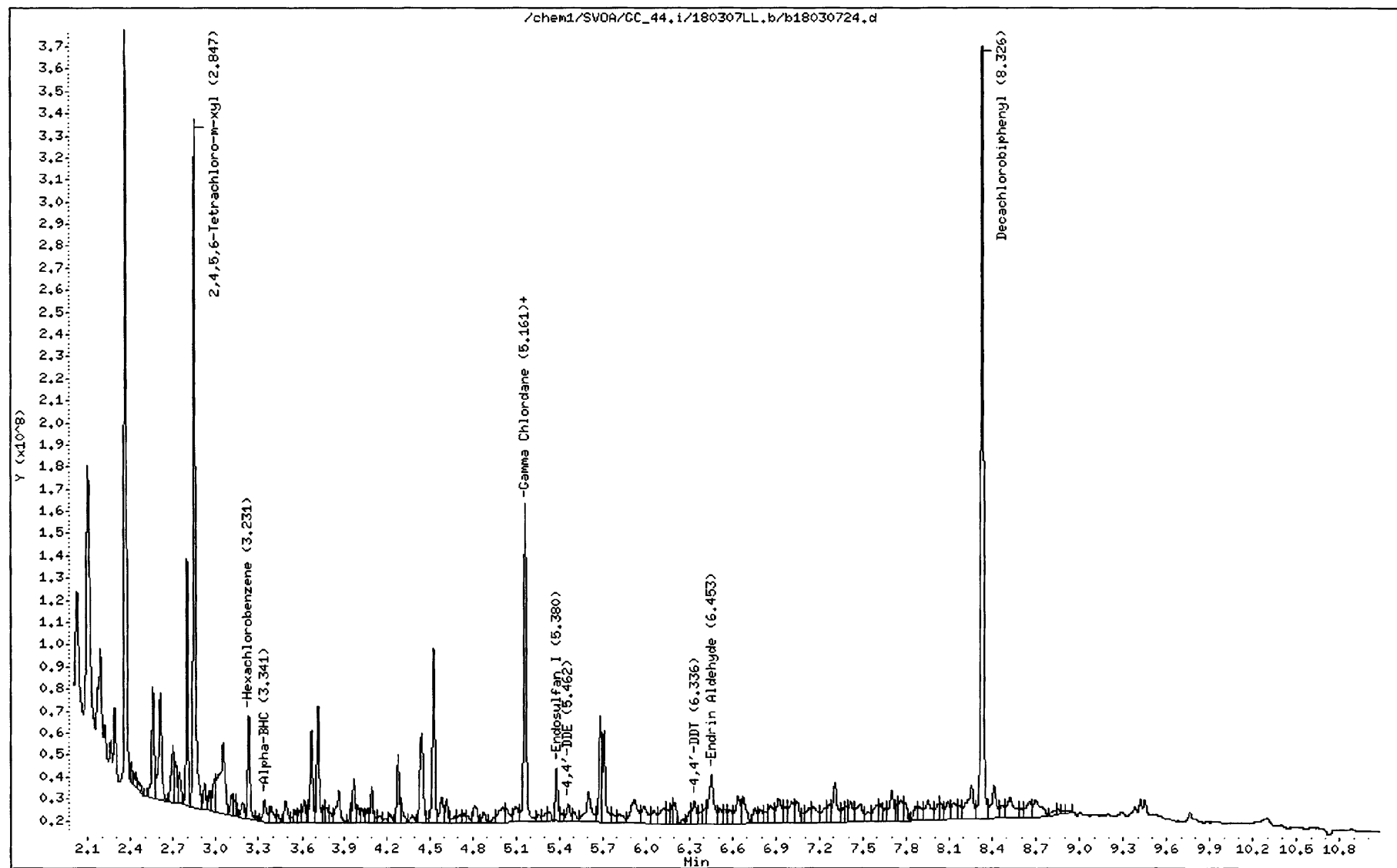
Instrument: GC_44.i

Sample Info: 18-02-1868-11

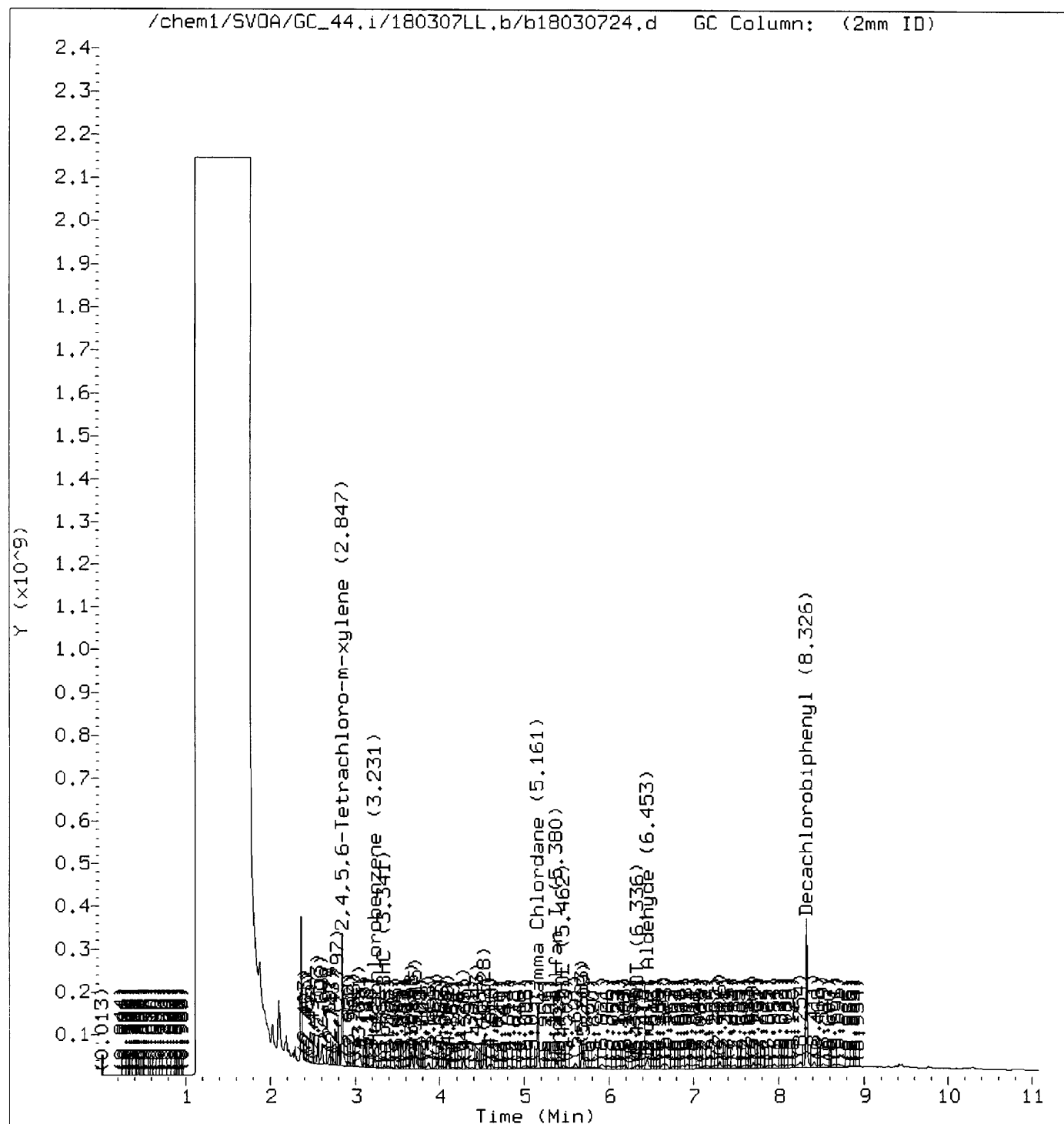
Operator: UHHN

Column phase:

Column diameter: 2.00



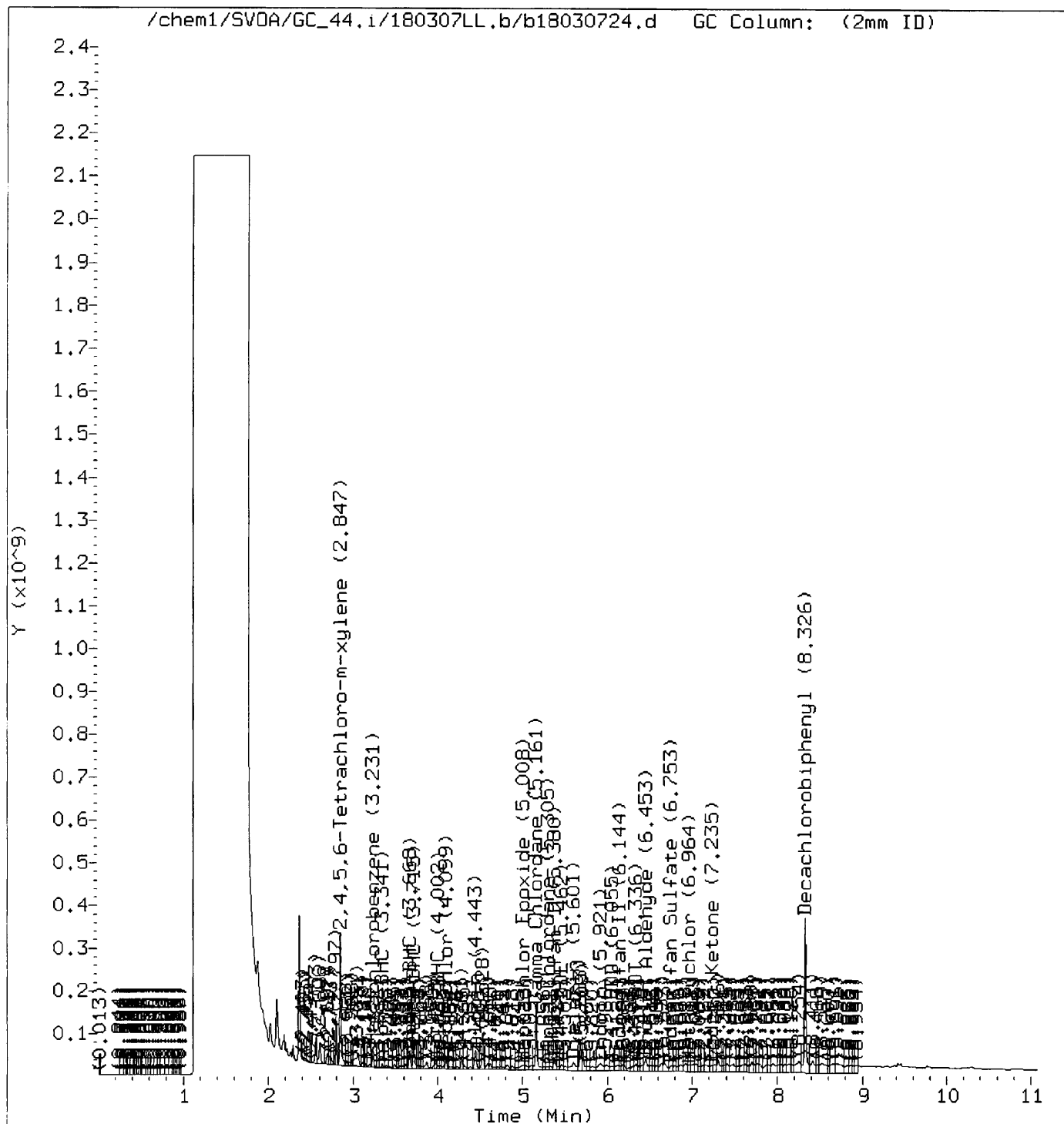
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:03.
Target 3.5 esignature user ID: uhhn

Audit/management approval: 142



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030724.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:43
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-11
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
2,4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030724.d

Page 1

Date : 07-MAR-2018 08:43

Client ID:

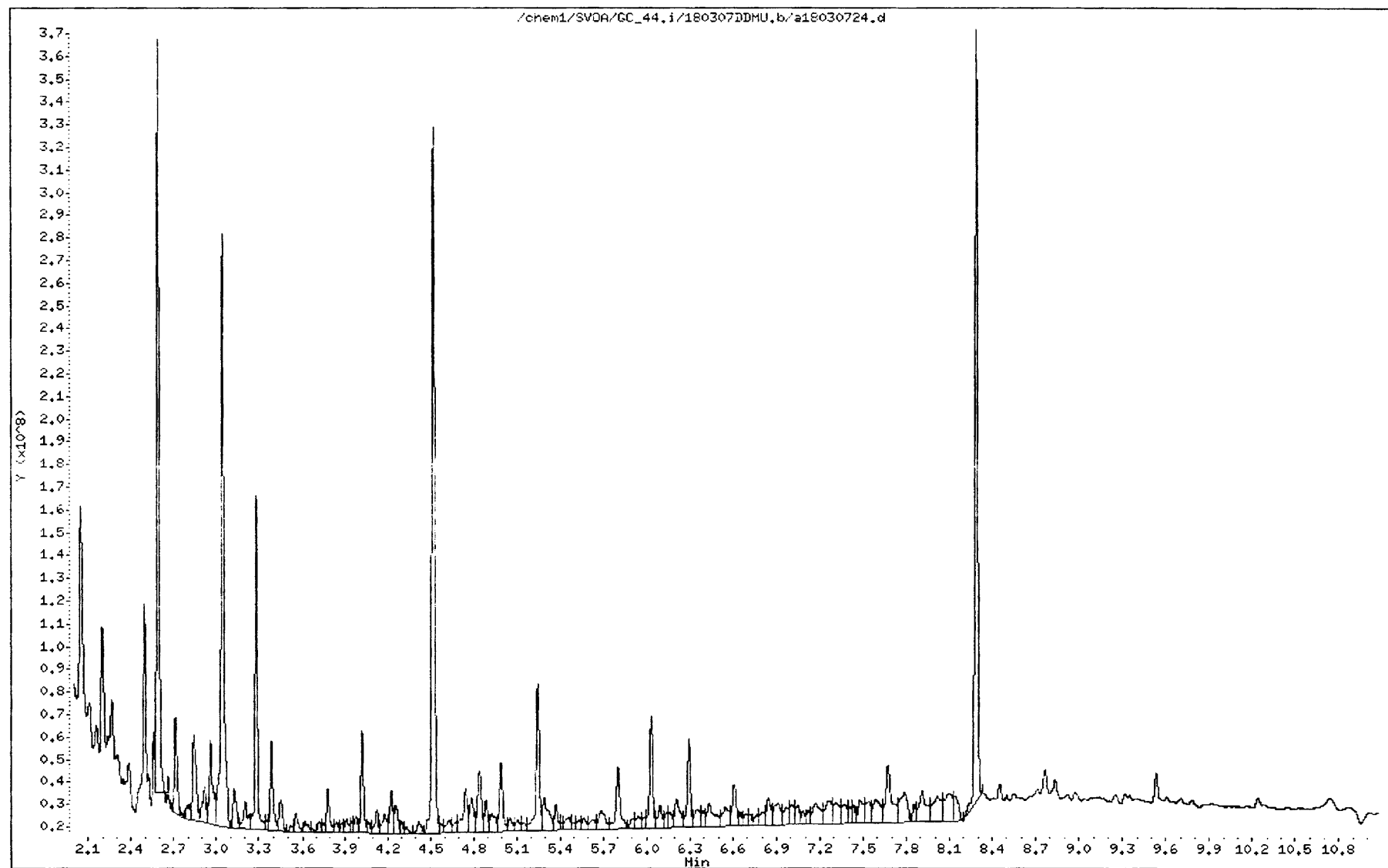
Instrument: GC_44.i

Sample Info: 18-02-1868-11

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030724.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:43
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-11
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN	FINAL
					(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU	5.098	5.122	-0.024	552091219	12.6849	12.684

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030724.d

Page 1

Date : 07-MAR-2018 08:43

Client ID:

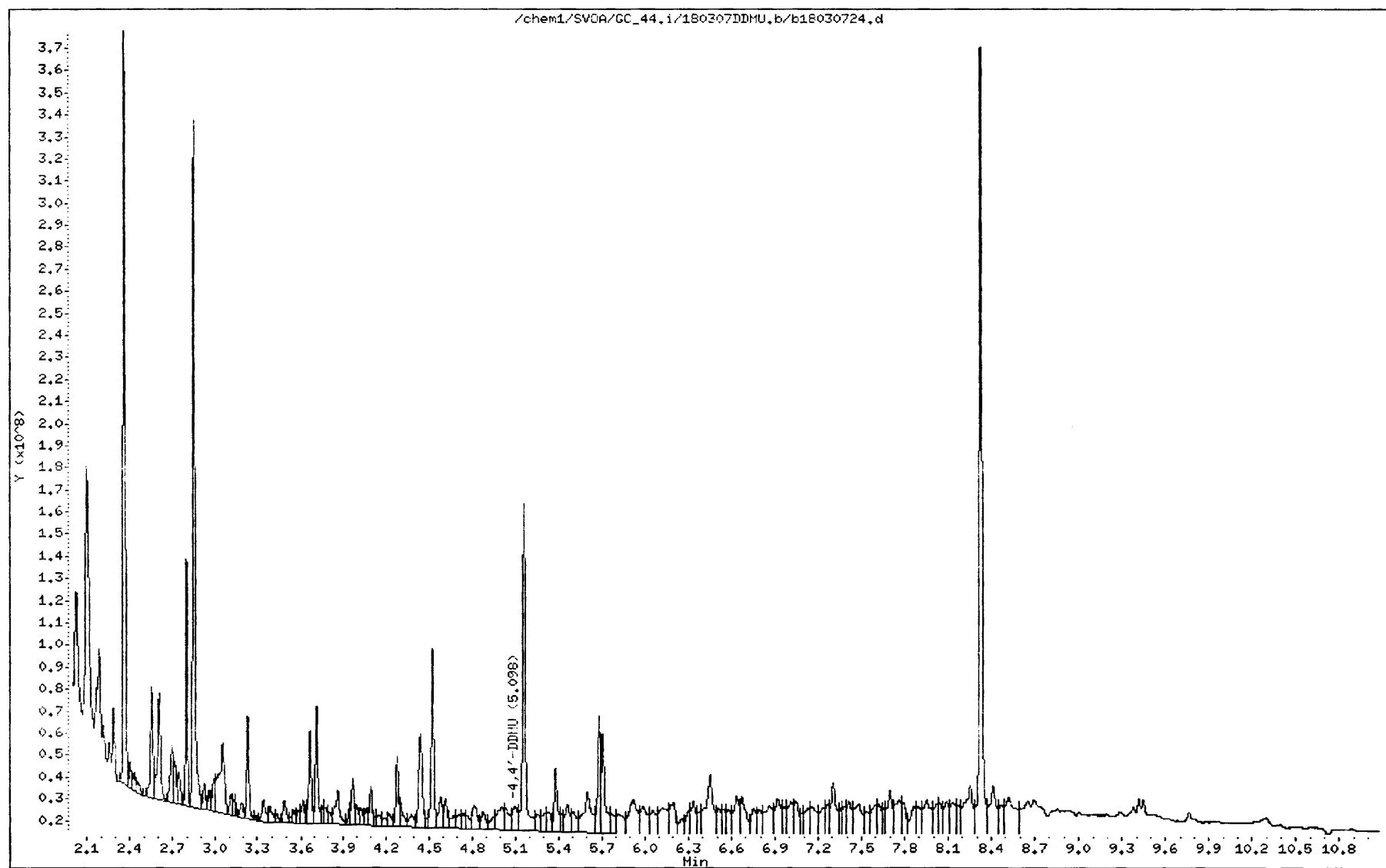
Instrument: GC_44.i

Sample Info: 18-02-1868-11

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 08:57
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072518030725

14 **CLIENT SAMPLE NUMBER:** OB-RW-17-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030725.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds		CONCENTRATIONS				
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN FINAL
					(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====
\$ 1	2,4,5,6-Tetrachloro-m-xylene	3.040	3.036	0.004	7302489436	73.2549 73.254
2	Hexachlorobenzene	Compound Not Detected.				
3	Alpha-BHC	Compound Not Detected.				
4	Gamma-BHC	Compound Not Detected.				
5	Beta-BHC	Compound Not Detected.				
6	Delta-BHC	Compound Not Detected.				
7	Heptachlor	Compound Not Detected.				
8	Aldrin	Compound Not Detected.				
9	4,4'-Dichlorobenzophenone	Compound Not Detected.				
10	Oxychlordane	Compound Not Detected.				
11	2,4'-DDE	Compound Not Detected.				
12	Heptachlor Epoxide	Compound Not Detected.				
13	Gamma Chlordane	Compound Not Detected.				
14	Trans-Nonachlor	Compound Not Detected.				
15	Alpha Chlordane	Compound Not Detected.				
16	4,4'-DDE	Compound Not Detected.				
17	Endosulfan I	Compound Not Detected.				
18	2,4'-DDD	Compound Not Detected.				
19	Dieldrin	Compound Not Detected.				
20	2,4'-DDT	Compound Not Detected.				
21	Endrin	Compound Not Detected.				

							CONCENTRATIONS		
							ON-COLUMN	FINAL	
Compounds		RT	EXP	RT	DLT	RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====	=====	=====
	22 Cis-Nonachlor		Compound	Not	Detected.				
	23 4,4'-DDD		Compound	Not	Detected.				
	24 Endosulfan II		Compound	Not	Detected.				
	25 4,4'-DDT		Compound	Not	Detected.				
	26 Endrin Aldehyde		Compound	Not	Detected.				
	27 Methoxychlor		Compound	Not	Detected.				
	28 Mirex		Compound	Not	Detected.				
	29 Endosulfan Sulfate		Compound	Not	Detected.				
	30 Endrin Ketone		Compound	Not	Detected.				
\$	31 Decachlorobiphenyl	8.285	8.284	0.001	9485039277		90.8657	90.865	
M	32 Chlordane		Compound	Not	Detected.				
	33 CHLD (1)		Compound	Not	Detected.				
	34 CHLD (2)		Compound	Not	Detected.				
	35 CHLD (3)		Compound	Not	Detected.				
	36 CHLD (4)		Compound	Not	Detected.				
	37 CHLD (5)		Compound	Not	Detected.				
M	38 Toxaphene		Compound	Not	Detected.				
	39 TOXAPHENE (1)		Compound	Not	Detected.				
	40 TOXAPHENE (2)		Compound	Not	Detected.				
	41 TOXAPHENE (3)		Compound	Not	Detected.				
	42 TOXAPHENE (4)		Compound	Not	Detected.				
	43 TOXAPHENE (5)		Compound	Not	Detected.				

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030725.d

Page 1

Date : 07-MAR-2018 08:57

Client ID:

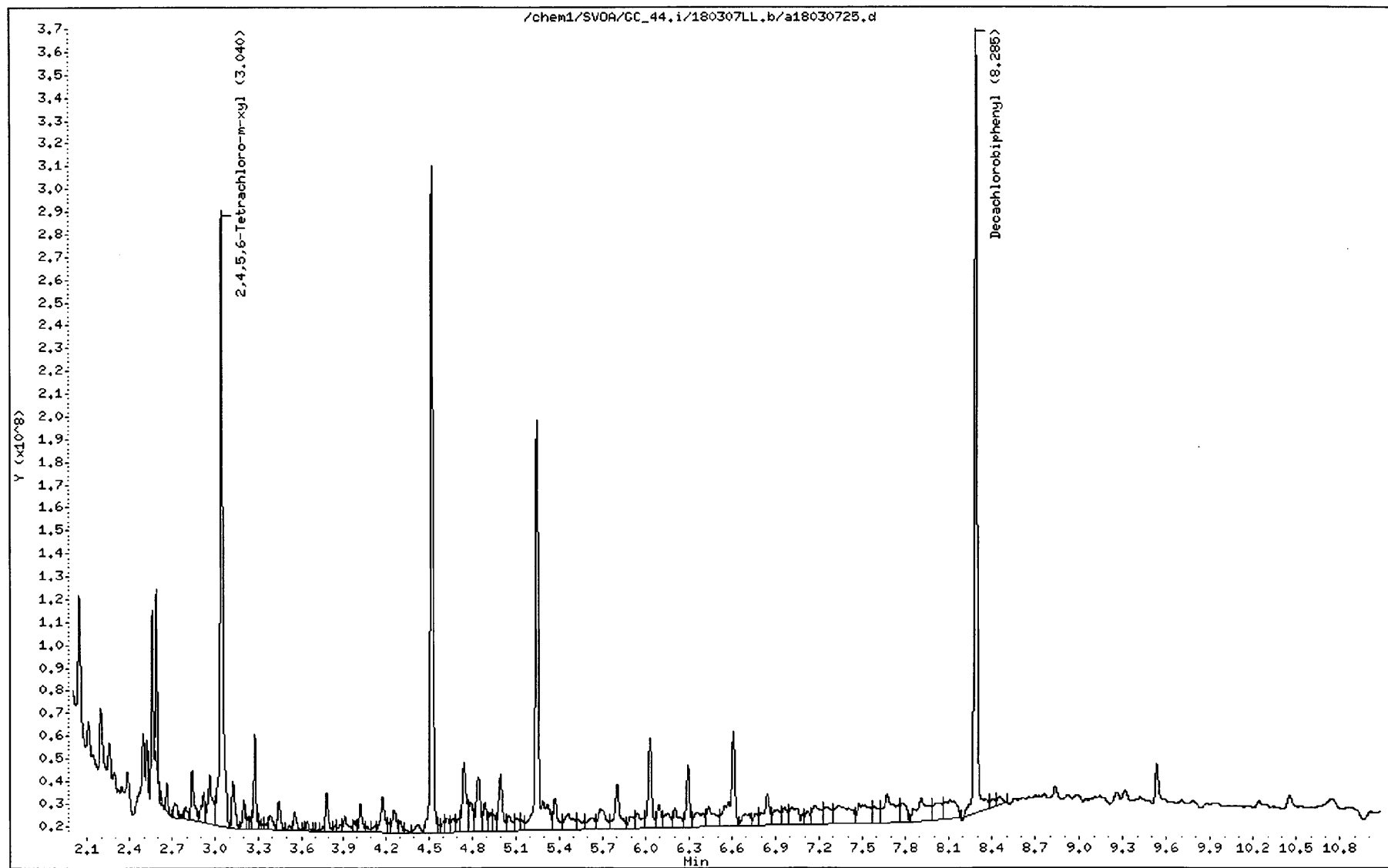
Instrument: GC_44.i

Sample Info: 18-02-1868-14

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030725.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene		2.846	2.842	0.004	6976136252	65.6262	65.626
2 Hexachlorobenzene		3.233	3.226	0.007	234708369	1.51505	1.515 (a)
3 Alpha-BHC		3.341	3.337	0.004	376049984	2.07114	2.071
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		Compound Not Detected.					
10 Oxychlordan		Compound Not Detected.					
11 Heptachlor Epoxide		Compound Not Detected.					
12 2,4'-DDE		5.160	5.155	0.005	3233598564	36.2996	36.299 (M)
13 Gamma Chlordane		5.160	5.162	-0.002	3233598564	24.7943	24.794
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 Endosulfan I		5.380	5.366	0.014	434975637	3.70273	3.702
17 4,4'-DDE		5.463	5.463	0.000	299570408	2.52944	2.529
18 Dieldrin		Compound Not Detected.					
19 2,4'-DDD		Compound Not Detected.					
20 Endrin		5.923	5.929	-0.006	446179731	3.70995	3.709 (M)
21 2,4'-DDT		Compound Not Detected.					

					CONCENTRATIONS	
Compounds	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor		Compound	Not	Detected.		
23 4,4'-DDD		Compound	Not	Detected.		
24 Endosulfan II		Compound	Not	Detected.		
25 4,4'-DDT	6.336	6.325	0.011	340110289	3.40452	3.404
26 Endrin Aldehyde	6.455	6.450	0.005	1348211495	14.9923	14.992
27 Endosulfan Sulfate		Compound	Not	Detected.		
28 Mirex		Compound	Not	Detected.		
29 Methoxychlor		Compound	Not	Detected.		
30 Endrin Ketone		Compound	Not	Detected.		
T 31 Decachlorobiphenyl	8.326	8.325	0.001	8449161613	87.4391	87.439 (A)
M 32 Chlordane		Compound	Not	Detected.		
33 CHLD (1)		Compound	Not	Detected.		
34 CHLD (2)		Compound	Not	Detected.		
35 CHLD (3)		Compound	Not	Detected.		
36 CHLD (4)		Compound	Not	Detected.		
37 CHLD (5)		Compound	Not	Detected.		
M 38 Toxaphene		Compound	Not	Detected.		
39 TOXAPHENE (1)		Compound	Not	Detected.		
40 TOXAPHENE (2)		Compound	Not	Detected.		
41 TOXAPHENE (3)		Compound	Not	Detected.		
42 TOXAPHENE (4)		Compound	Not	Detected.		
43 TOXAPHENE (5)		Compound	Not	Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030725.d

Date : 07-MAR-2018 08:57

Client ID:

Sample Info: 18-02-1868-14

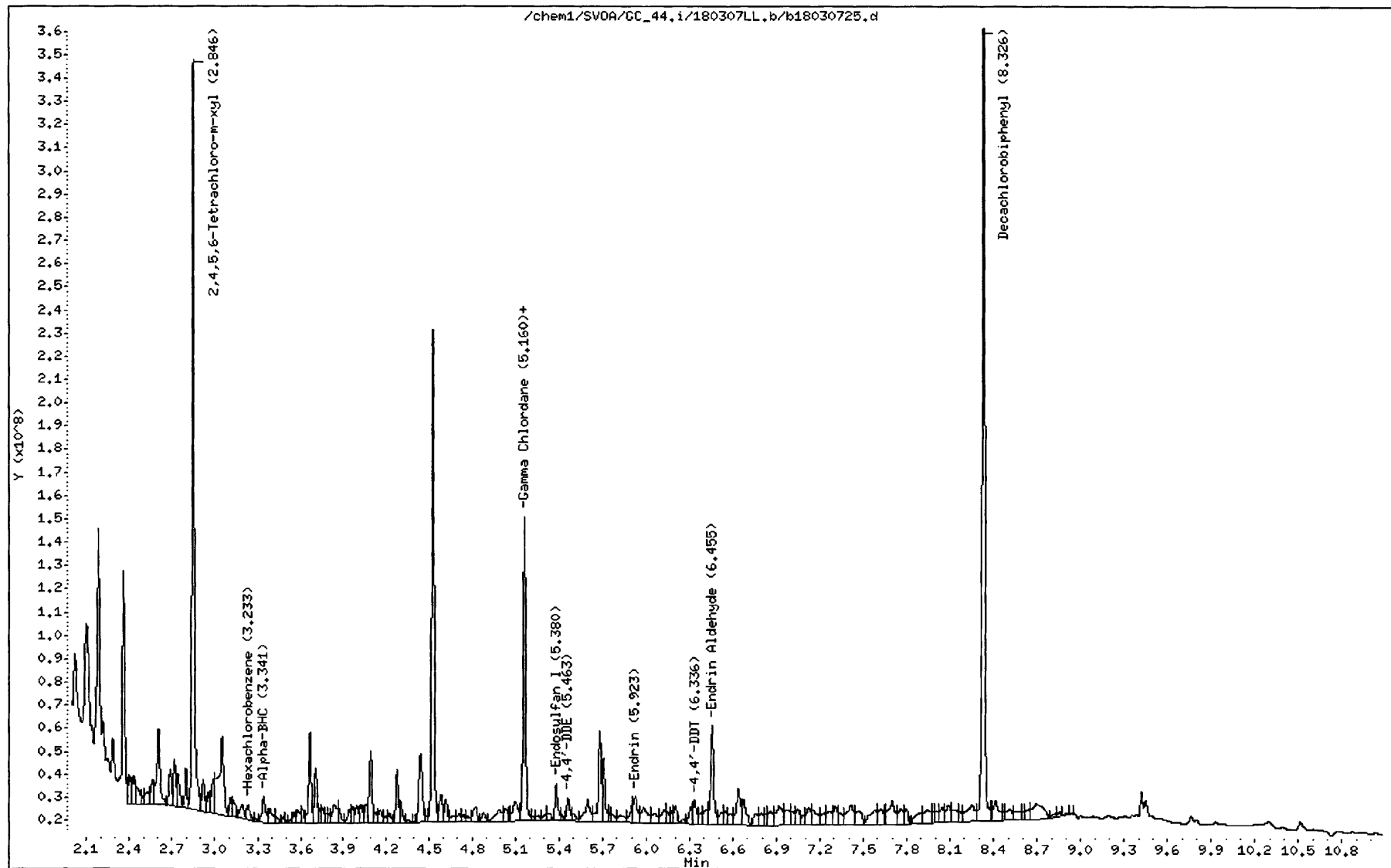
Page 1

Instrument: GC_44.i

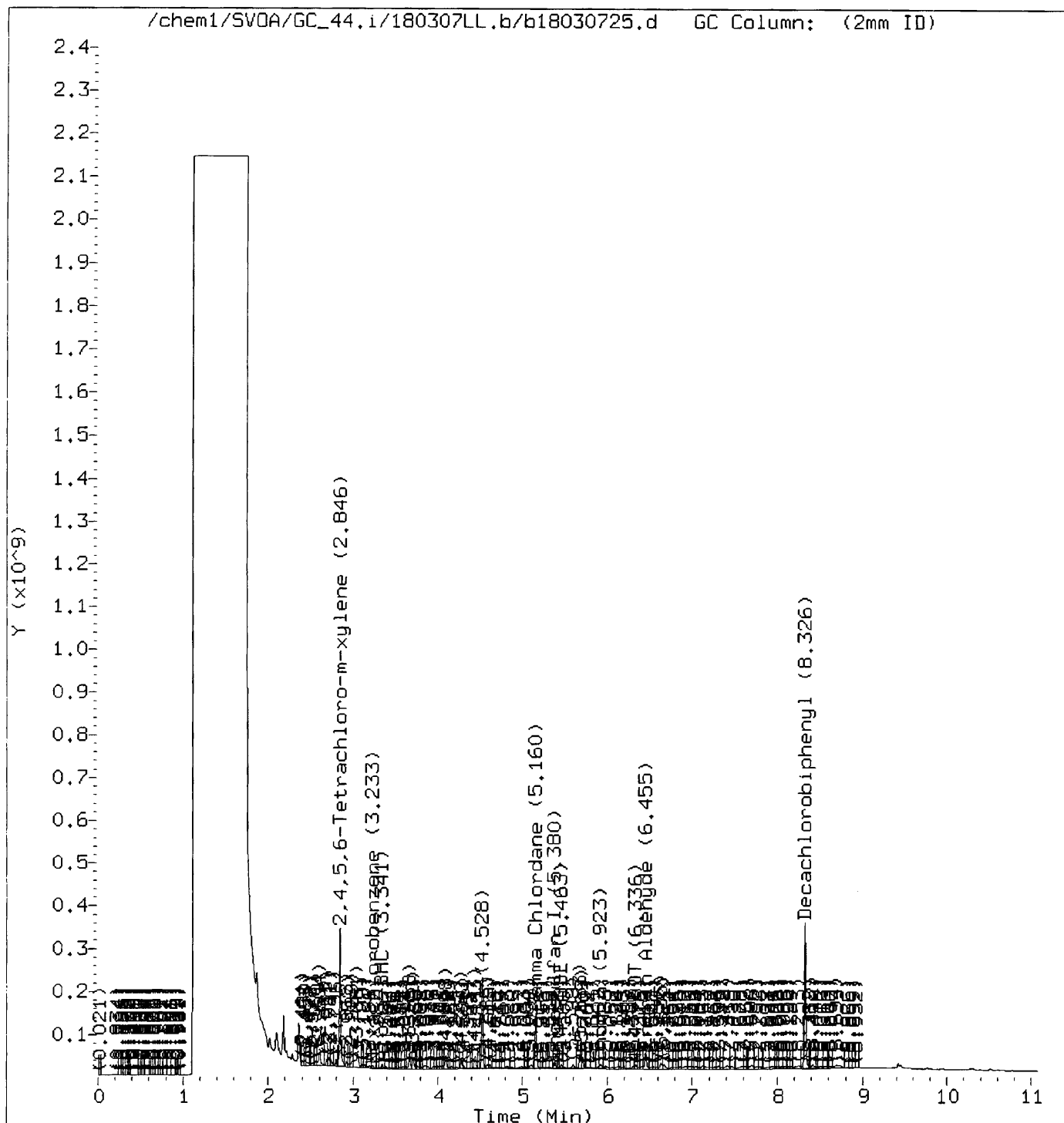
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File

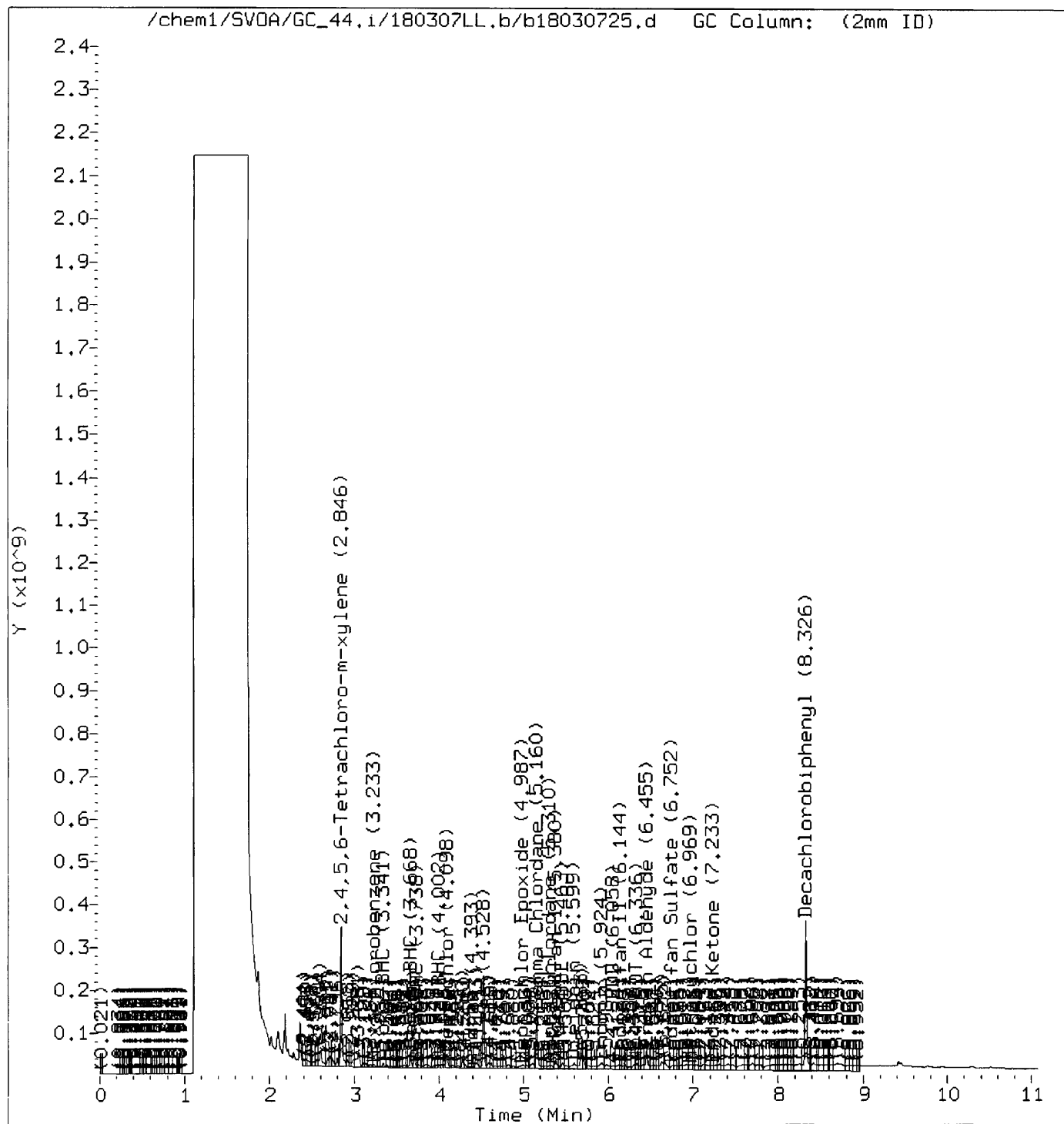


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:03.

Target 3.5 esignature user ID: uhhn

Audit/management approval: 142



Data File: /chem1/SVOA/GC_44.i/180307DDMU.b/a18030725.d
Report Date: 09-Mar-2018 17:58

Page 1

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030725.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:57
Operator : UHHN
Smp Info : 18-02-1868-14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4
Inst ID: GC_44.i
Quant Type: ESTD
Cal File: a18030530.d
Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVQA/GC_44.i/180307DDMU,b/a18030725.d

Page 1

Date : 07-MAR-2018 08:57

Client ID:

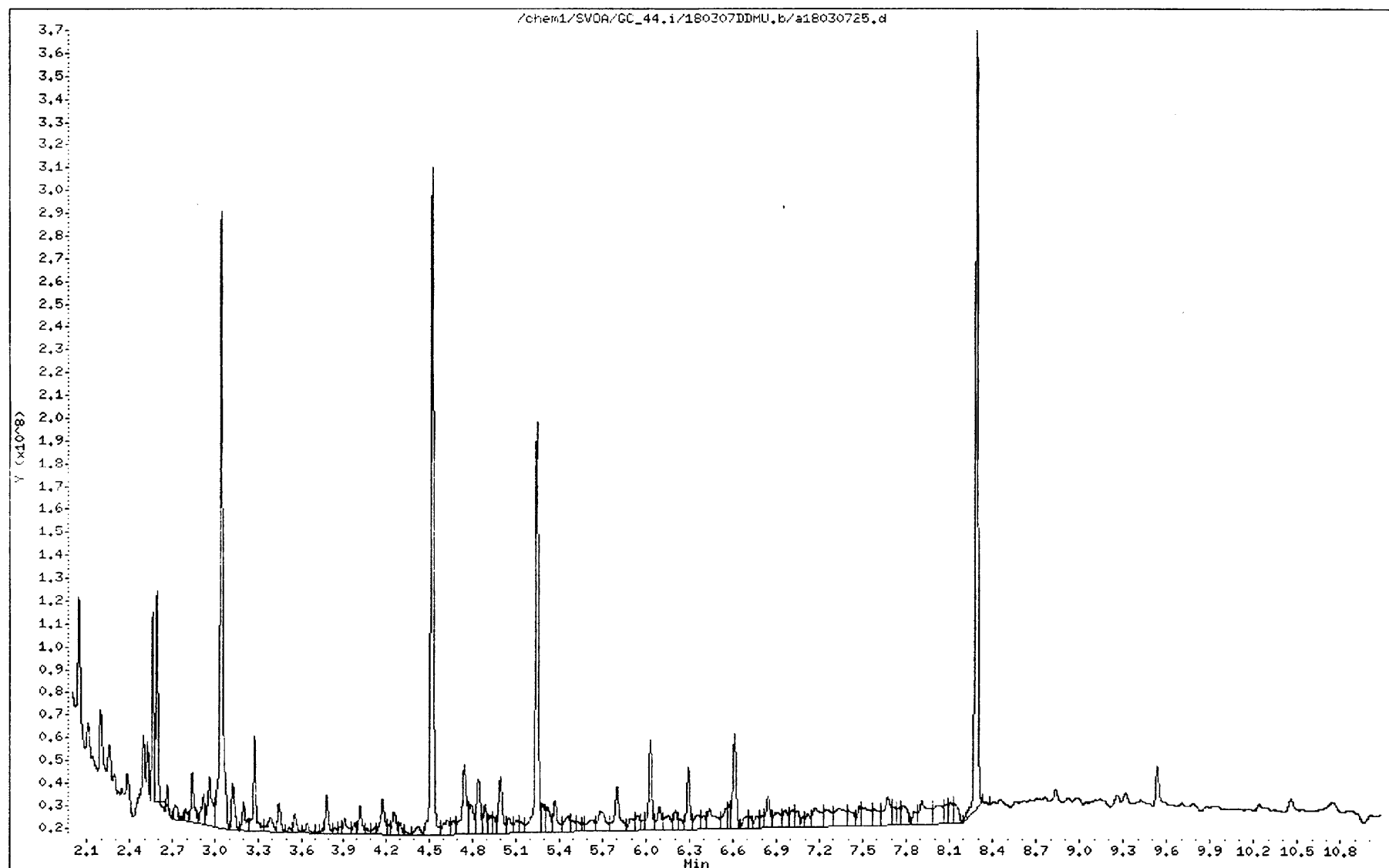
Instrument: GC_44.i

Sample Info: 18-02-1868-14

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030725.d
Lab Smp Id:
Inj Date : 07-MAR-2018 08:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN	FINAL
					(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.098	5.122	-0.024	838893995	19.2745	19.274

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/b18030725.d

Page 1

Date : 07-MAR-2018 08:57

Client ID:

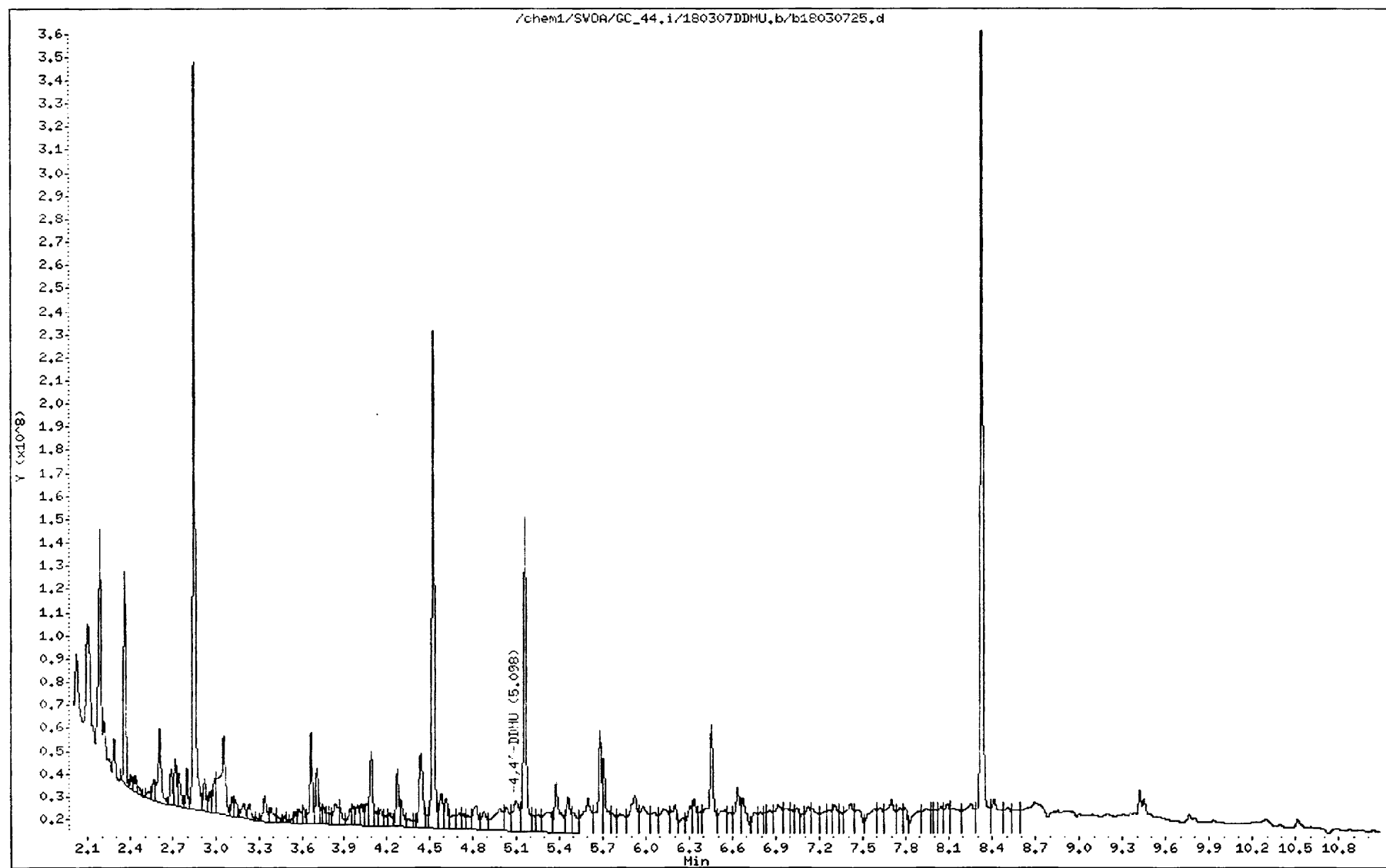
Instrument: GC_44.i

Sample Info: 18-02-1868-14

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 09:11
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072618030726

17 **CLIENT SAMPLE NUMBER:** SP-RW-18-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	5.07	ND	1.00	1.3	#		2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030726.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-17
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds							CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE		ON-COLUMN	FINAL
=====		==	=====	=====	=====		(ppb)	(ug/Kg)
\$	1 2,4,5,6-Tetrachloro-m-xylene	3.038	3.036	0.002	5758962729		57.7710	57.771
	2 Hexachlorobenzene	3.387	3.382	0.005	79358761		0.54673	0.546 (aMH)
	3 Alpha-BHC				Compound Not Detected.			
	4 Gamma-BHC				Compound Not Detected.			
	5 Beta-BHC				Compound Not Detected.			
	6 Delta-BHC				Compound Not Detected.			
	7 Heptachlor				Compound Not Detected.			
	8 Aldrin				Compound Not Detected.			
	9 4,4'-Dichlorobenzophenone				Compound Not Detected.			
	10 Oxychlordane				Compound Not Detected.			
	11 2,4'-DDE				Compound Not Detected.			
	12 Heptachlor Epoxide				Compound Not Detected.			
	13 Gamma Chlordane				Compound Not Detected.			
	14 Trans-Nonachlor				Compound Not Detected.			
	15 Alpha Chlordane				Compound Not Detected.			
	16 4,4'-DDE	5.541	5.539	0.002	579335127	5.07248	5.072 (MH)	NC
	17 Endosulfan I				Compound Not Detected.			
	18 2,4'-DDD				Compound Not Detected.			
	19 Dieldrin				Compound Not Detected.			
	20 2,4'-DDT				Compound Not Detected.			
	21 Endrin				Compound Not Detected.			

							CONCENTRATIONS		
		RT	EXP	RT	DLT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====		=====		=====	=====	=====
	22 Cis-Nonachlor		Compound	Not	Detected.				
	23 4,4'-DDD		Compound	Not	Detected.				
	24 Endosulfan II		Compound	Not	Detected.				
	25 4,4'-DDT		Compound	Not	Detected.				
	26 Endrin Aldehyde		Compound	Not	Detected.				
	27 Methoxychlor		Compound	Not	Detected.				
	28 Mirex		Compound	Not	Detected.				
	29 Endosulfan Sulfate		Compound	Not	Detected.				
	30 Endrin Ketone		Compound	Not	Detected.				
\$	31 Decachlorobiphenyl	8.285	8.284	0.001	9919275412			95.0257	95.025
M	32 Chlordane		Compound	Not	Detected.				
	33 CHLD (1)		Compound	Not	Detected.				
	34 CHLD (2)		Compound	Not	Detected.				
	35 CHLD (3)		Compound	Not	Detected.				
	36 CHLD (4)		Compound	Not	Detected.				
	37 CHLD (5)		Compound	Not	Detected.				
M	38 Toxaphene		Compound	Not	Detected.				
	39 TOXAPHENE (1)		Compound	Not	Detected.				
	40 TOXAPHENE (2)		Compound	Not	Detected.				
	41 TOXAPHENE (3)		Compound	Not	Detected.				
	42 TOXAPHENE (4)		Compound	Not	Detected.				
	43 TOXAPHENE (5)		Compound	Not	Detected.				

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030726.d

Date : 07-MAR-2018 09:11

Client ID:

Sample Info: 18-02-1868-17

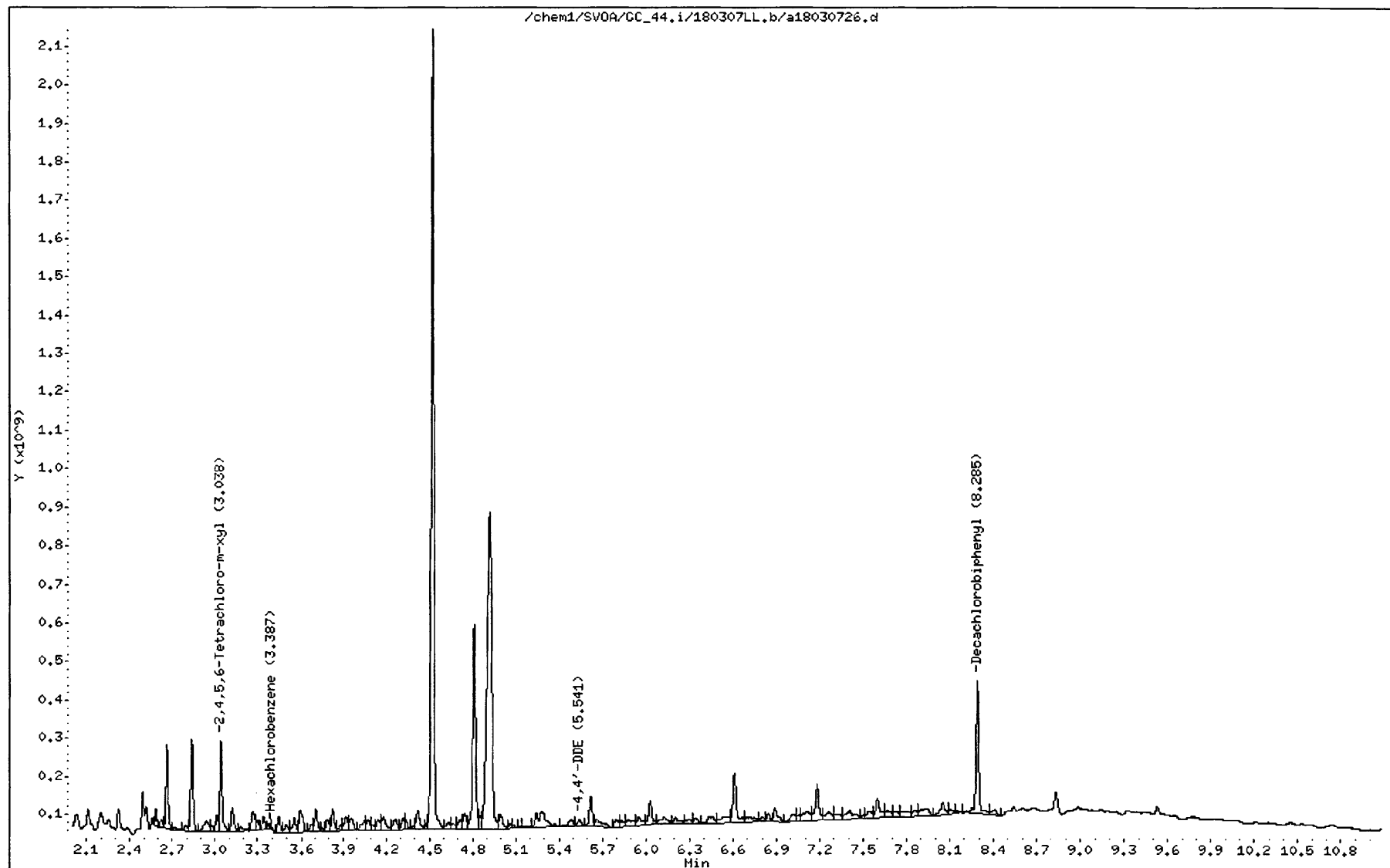
Page 1

Instrument: GC_44.i

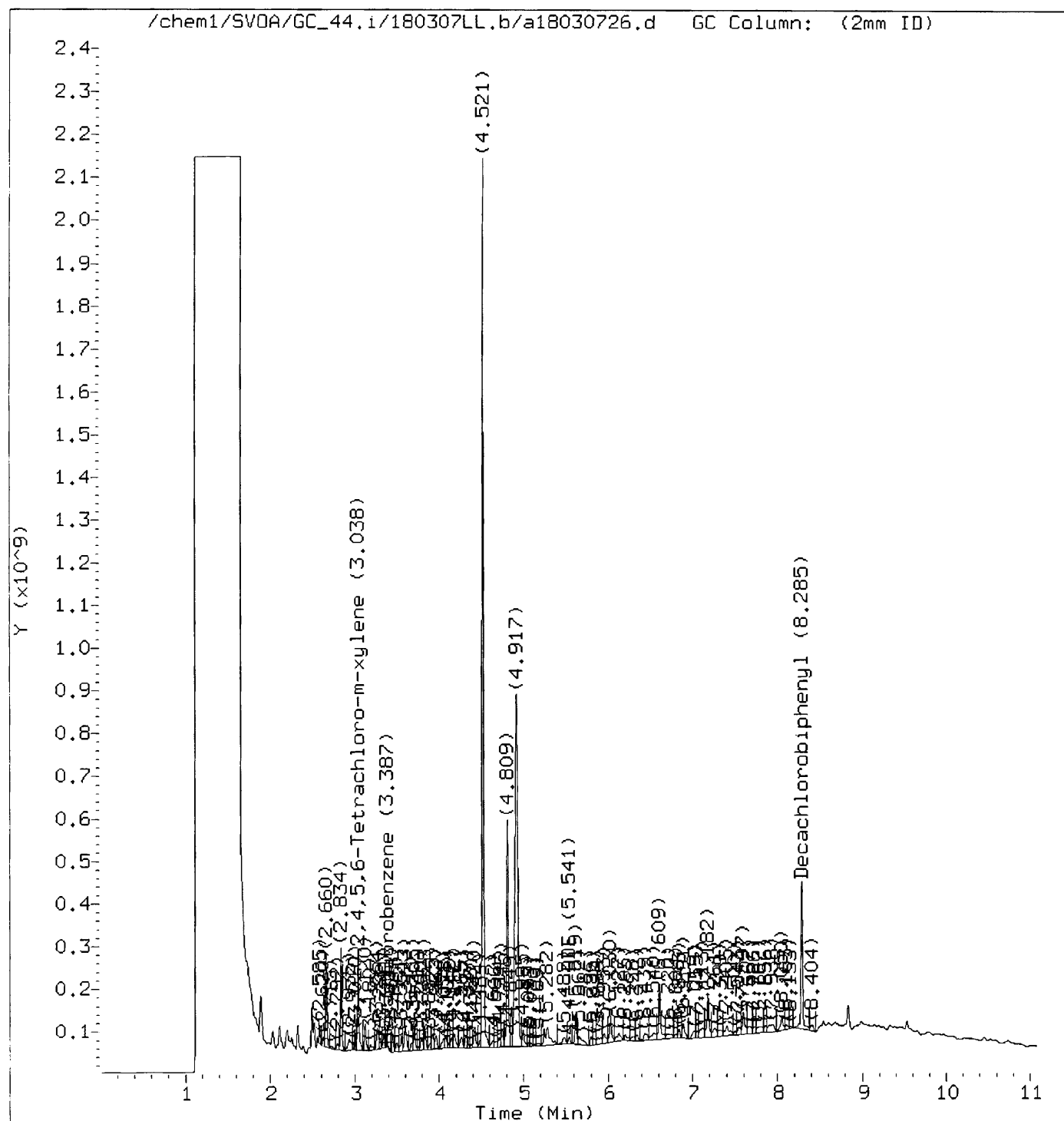
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File

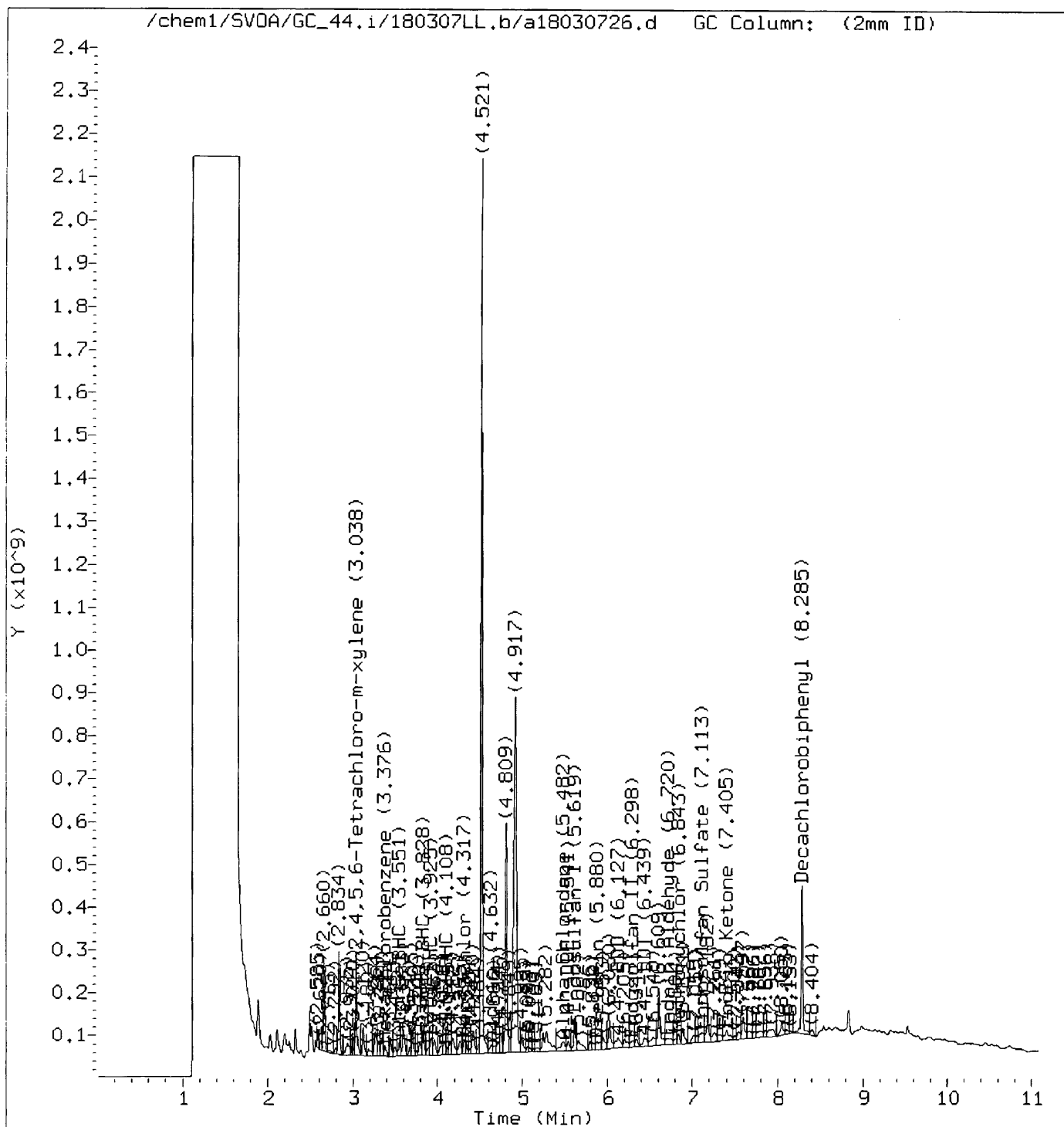


Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 18:02.

Target 3.5 esignature user ID: uhhn

Audit/management approval: 142



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030726.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-17
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS				
		ON-COLUMN			FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene	2.845	2.842	0.003	7576986996	71.2785	71.278
2 Hexachlorobenzene	3.225	3.226	-0.001	305831288	1.97415	1.974 (a)
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordane	Compound Not Detected.					
11 Heptachlor Epoxide	Compound Not Detected.					
12 2,4'-DDE	5.160	5.155	0.005	19371898319	217.464	217.464 (AM)
13 Gamma Chlordane	5.160	5.162	-0.002	19371898319	148.538	148.537 (A)
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 Endosulfan I	5.358	5.366	-0.008	2934026449	24.9759	24.975
17 4,4'-DDE	Compound Not Detected. ✓					
18 Dieldrin	Compound Not Detected.					
19 2,4'-DDD	Compound Not Detected.					
20 Endrin	Compound Not Detected.					
21 2,4'-DDT	Compound Not Detected.					

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor				Compound Not Detected.		
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT	6.332	6.325	0.007	1683092759	16.8479	16.847 (H)
26 Endrin Aldehyde	6.453	6.450	0.003	3340970974	37.1520	37.152
27 Endosulfan Sulfate				Compound Not Detected.		
28 Mirex				Compound Not Detected.		
29 Methoxychlor				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
T 31 Decachlorobiphenyl	8.325	8.325	0.000	7710623154	79.7961	79.796
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/b18030726.d

Page 1

Date : 07-MAR-2018 09:11

Client ID:

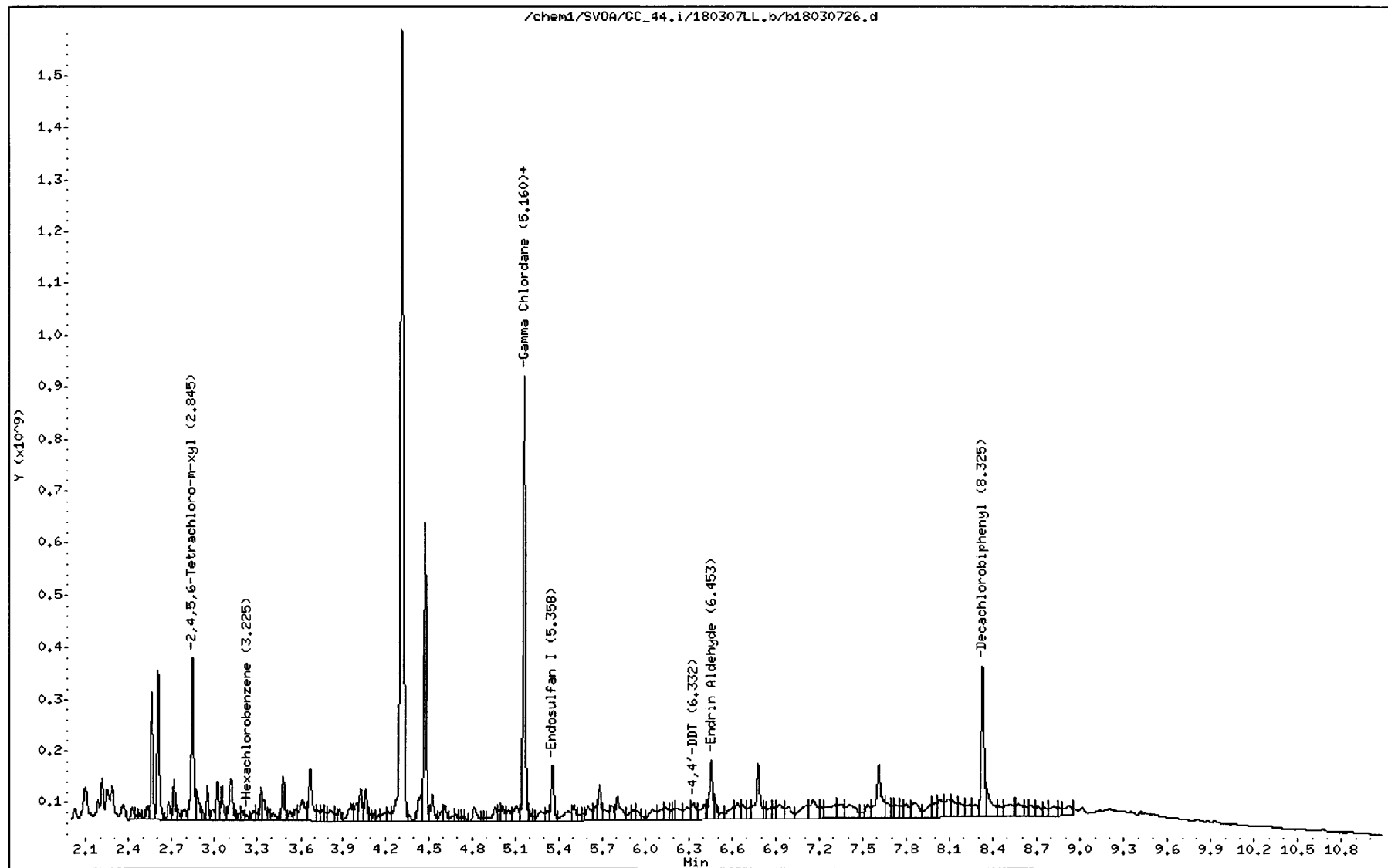
Instrument: GC_44.i

Sample Info: 18-02-1868-17

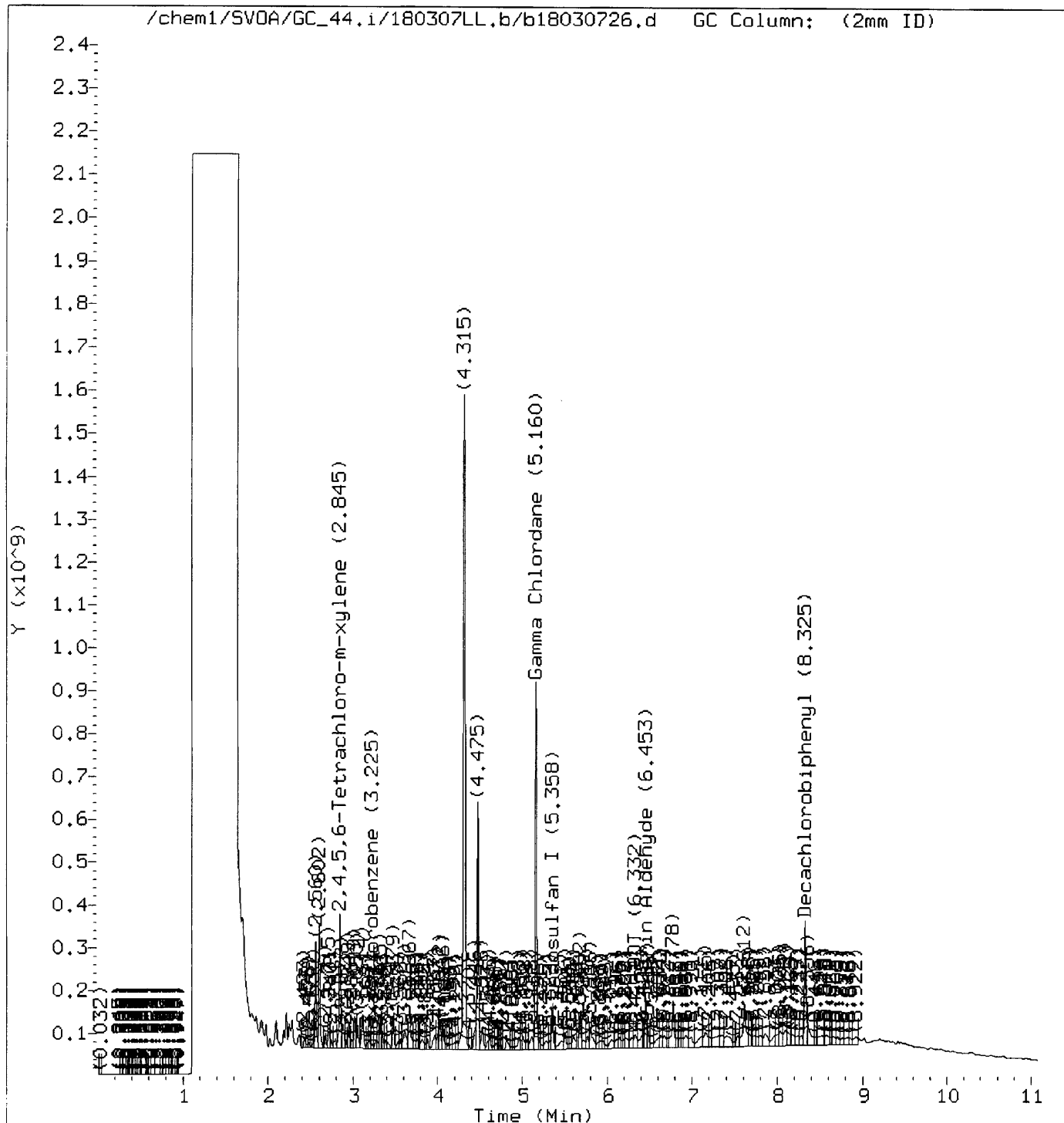
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File

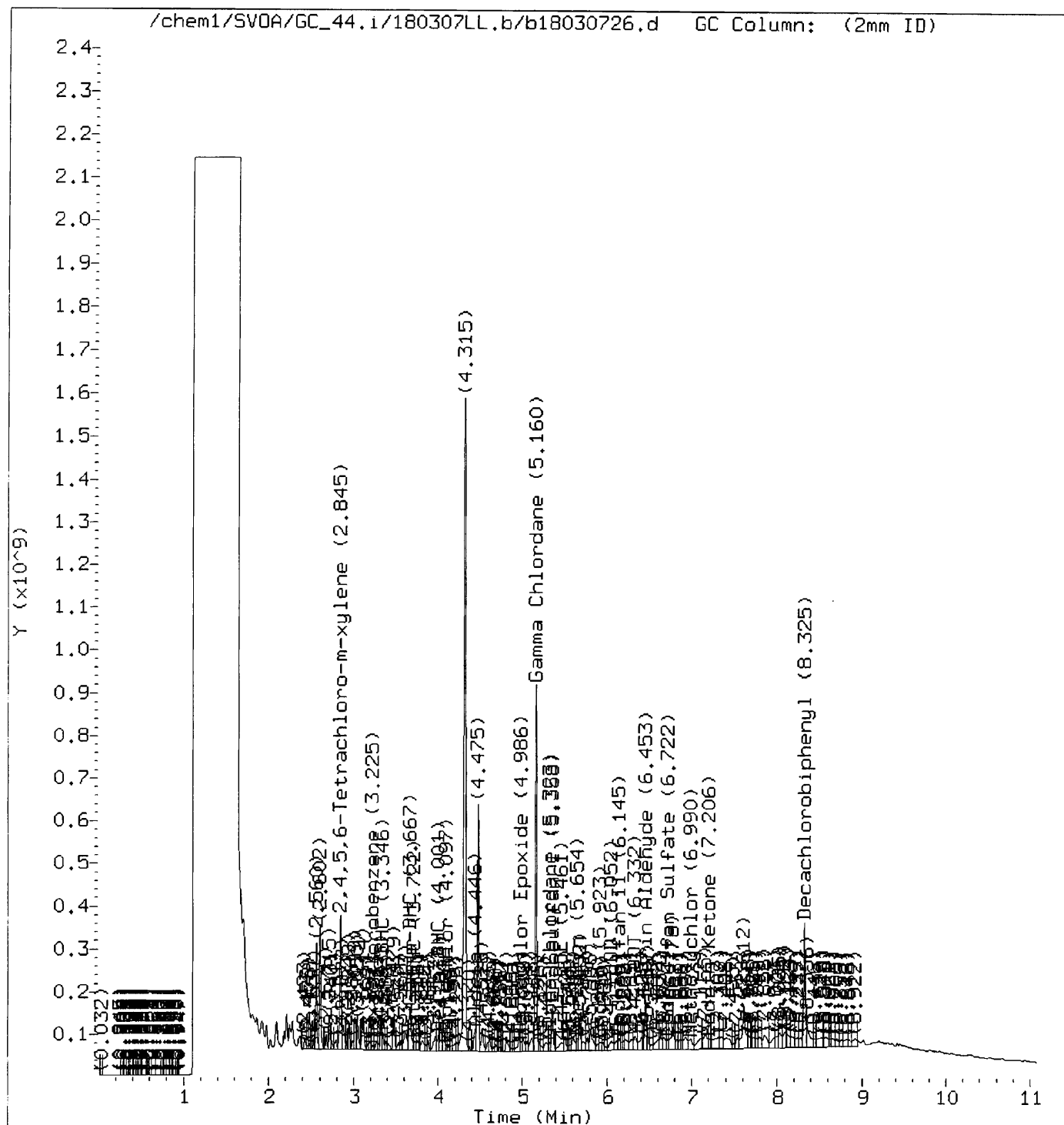


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:03.
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

Original Data File



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030726.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-17
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SV0A/GC_44.i/180307DDMU,b/a18030726.d

Page 1

Date : 07-MAR-2018 09:11

Client ID:

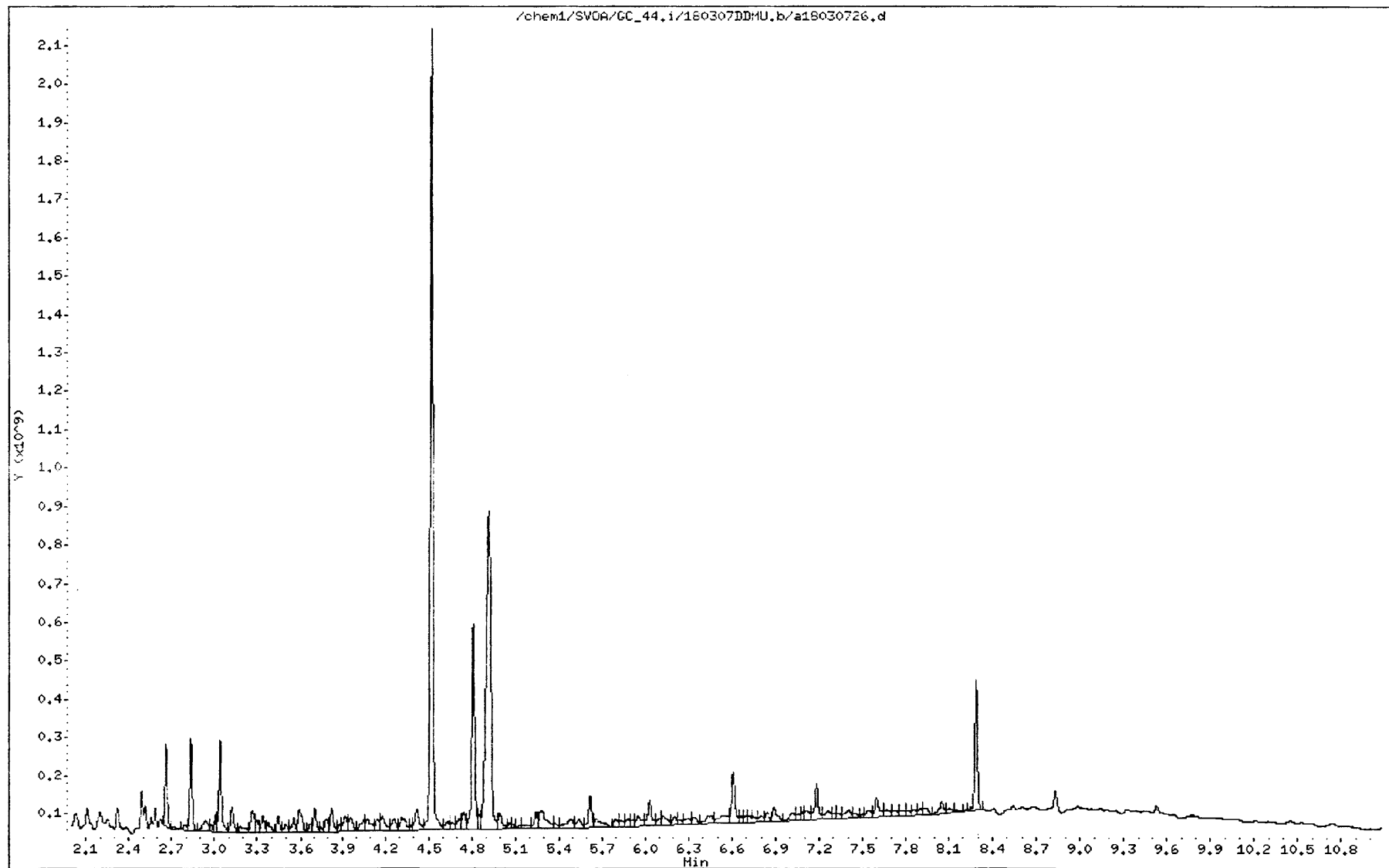
Instrument: GC_44.i

Sample Info: 18-02-1868-17

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030726.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-17
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN	FINAL
					(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU	5.108	5.122	-0.014	1585587918	36.4306	36.430

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030726.d

Page 1

Date : 07-MAR-2018 09:11

Client ID:

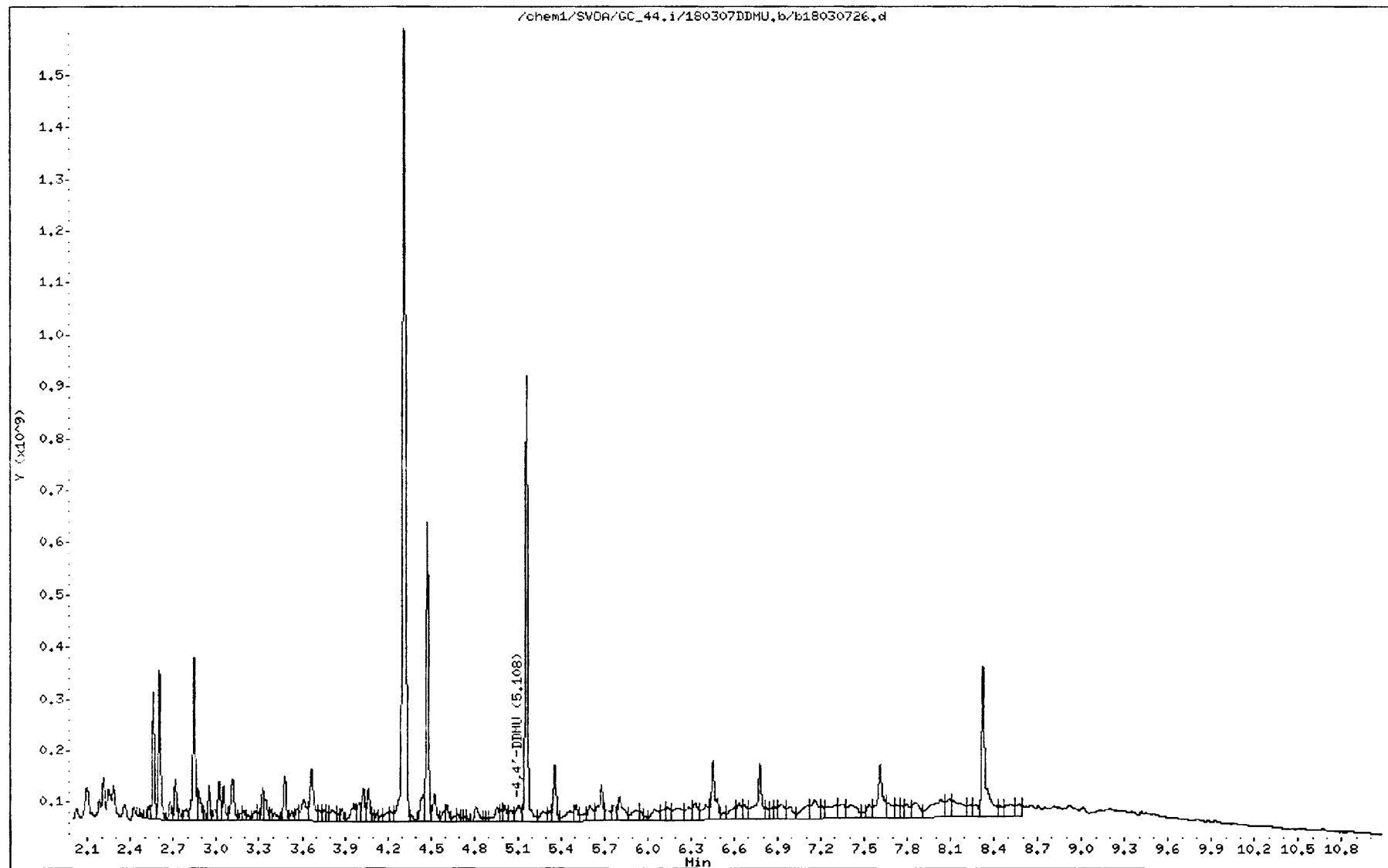
Instrument: GC_44.i

Sample Info: 18-02-1868-17

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 09:26
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072718030727

20 **CLIENT SAMPLE NUMBER:** SP-RW-19-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	5.71	3.81	1.00	1.3		6%	2	3.58
4,4'-DDT	2.32	1.55	1.00	1.3	Y	79%	2	3.57
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	20.5	ND	1.00	1.3	#Y		2	ND
Gamma-BHC	9.62	ND	1.00	1.3	#		2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Data file : /chem1/SVOA/GC 44.i/180307LL.b/a18030727.d

Inst ID: GC 44.i

Quant Type: ESTD

Compound Sublist: all.sub

Processing Host: US26TAR4

Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.040	3.036	0.004	7535681309	75.5942	75.594
2 Hexachlorobenzene	Compound Not Detected.					
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	3.829	3.832	-0.003	1440538171	9.61789	9.617 (H) NC
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordan	Compound Not Detected.					
11 2,4'-DDE	Compound Not Detected.					
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordan	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordan	Compound Not Detected.					
16 4,4'-DDE	5.539	5.539	0.000	651655343	5.70570	5.705 ←
17 Endosulfan I	5.619	5.625	-0.006	443561888	3.71951	3.719 (M)
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	6.093	6.090	0.003	2426909820	20.5007	20.500 (H) NC
22 Cis-Nonachlor	Compound Not Detected.					

						CONCENTRATIONS		
Compounds	RT	EXP	RT	DLT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT	6.395	6.395	0.000		232084666		2.31841	2.318
26 Endrin Aldehyde						Compound Not Detected.		
27 Methoxychlor	6.839	6.841	-0.002		784823764		14.3058	14.305 <i>me</i>
28 Mirex						Compound Not Detected.		
29 Endosulfan Sulfate						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.284	8.284	0.000		9209134762		88.2226	88.222
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

M - Compound response manually integrated.
 H - Operator selected an alternate compound hit.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030727.d

Page 1

Date : 07-MAR-2018 09:26

Client ID:

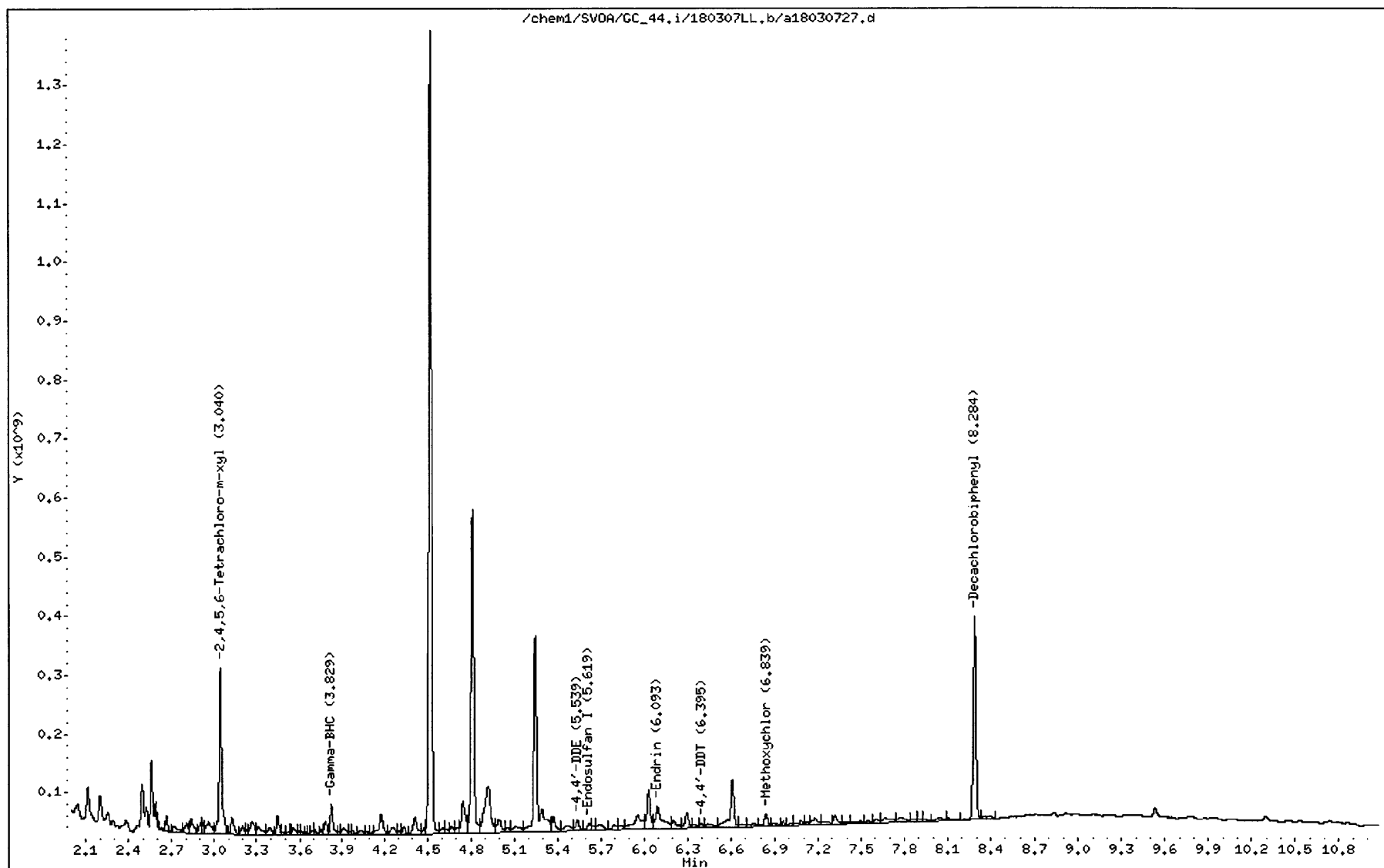
Instrument: GC_44.i

Sample Info: 18-02-1868-20

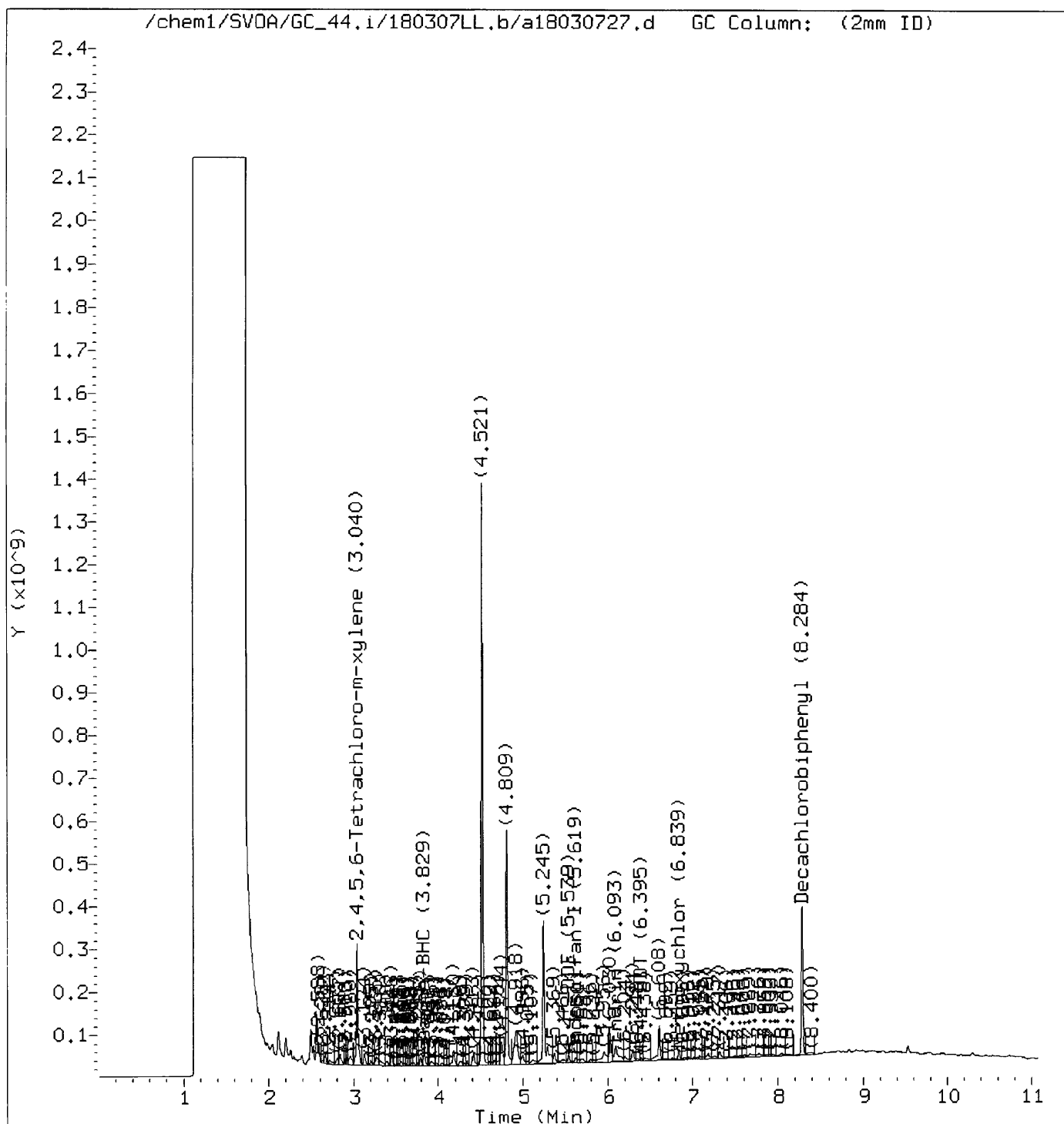
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File

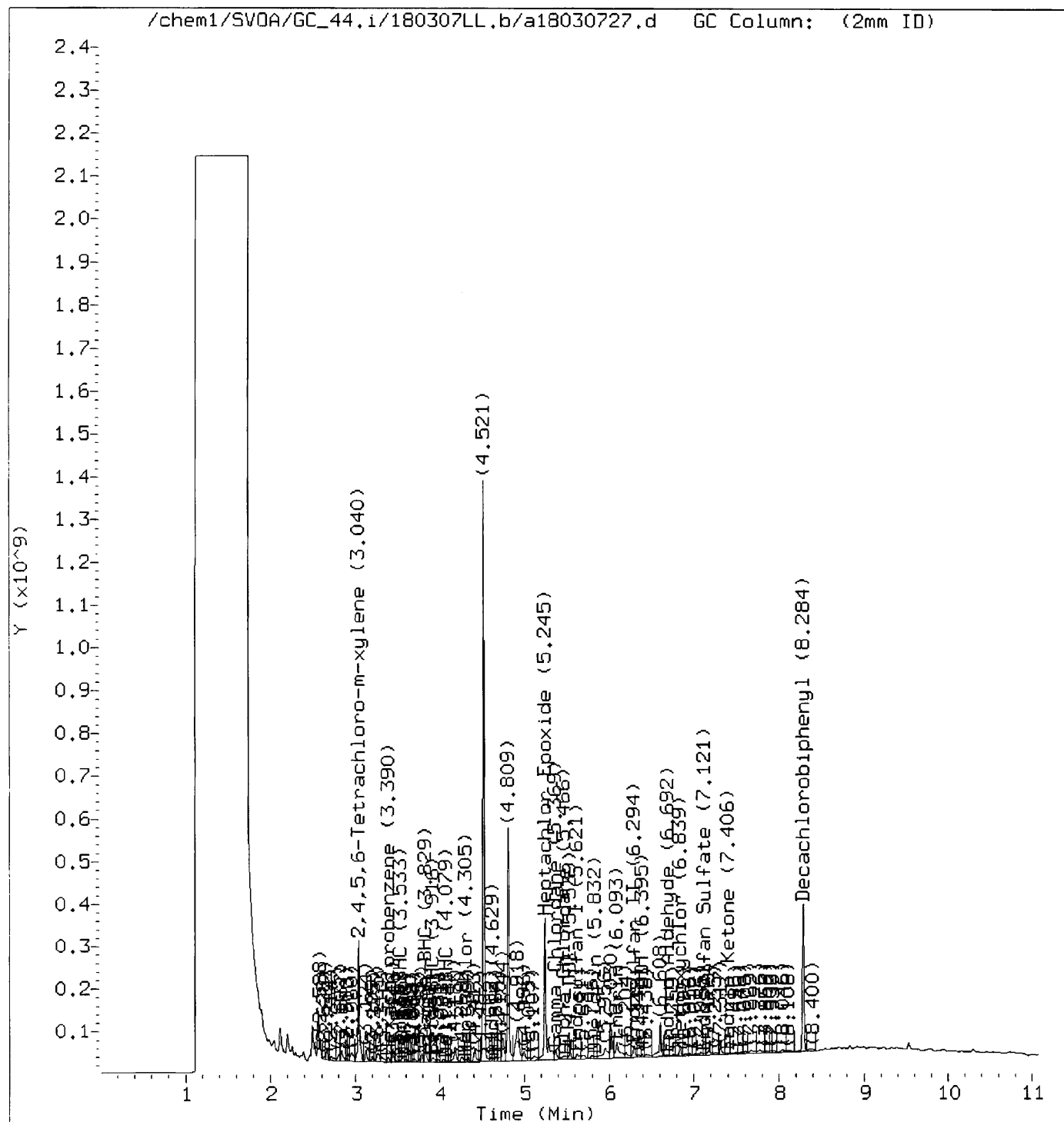


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
 Analyst responsible for change: on 03/09/2018 at 18:02.

Target 3.5 esignature user ID: uhhn

Audit/management approval: _____ 142

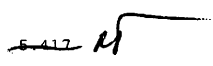


Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030727.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:26
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-20
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene		2.846	2.842	0.004	7280585010	68.4902	68.490
2 Hexachlorobenzene		3.230	3.226	0.004	397874653	2.56829	2.568
3 Alpha-BHC		3.340	3.337	0.003	795875129	4.38338	4.383
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		Compound Not Detected.					
10 Oxychlordan		Compound Not Detected.					
11 Heptachlor Epoxide		Compound Not Detected.					
12 2,4'-DDE		5.161	5.155	0.006	13744978267	154.298	154.297 (AM)
13 Gamma Chlordane		5.161	5.162	-0.001	13744978267	105.392	105.392 (A)
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 Endosulfan I		5.359	5.366	-0.007	593291377	5.05040	5.050 (H)
17 4,4'-DDE		5.462	5.463	-0.001	635618153	5.36689	5.366 ✓
18 Dieldrin		Compound Not Detected.					
19 2,4'-DDD		Compound Not Detected.					
20 Endrin		5.921	5.929	-0.008	651564884	5.41771	5.417 
21 2,4'-DDT		Compound Not Detected.					

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor				Compound Not Detected.		
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT	6.330	6.325	0.005	534243183	5.34781	5.347 ✓
26 Endrin Aldehyde	6.454	6.450	0.004	2067008475	22.9854	22.985
27 Endosulfan Sulfate				Compound Not Detected.		
28 Mirex				Compound Not Detected.		
29 Methoxychlor				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
T 31 Decachlorobiphenyl	8.326	8.325	0.001	7803931925	80.7617	80.761 (A)
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030727.d

Page 1

Date : 07-MAR-2018 09:26

Client ID:

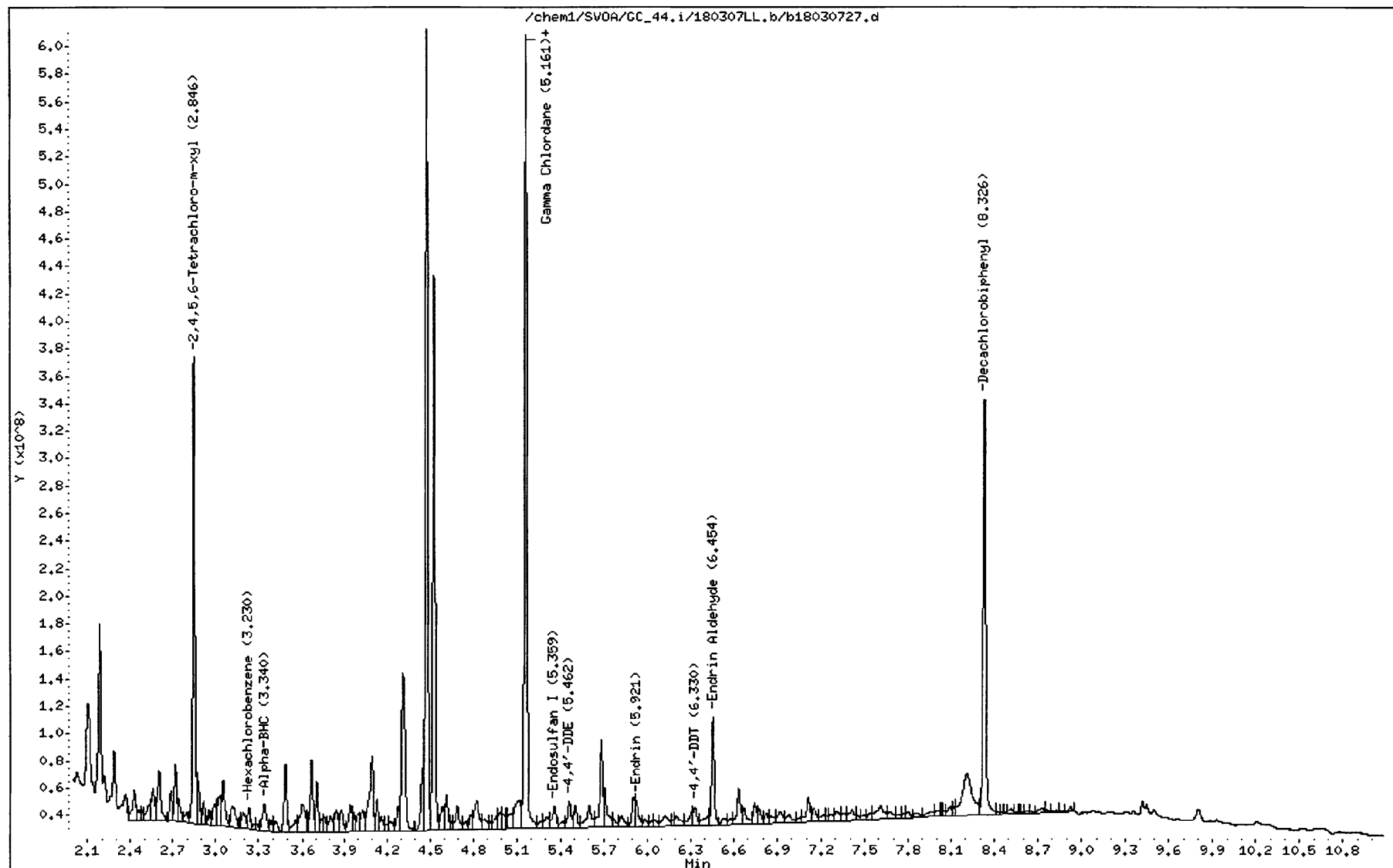
Instrument: GC_44.i

Sample Info: 18-02-1868-20

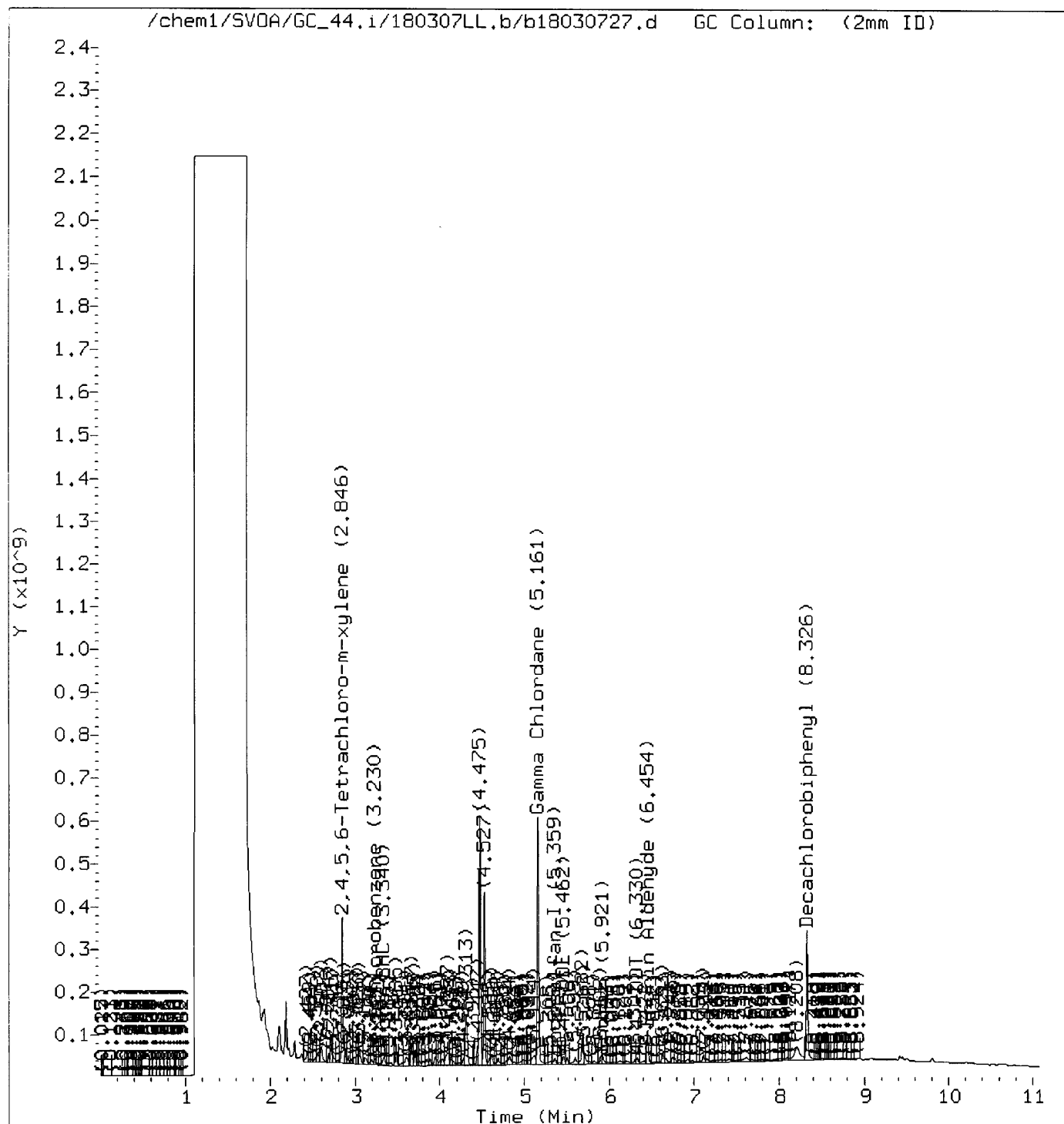
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File

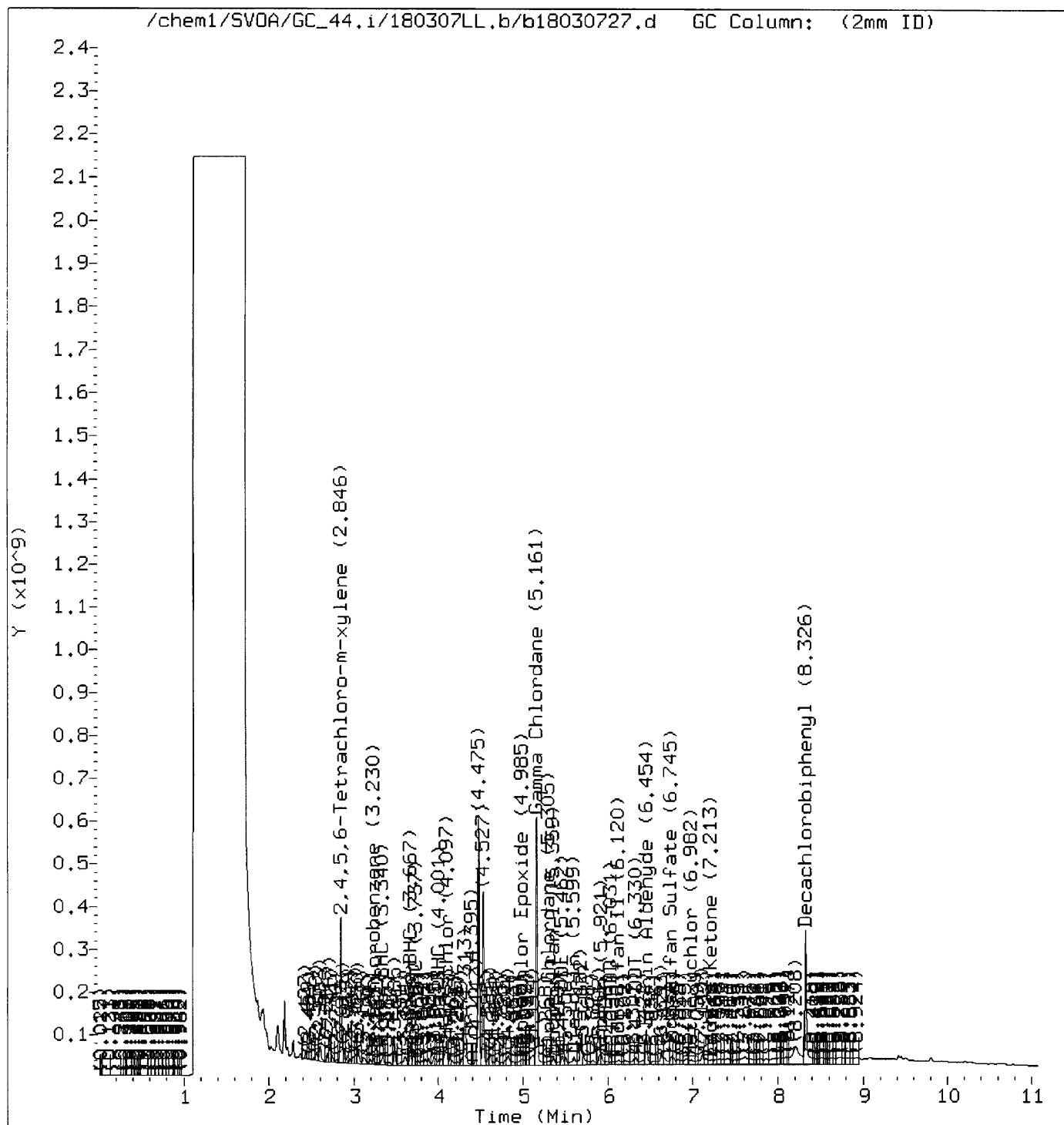


Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 18:03.
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

142



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030727.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:26
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-20
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (pgb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030727.d

Page 1

Date : 07-MAR-2018 09:26

Client ID:

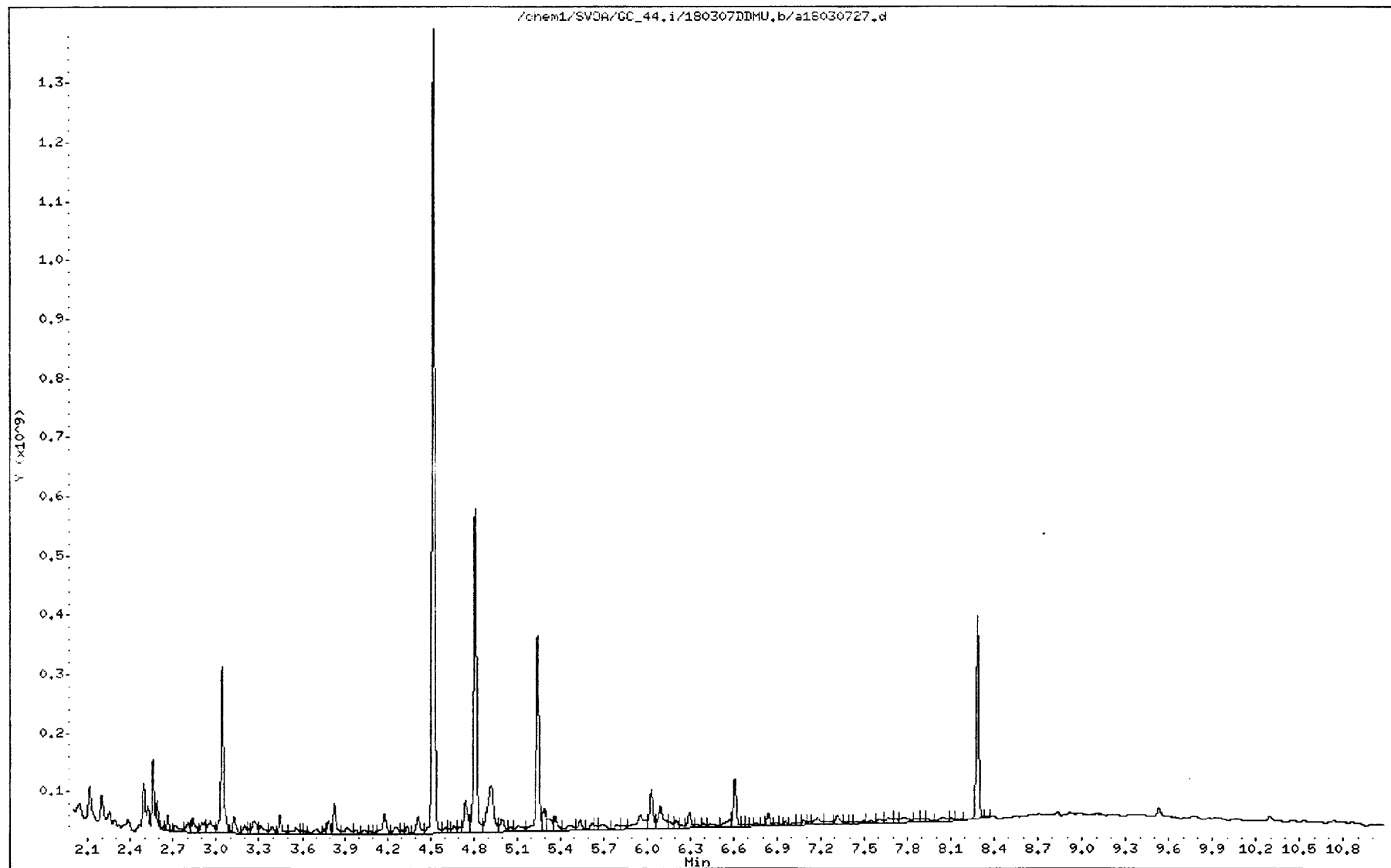
Instrument: GC_44.i

Sample Info: 18-02-1868-20

Operator: UHHN

Column phase:

Column diameter: 2.00



Data File: /chem1/SVOA/GC_44.i/180307DDMU.b/b18030727.d
Report Date: 09-Mar-2018 17:59

Page 1

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030727.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:26
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-20
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====		=====	=====	=====
2 4,4'-DDMU	5.114	5.122	-0.008	1535069415	35.2699	35.269	

Data File: /chem1/SVDA/GC_44.i/180307DDHU.b/b18030727.d

Page 1

Date : 07-MAR-2018 09:26

Client ID:

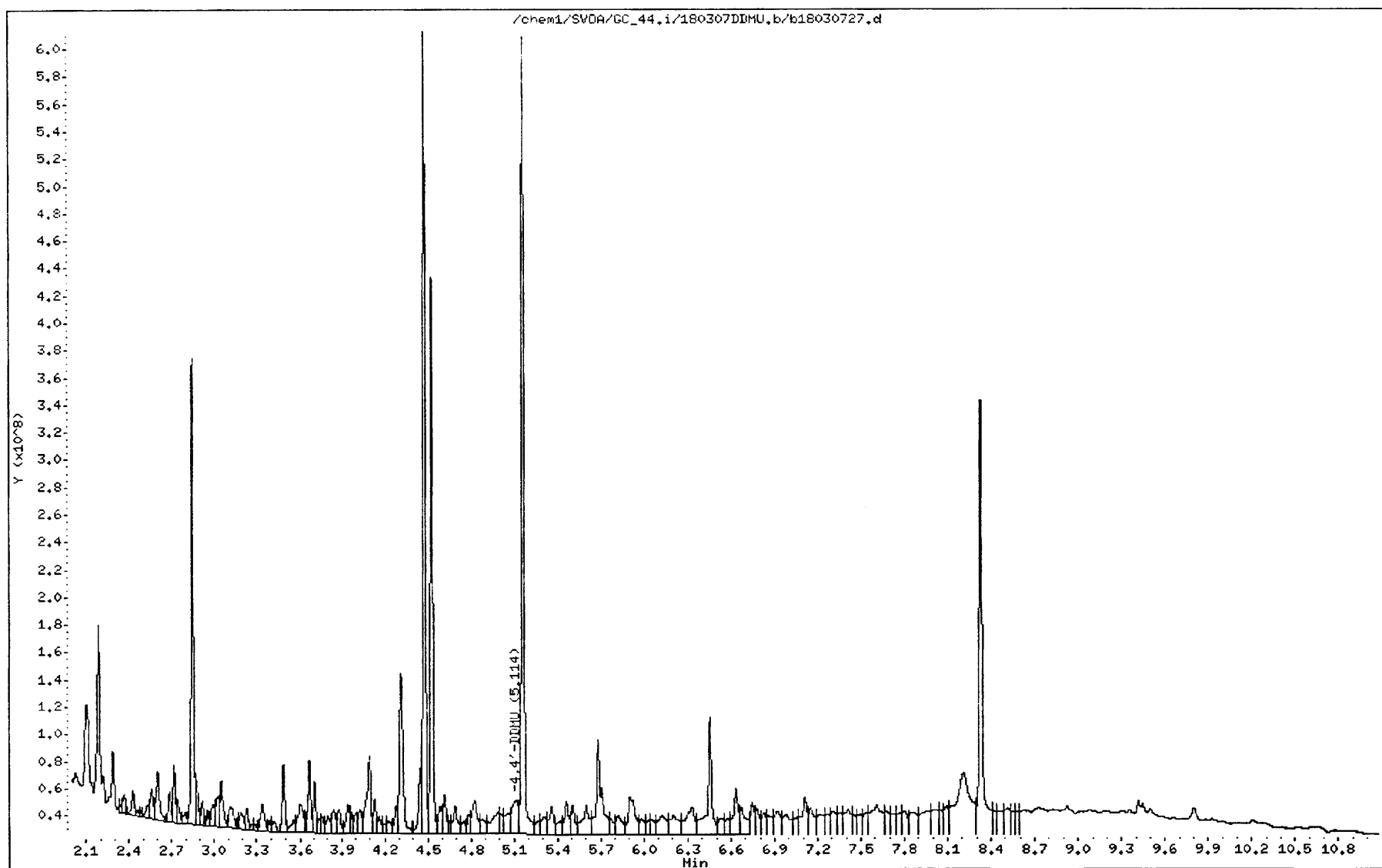
Instrument: GC_44.i

Sample Info: 18-02-1868-20

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 09:40
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072818030728

23 **CLIENT SAMPLE NUMBER:** SP-RW-20-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	4.26	2.84	1.00	1.3		10%	2	2.58
4,4'-DDT	1.32	0.880	1.00	1.3	JY	82%	2	2.10
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	4.93	ND	1.00	1.3	#		2	ND
Gamma-BHC	7.65	ND	1.00	1.3	#		2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030728.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:40
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-23
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.037	3.036	0.001	5988158452	60.0702	60.070
2 Hexachlorobenzene	Compound Not Detected.					
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	3.828	3.832	-0.004	1145932591	7.65093	7.650 <i>MC</i>
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	4.995	4.976	0.019	736983615	26.2611	26.261 (M) <i>MC</i>
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	Compound Not Detected.					
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 4,4'-DDE	5.538	5.539	-0.001	486196328	4.25699	4.256 <i>—</i>
17 Endosulfan I	Compound Not Detected.					
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	6.092	6.090	0.002	583313940	4.92741	4.927 <i>MC</i>
22 Cis-Nonachlor	Compound Not Detected.					

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT	6.394	6.395	-0.001	132535123	1.32396	1.323 (a) ✓
26 Endrin Aldehyde				Compound Not Detected.		
27 Methoxychlor	6.840	6.841	-0.001	462494456	8.43037	8.430
28 Mirex				Compound Not Detected.		
29 Endosulfan Sulfate				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.285	8.284	0.001	8242752007	78.9647	78.964
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030728.d

Date : 07-MAR-2018 09:40

Client ID:

Sample Info: 18-02-1868-23

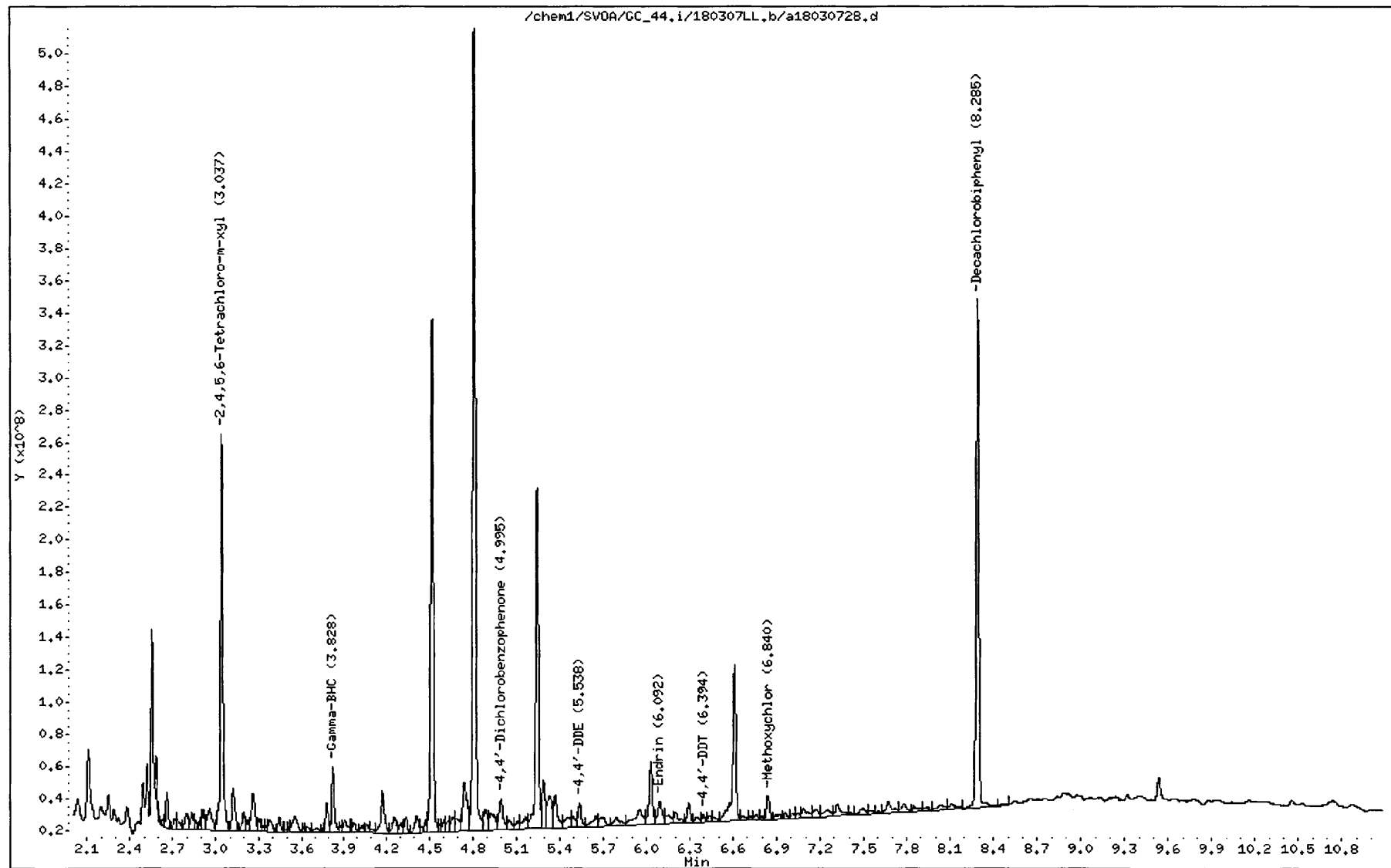
Page 1

Instrument: GC_44.i

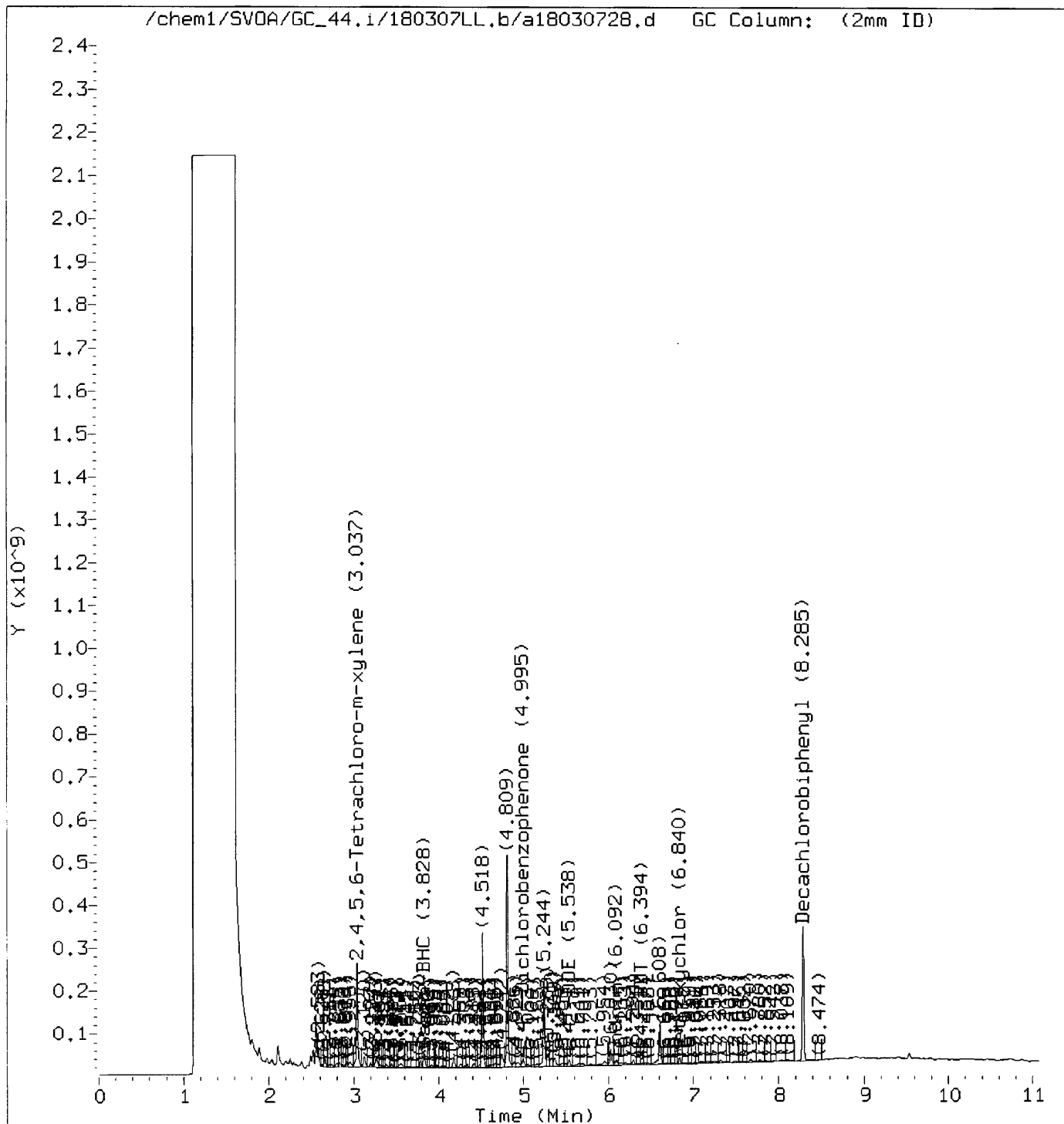
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File

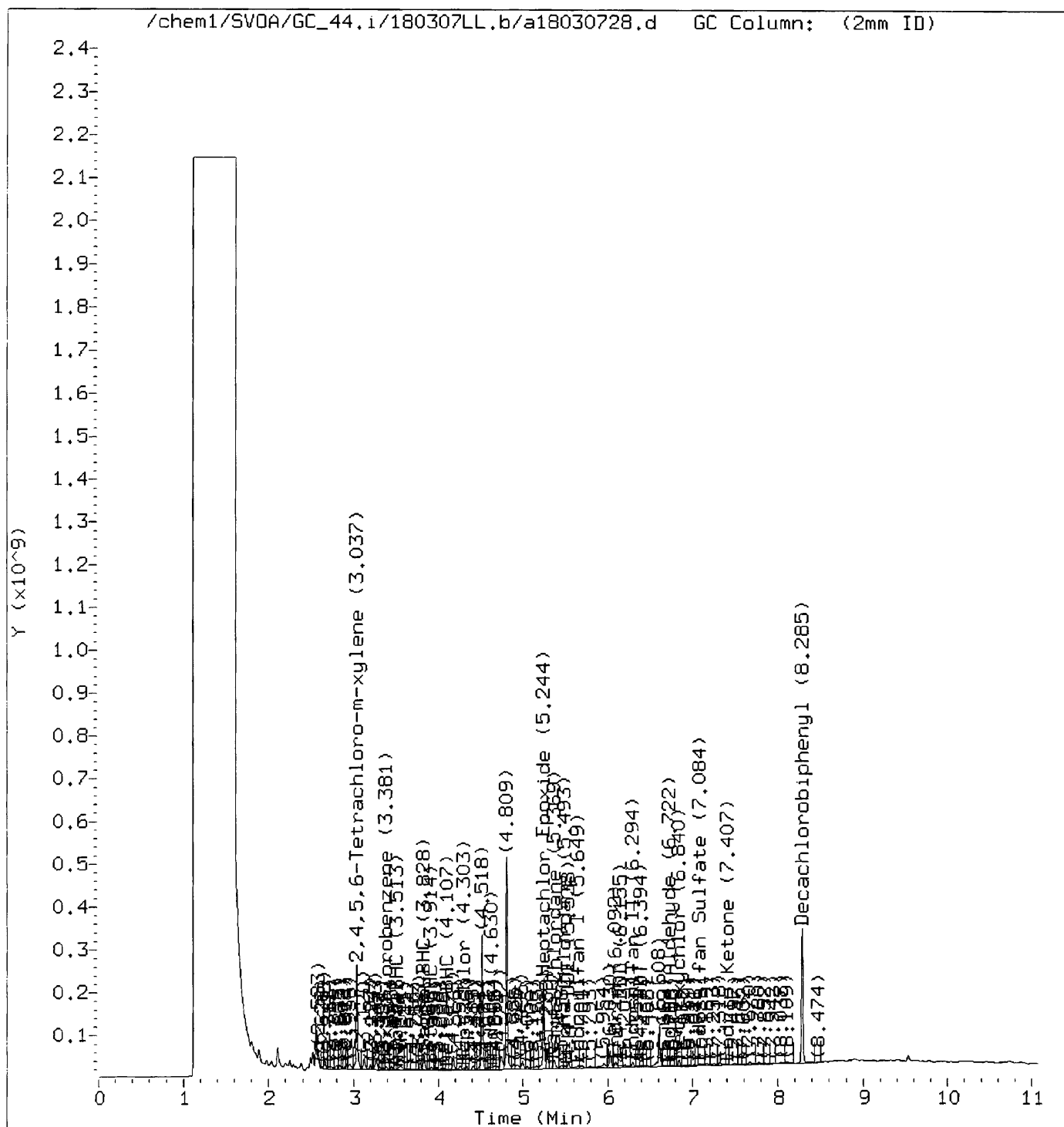


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:02.
Target 3.5 esignature user ID: uhn

Audit/management approval: _____

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Data file : /chem1/SVOA/GC 44.i/180307LL.b/b18030728.d

Processing Host: US26TAR4

Local Compound Variable

						CONCENTRATIONS	
Compounds		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
T	1 2,4,5,6-Tetrachloro-m-xylene	2.844	2.842	0.002	6309951323	59.3592	59.359
	2 Hexachlorobenzene	3.226	3.226	0.000	250912714	1.61965	1.619 (a)
	3 Alpha-BHC	3.338	3.337	0.001	487263607	2.68367	2.683
	4 Gamma-BHC	3.666	3.656	0.010	1140648377	7.19637	7.196
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordan	Compound Not Detected.					
	11 Heptachlor Epoxide	Compound Not Detected.					
	12 2,4'-DDE	5.160	5.155	0.005	3908821650	43.8795	43.879 (M)
	13 Gamma Chlordane	5.160	5.162	-0.002	3908821650	29.9717	29.971
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.358	5.366	-0.008	294598926	2.50778	2.507 (H)
	17 4,4'-DDE	5.462	5.463	-0.001	458623451	3.87242	3.872
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	5.923	5.929	-0.006	517872873	4.30607	4.306 (H)
	21 2,4'-DDT	Compound Not Detected.					

						CONCENTRATIONS	
Compounds		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
	22 Cis-Nonachlor		Compound	Not Detected.			
	23 4,4'-DDD		Compound	Not Detected.			
	24 Endosulfan II		Compound	Not Detected.			
	25 4,4'-DDT	6.332	6.325	0.007	314317951	3.14634	3.146
	26 Endrin Aldehyde	6.453	6.450	0.003	2498713196	27.7860	27.786
	27 Endosulfan Sulfate		Compound	Not Detected.			
	28 Mirex		Compound	Not Detected.			
	29 Methoxychlor		Compound	Not Detected.			
	30 Endrin Ketone		Compound	Not Detected.			
T	31 Decachlorobiphenyl	8.326	8.325	0.001	6979675727	72.2316	72.231
M	32 Chlordane		Compound	Not Detected.			
	33 CHLD (1)		Compound	Not Detected.			
	34 CHLD (2)		Compound	Not Detected.			
	35 CHLD (3)		Compound	Not Detected.			
	36 CHLD (4)		Compound	Not Detected.			
	37 CHLD (5)		Compound	Not Detected.			
M	38 Toxaphene		Compound	Not Detected.			
	39 TOXAPHENE (1)		Compound	Not Detected.			
	40 TOXAPHENE (2)		Compound	Not Detected.			
	41 TOXAPHENE (3)		Compound	Not Detected.			
	42 TOXAPHENE (4)		Compound	Not Detected.			
	43 TOXAPHENE (5)		Compound	Not Detected.			

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030728.d

Date : 07-MAR-2018 09:40

Client ID:

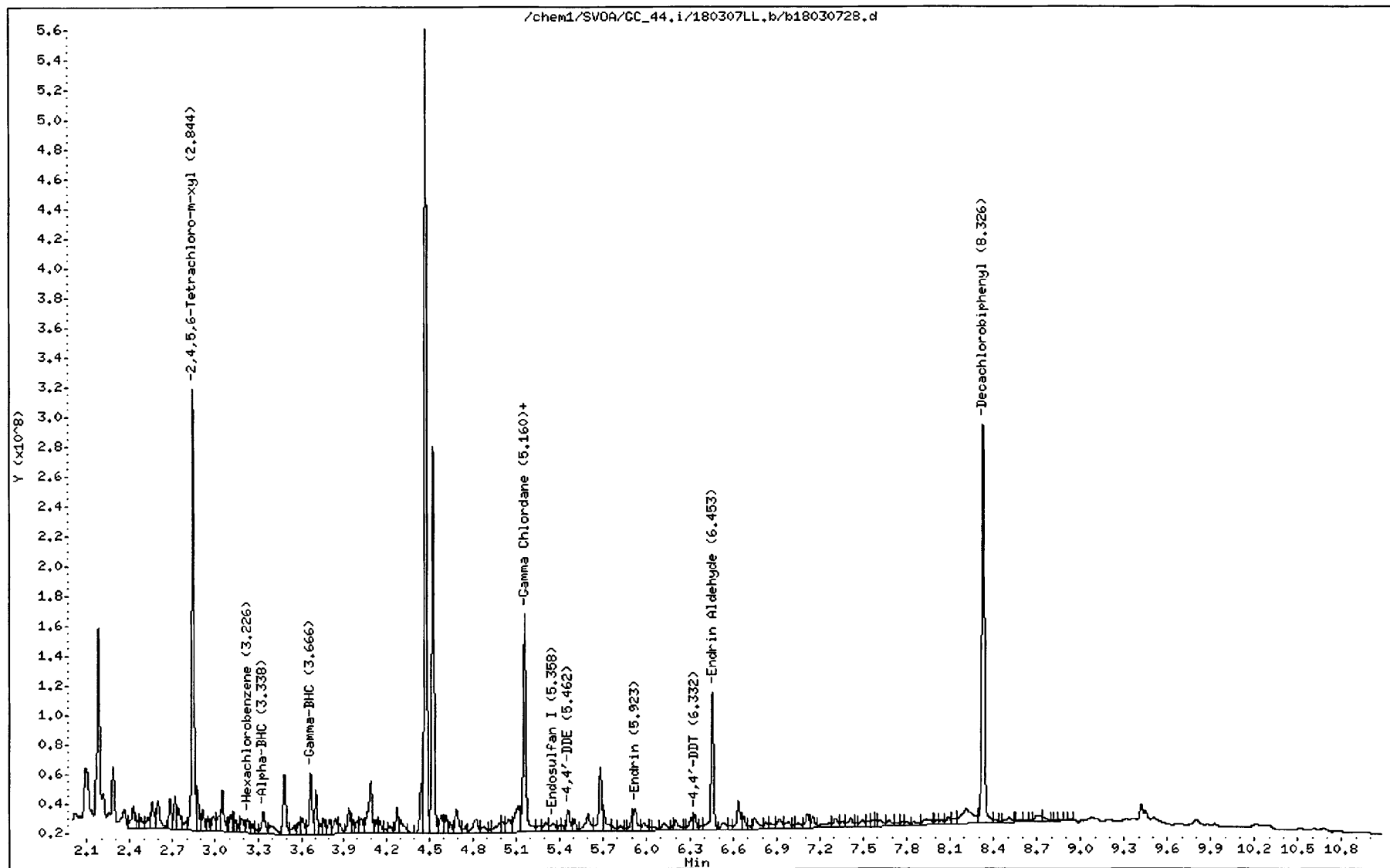
Sample Info: 18-02-1868-23

Instrument: GC_44.i

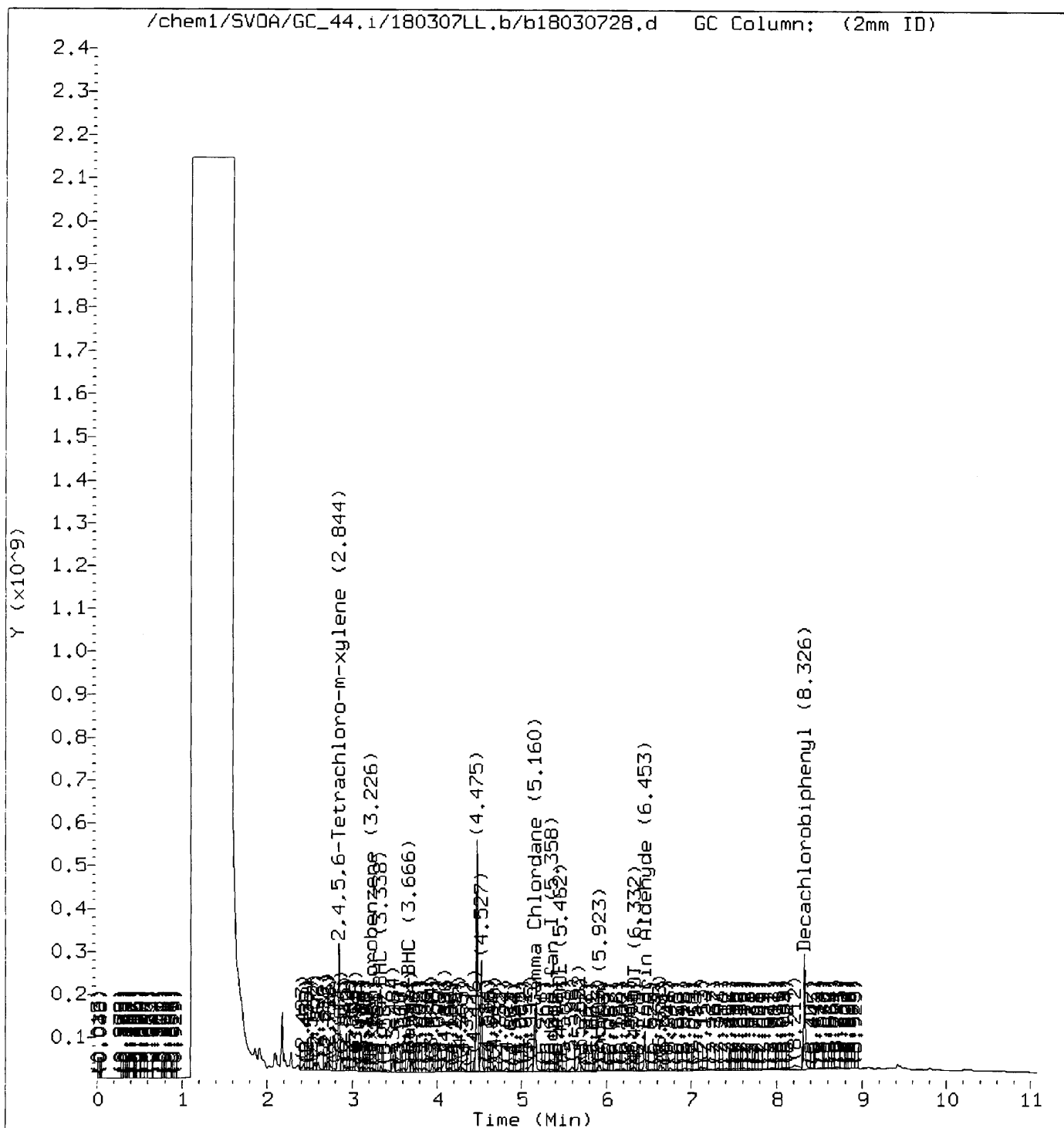
Operator: UHHN

Column diameter: 2.00

Column phase:



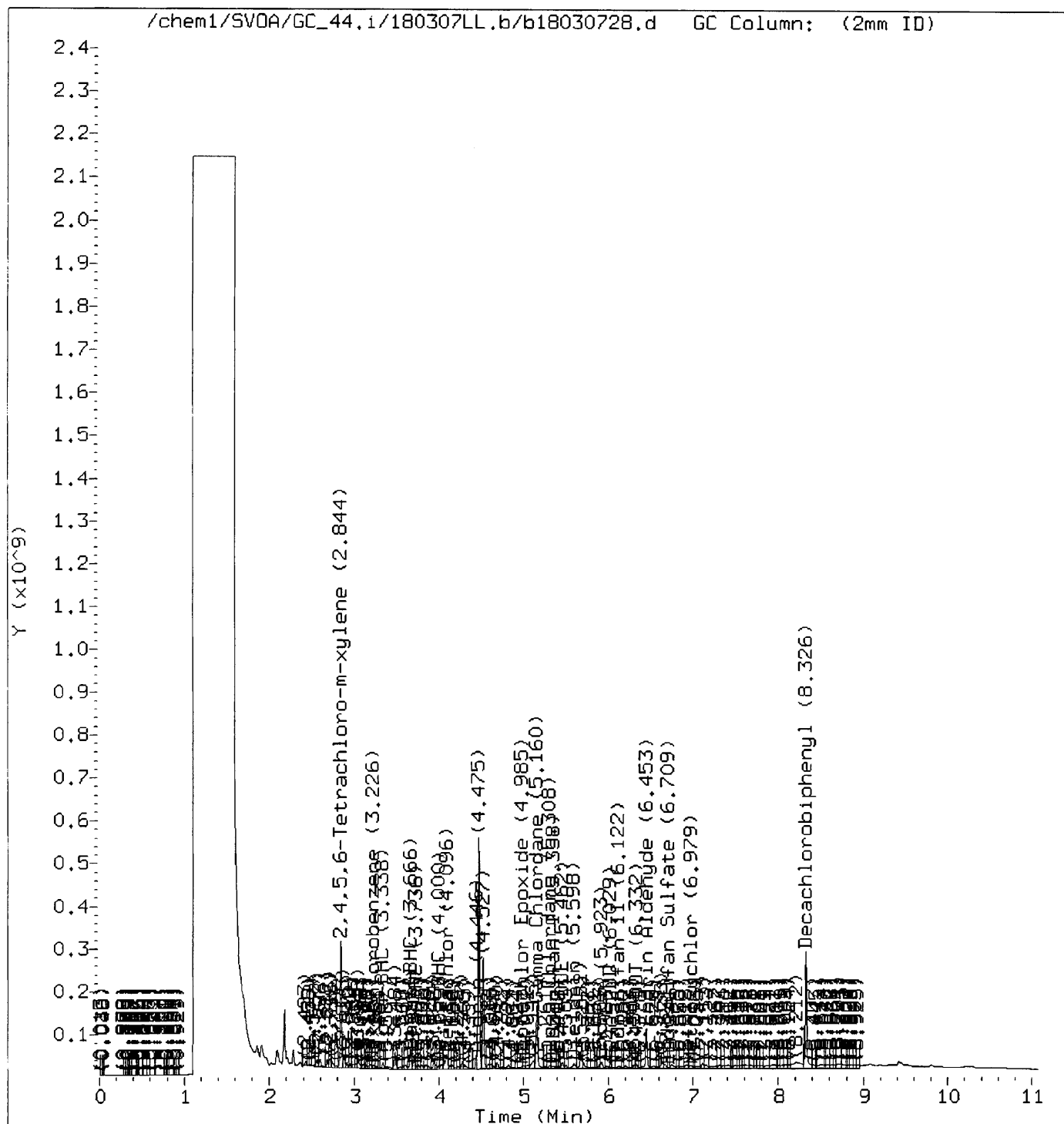
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 18:03.
Target 3.5 esignature user ID: uhn

Audit/management approval: 142



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030728.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:40
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-23
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	=====	=====	=====	=====	=====	=====
2,4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/a18030728.d

Page 1

Date : 07-MAR-2018 09:40

Client ID:

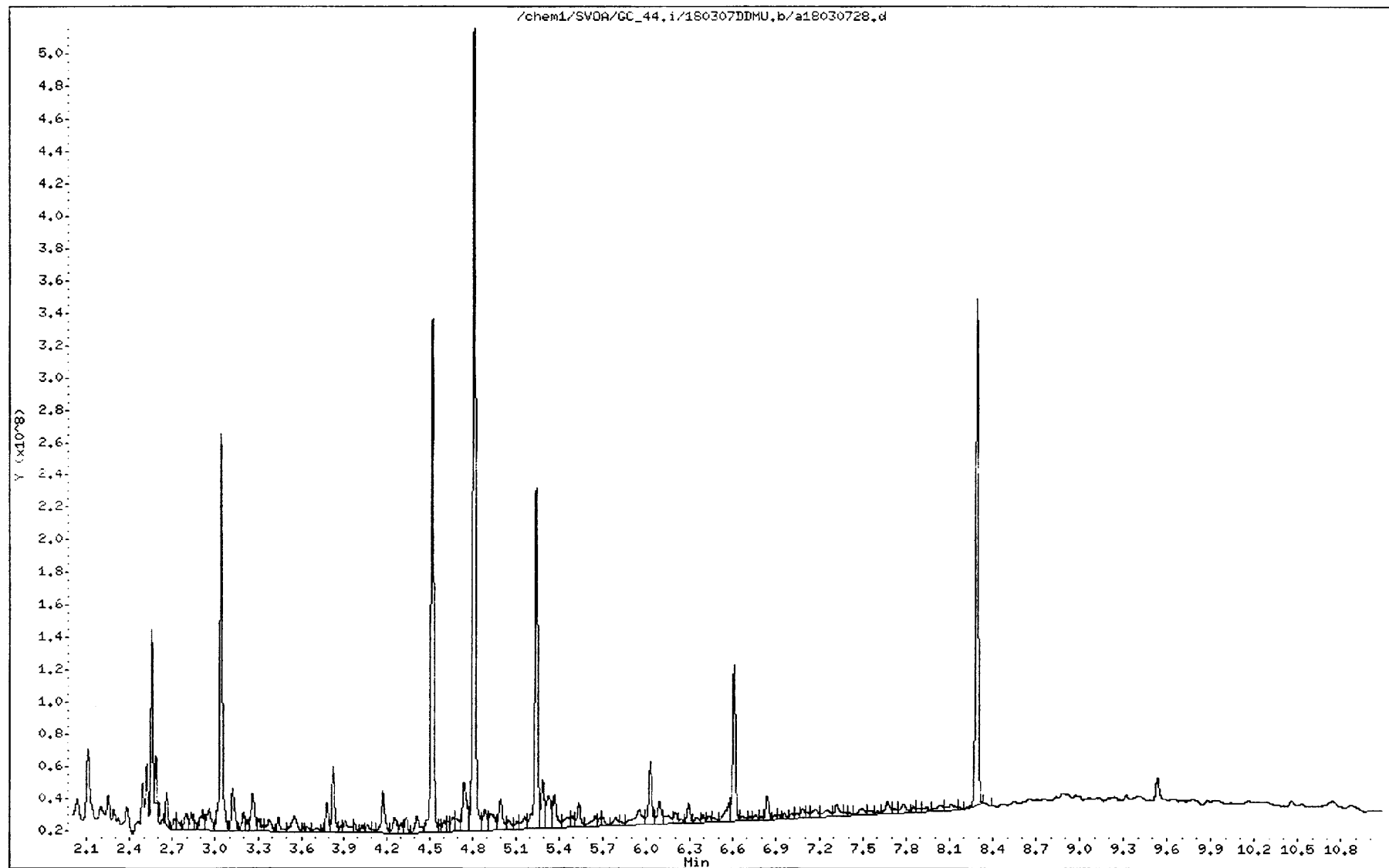
Instrument: GC_44.i

Sample Info: 18-02-1868-23

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030728.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:40
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-23
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU	5.115	5.122	-0.007	1069051509	24.5626	24.562

Data File: /chem1/SVQA/GC_44.i/180307DDHU.b/b18030728.d

Page 1

Date : 07-MAR-2018 09:40

Client ID:

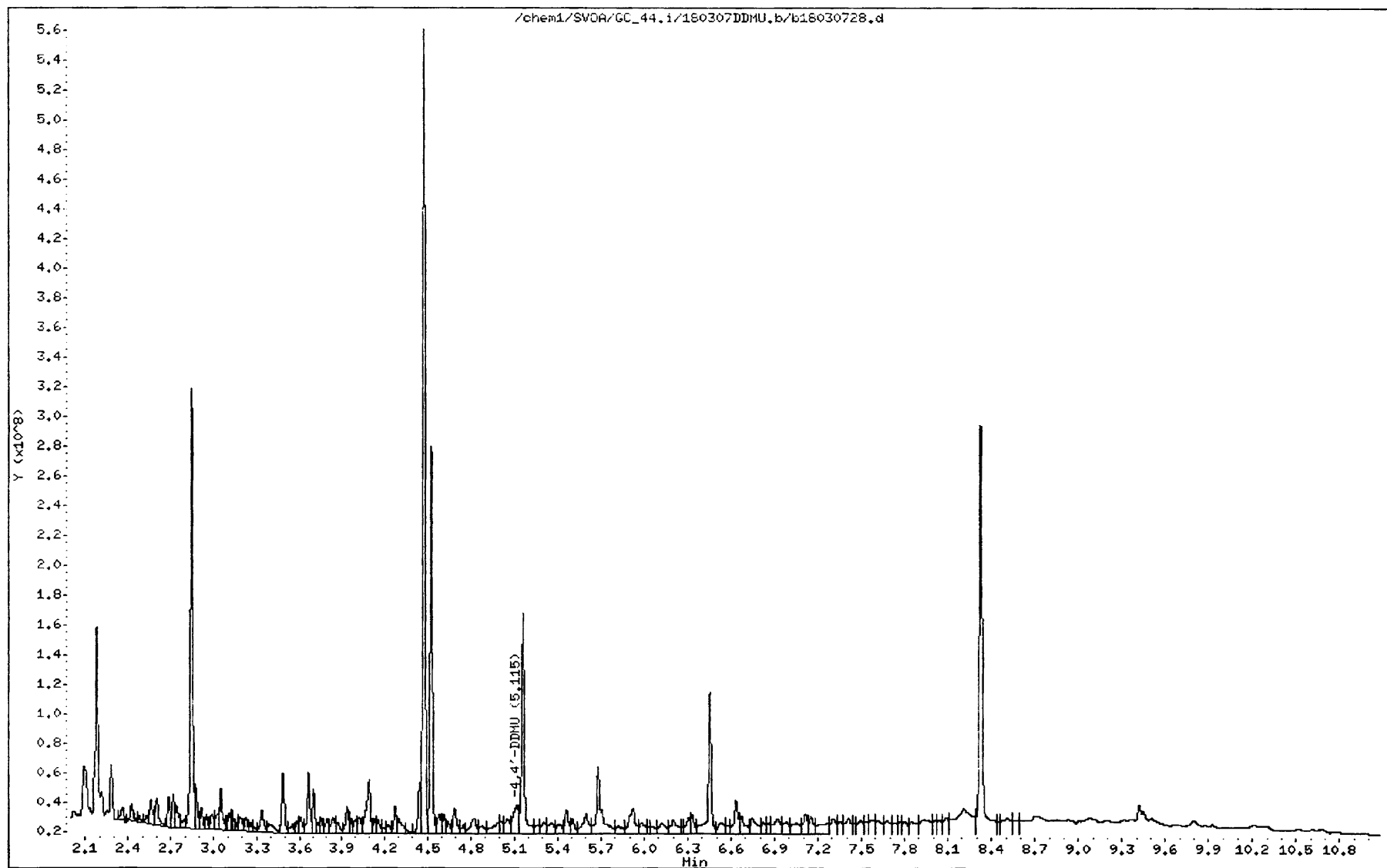
Instrument: GC_44.i

Sample Info: 18-02-1868-23

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 09:54
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072918030729

26 **CLIENT SAMPLE NUMBER:** LE-RW-21-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	25.6	ND	1.00	1.3	#		2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	39.9	ND	1.00	1.3	#		2	ND
Heptachlor Epoxide	10.5	ND	1.00	1.3	#		2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030729.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:54
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-26
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.041	3.036	0.005	7650476053	76.7457	76.745
2 Hexachlorobenzene	3.377	3.382	-0.005	4111770349	28.3272	28.327
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	4.081	4.093	-0.012	6149953865	41.2259	41.225 <i>re</i>
7 Heptachlor	4.318	4.310	0.008	5772719004	39.8873	<u>39.887</u>
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	Compound Not Detected.					
12 Heptachlor Epoxide	5.229	5.227	0.002	1337134844	10.5254	10.525 (H)
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 4,4'-DDE	5.548	5.539	0.009	2918299422	25.5517	25.551
17 Endosulfan I	5.621	5.625	-0.004	13216413950	110.827	110.826 (AM)
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	Compound Not Detected.					
22 Cis-Nonachlor	Compound Not Detected.					

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT				Compound Not Detected.		
26 Endrin Aldehyde				Compound Not Detected.		
27 Methoxychlor				Compound Not Detected.		
28 Mirex				Compound Not Detected.		
29 Endosulfan Sulfate				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.286	8.284	0.002	9667518598	92.6139	92.613 (M)
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030729.d

Date : 07-MAR-2018 09:54

Client ID:

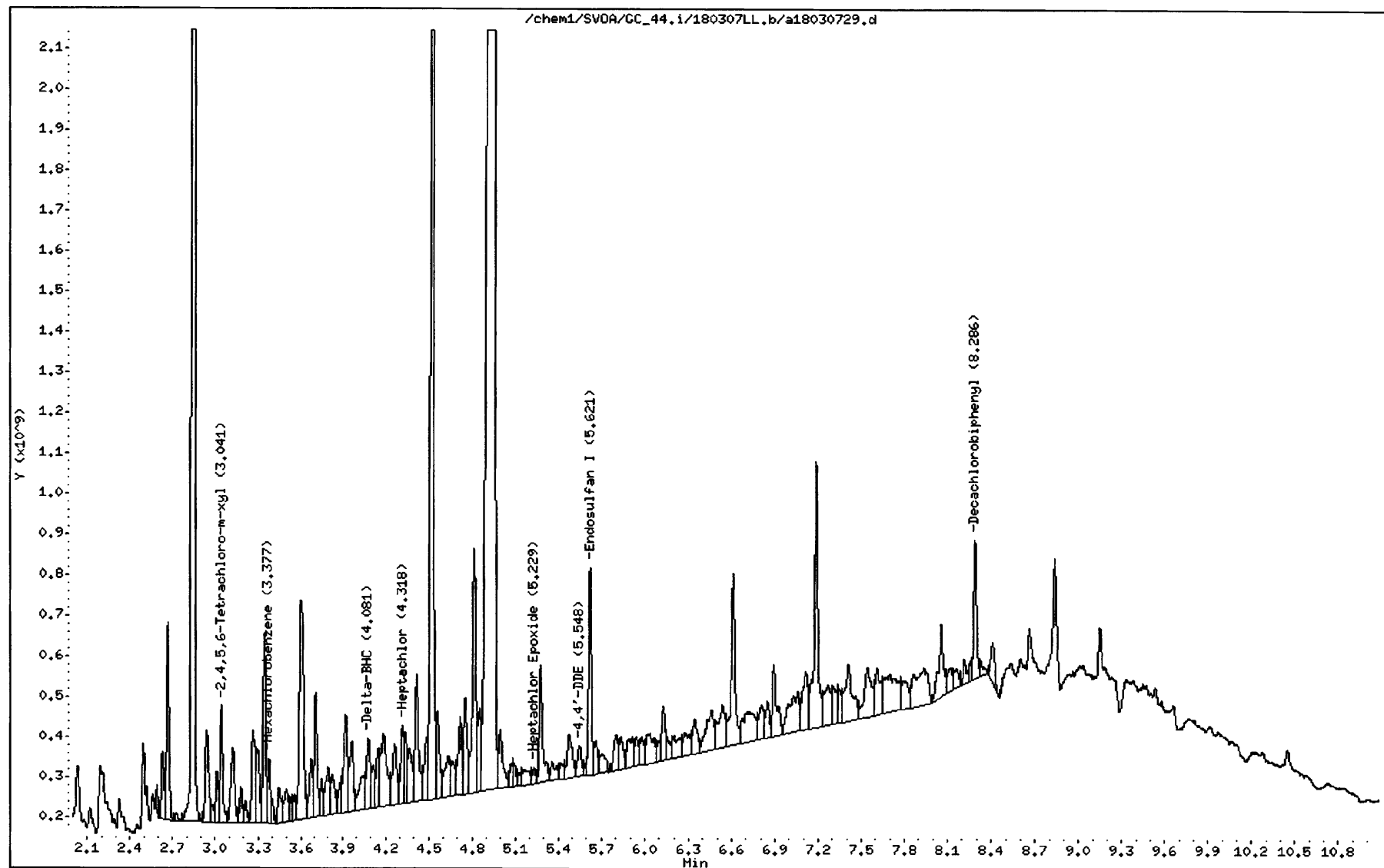
Sample Info: 18-02-1868-26

Instrument: GC_44.i

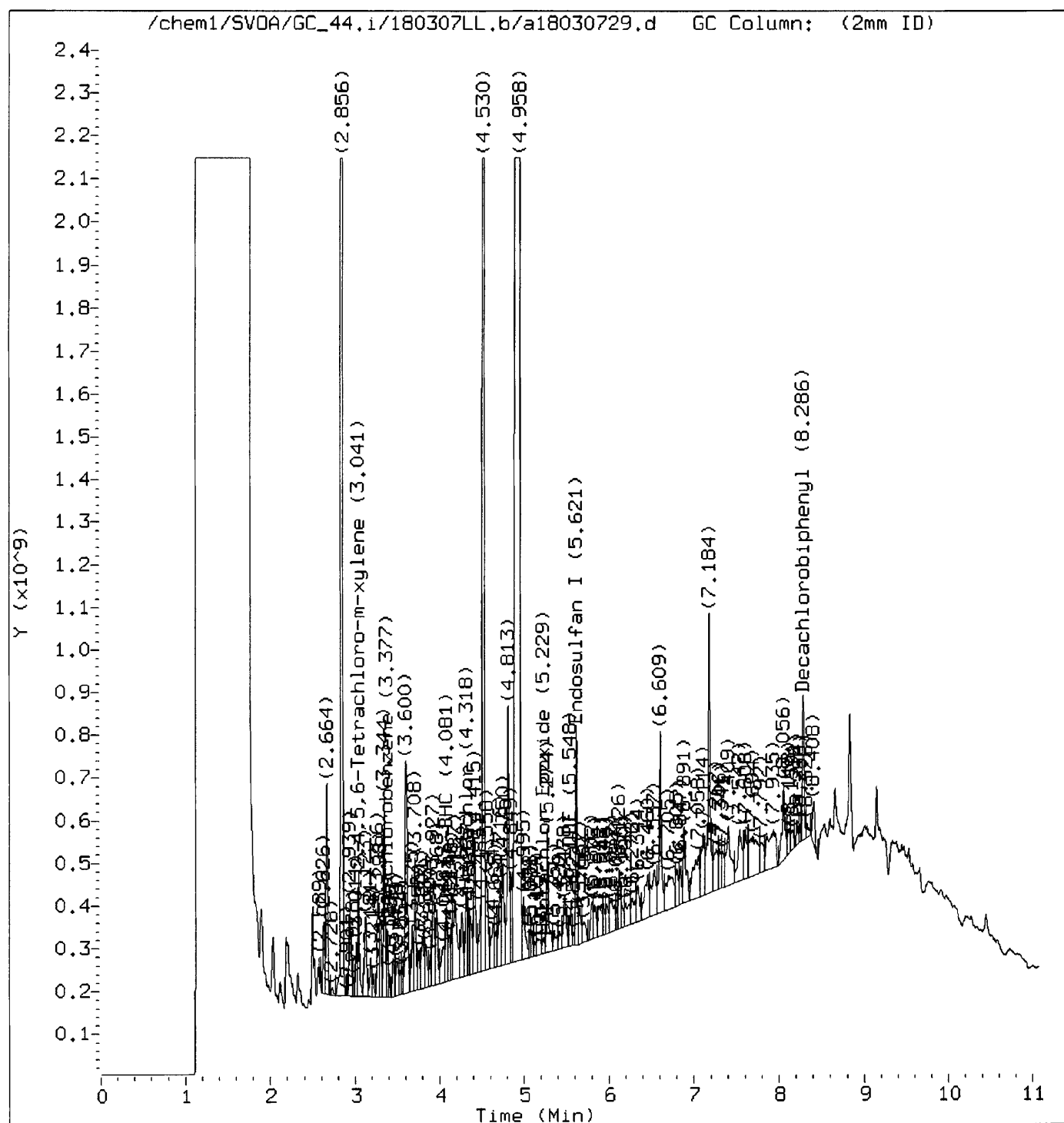
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File

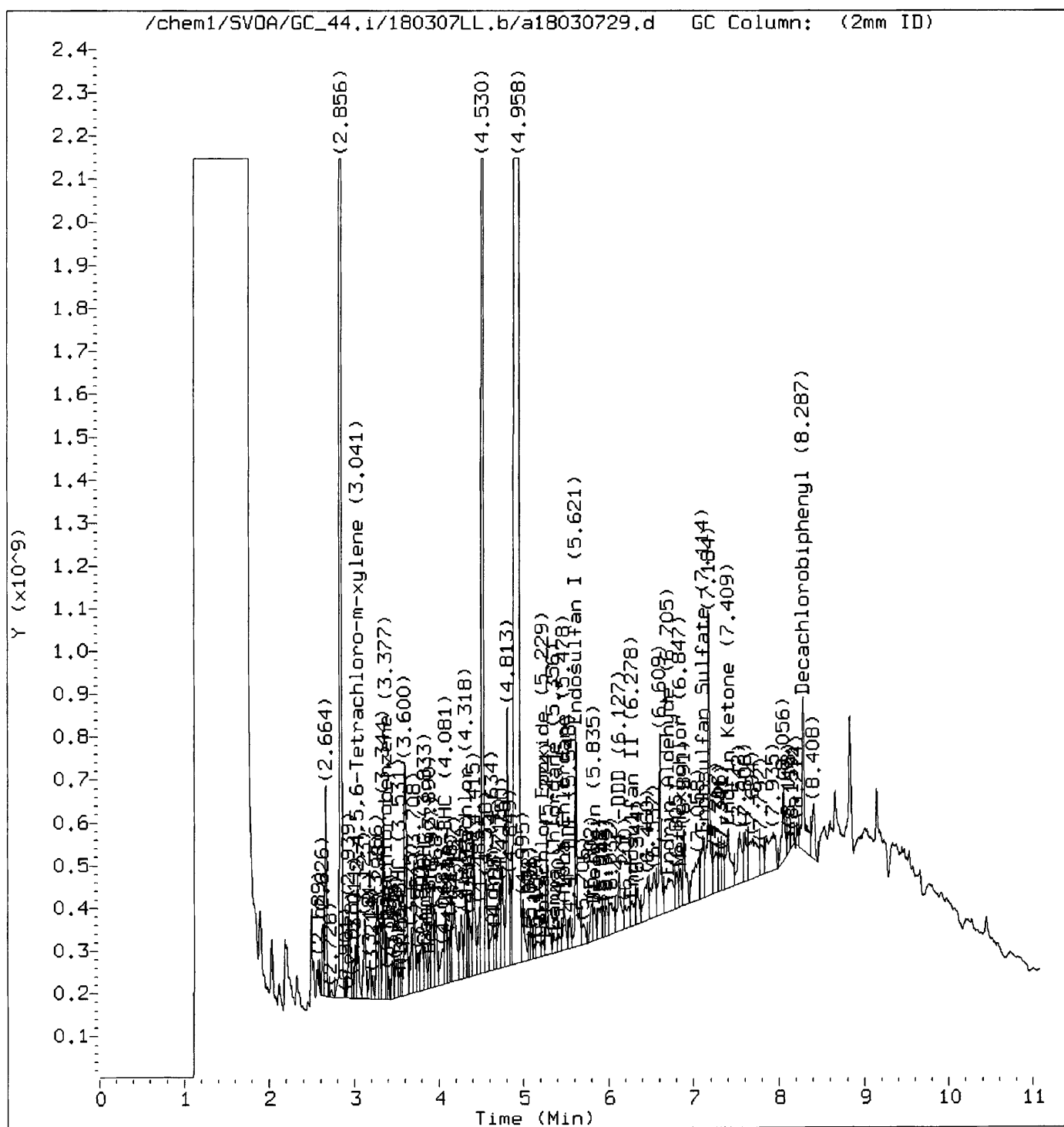


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/12/2018 at 10:36.
Target 3.5 esignature user ID: uhnn

Audit/management approval: 142

Original Data File



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030729.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:54
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-26
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds		CONCENTRATIONS					
		ON-COLUMN			FINAL		
		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene		2.851	2.842	0.009	15396221595	144.836	144.835 (R)
2 Hexachlorobenzene		Compound Not Detected.					
3 Alpha-BHC		Compound Not Detected.					
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		Compound Not Detected.					
10 Oxychlordane		Compound Not Detected.					
11 Heptachlor Epoxide		Compound Not Detected.					
12 2,4'-DDE		5.162	5.155	0.007	33104894120	371.627	371.627 (AM)
13 Gamma Chlordane		5.162	5.162	0.000	33104894120	253.838	253.838 (A)
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 Endosulfan I		5.362	5.366	-0.004	17273779793	147.043	147.043 (A)
17 4,4'-DDE		Compound Not Detected.					
18 Dieldrin		Compound Not Detected.					
19 2,4'-DDD		Compound Not Detected.					
20 Endrin		Compound Not Detected.					
21 2,4'-DDT		Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.			
23 4,4'-DDD					Compound Not Detected.			
24 Endosulfan II					Compound Not Detected.			
25 4,4'-DDT					Compound Not Detected.			
26 Endrin Aldehyde					Compound Not Detected.			
27 Endosulfan Sulfate					Compound Not Detected.			
28 Mirex					Compound Not Detected.			
29 Methoxychlor					Compound Not Detected.			
30 Endrin Ketone					Compound Not Detected.			
T 31 Decachlorobiphenyl	8.328	8.325	0.003	7956080691		82.3363	82.336 (A)	
M 32 Chlordane					Compound Not Detected.			
33 CHLD (1)					Compound Not Detected.			
34 CHLD (2)					Compound Not Detected.			
35 CHLD (3)					Compound Not Detected.			
36 CHLD (4)					Compound Not Detected.			
37 CHLD (5)					Compound Not Detected.			
M 38 Toxaphene					Compound Not Detected.			
39 TOXAPHENE (1)					Compound Not Detected.			
40 TOXAPHENE (2)					Compound Not Detected.			
41 TOXAPHENE (3)					Compound Not Detected.			
42 TOXAPHENE (4)					Compound Not Detected.			
43 TOXAPHENE (5)					Compound Not Detected.			

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/b18030729.d

Page 1

Date : 07-MAR-2018 09:54

Client ID:

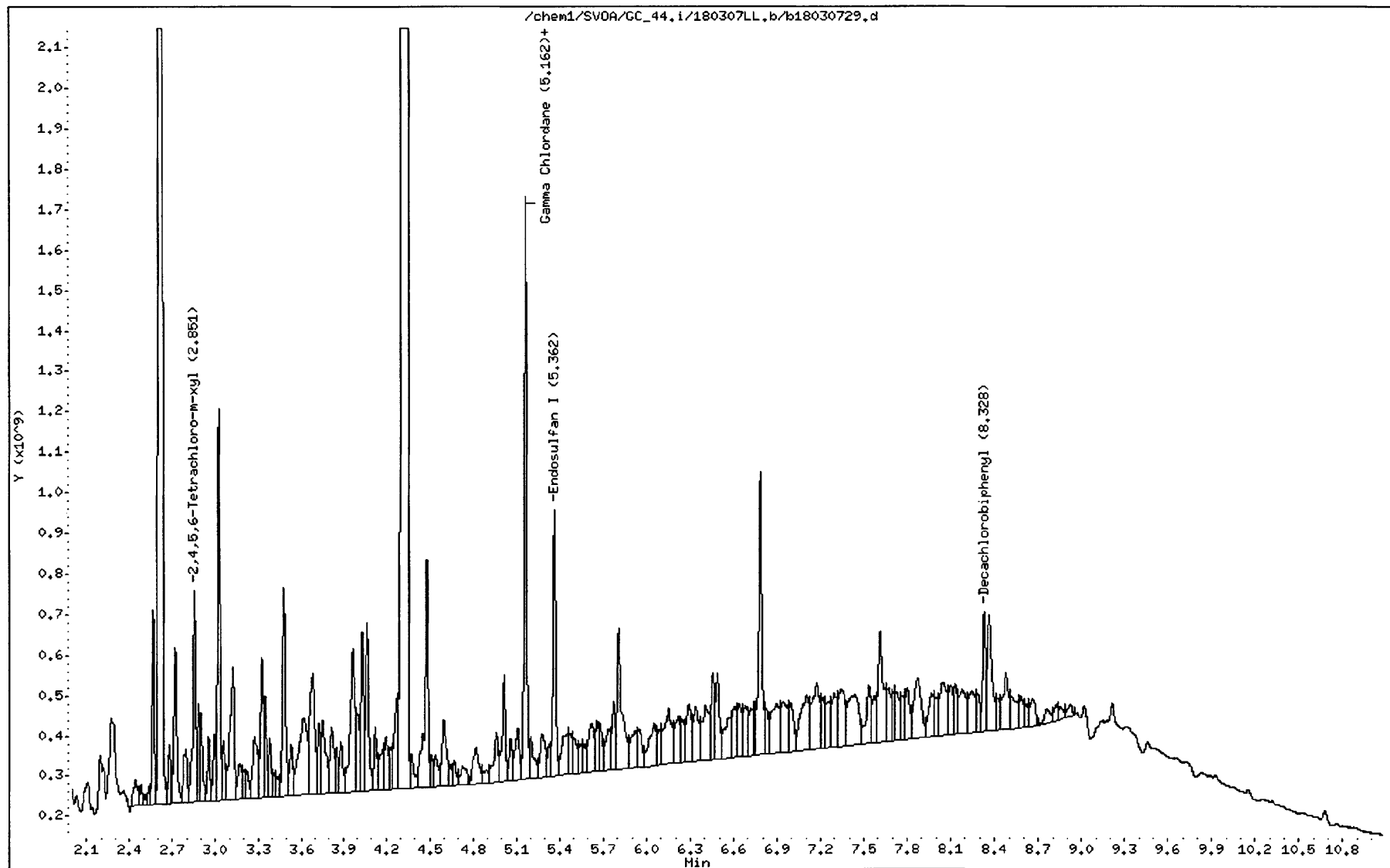
Instrument: GC_44.i

Sample Info: 18-02-1868-26

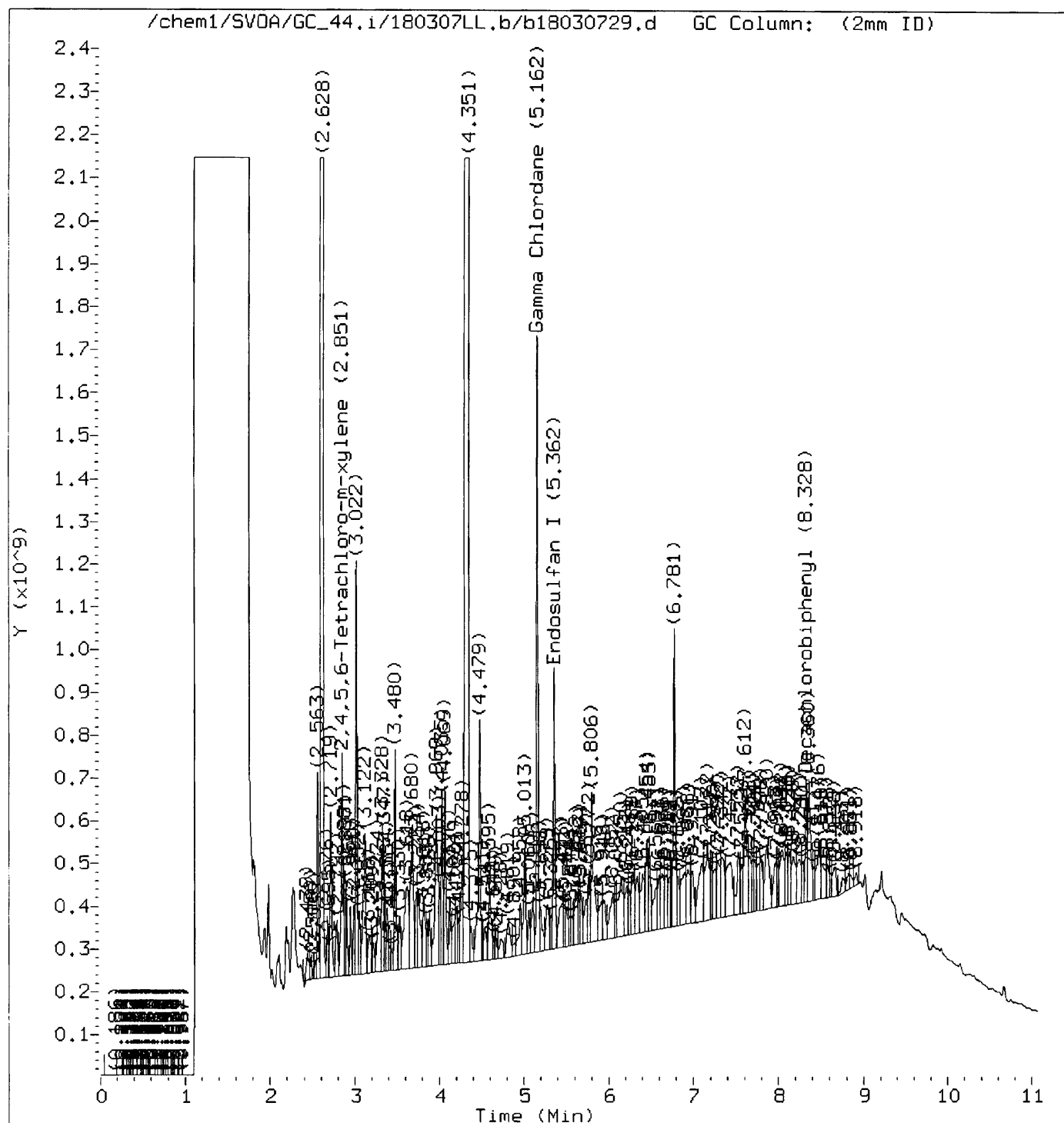
Operator: UHHN

Column phase:

Column diameter: 2.00



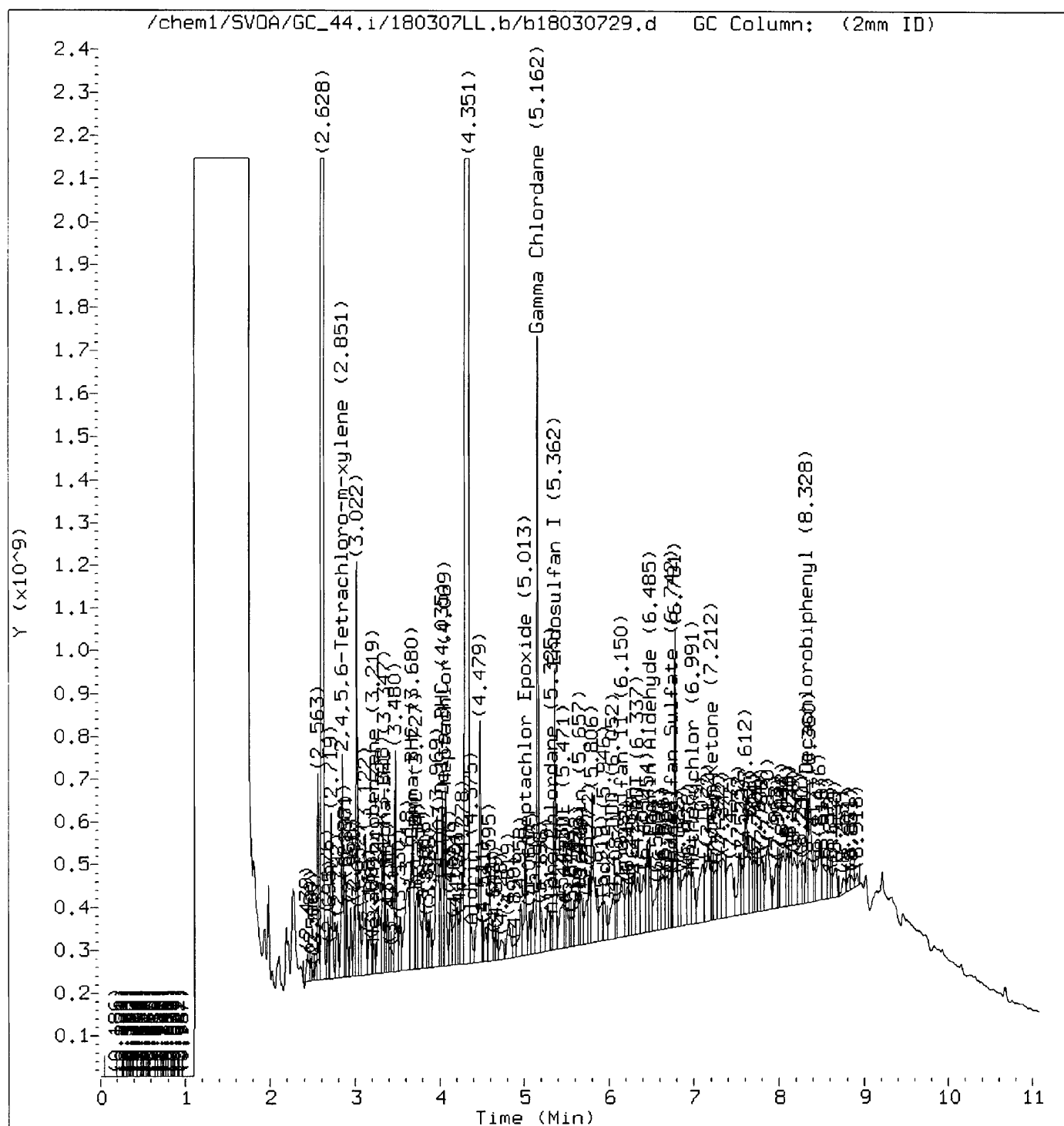
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
 Analyst responsible for change: on 03/09/2018 at 18:03.
 Target 3.5 esignature user ID: uhhn

Audit/management approval: 142



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030729.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:54
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-26
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (pgb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SV0A/GC_44.i/180307DDMU.b/a18030729.d

Page 1

Date : 07-MAR-2018 09:54

Client ID:

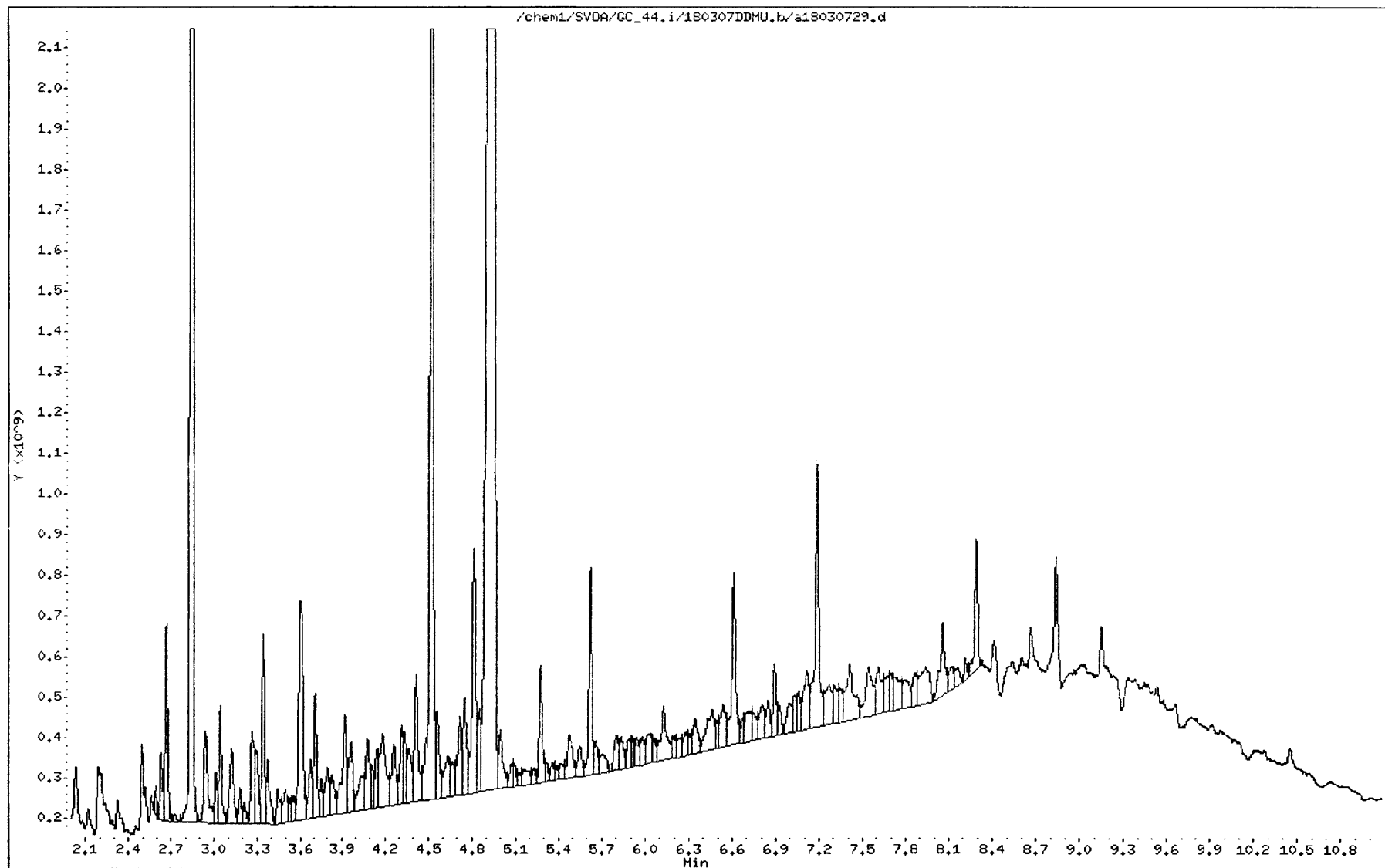
Instrument: GC_44.i

Sample Info: 18-02-1868-26

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030729.d
Lab Smp Id:
Inj Date : 07-MAR-2018 09:54
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-26
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN	FINAL
					(ppb)	(ug/Kg)
2,4,4'-DDMU	5.106	5.122	-0.016	5116457773	117.556	117.556 (A)

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030729.d

Page 1

Date : 07-MAR-2018 09:54

Client ID:

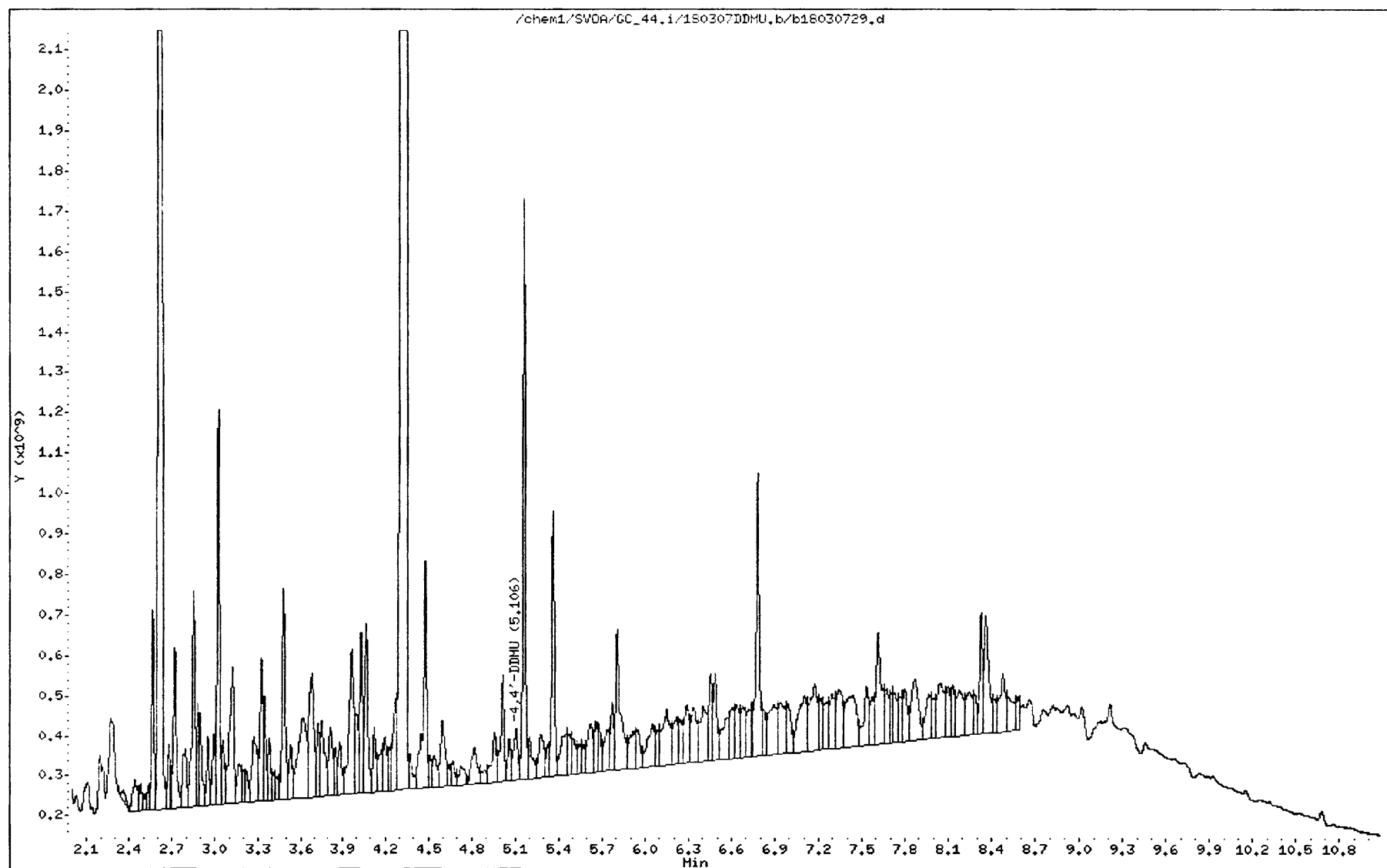
Instrument: GC_44.i

Sample Info: 18-02-1868-26

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 10:08
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803073018030730

27 **CLIENT SAMPLE NUMBER:** LE-RW-22-G-S-20180227

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	33.8	ND	1.00	1.3	#		2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	25.2	ND	1.00	2.0	#Y		2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	42.0	ND	1.00	1.3	#		2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030730.d
Lab Smp Id:
Inj Date : 07-MAR-2018 10:08
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-27
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds							CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE		ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
*****		==	=====	=====	=====		=====	=====
\$	1 2,4,5,6-Tetrachloro-m-xylene	3.043	3.036	0.007	8740445876		87.6798	87.679
	2 Hexachlorobenzene	3.377	3.382	-0.005	3643852118		25.1036	25.103
	3 Alpha-BHC				Compound Not Detected.			
	4 Gamma-BHC				Compound Not Detected.			
	5 Beta-BHC				Compound Not Detected.			
	6 Delta-BHC				Compound Not Detected.			
	7 Heptachlor	4.319	4.310	0.009	6082243546	42.0260	42.026 (H)	MC
	8 Aldrin				Compound Not Detected.			
	9 4,4'-Dichlorobenzophenone				Compound Not Detected.			
	10 Oxychlordane				Compound Not Detected.			
	11 2,4'-DDE				Compound Not Detected.			
	12 Heptachlor Epoxide				Compound Not Detected.			
	13 Gamma Chlordane				Compound Not Detected.			
	14 Trans-Nonachlor				Compound Not Detected.			
	15 Alpha Chlordane				Compound Not Detected.			
	16 4,4'-DDE	5.549	5.539	0.010	3857341229	33.7737	33.773	MC
	17 Endosulfan I	5.622	5.625	-0.003	16821309600	141.056	141.055 (A)	
	18 2,4'-DDD				Compound Not Detected.			
	19 Dieldrin				Compound Not Detected.			
	20 2,4'-DDT				Compound Not Detected.			
	21 Endrin				Compound Not Detected.			

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT						Compound Not Detected.		
26 Endrin Aldehyde						Compound Not Detected.		
27 Methoxychlor						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Endosulfan Sulfate						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.285	8.284	0.001		12729142891		121.944	121.943
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030730.d

Page 1

Date : 07-MAR-2018 10:08

Client ID:

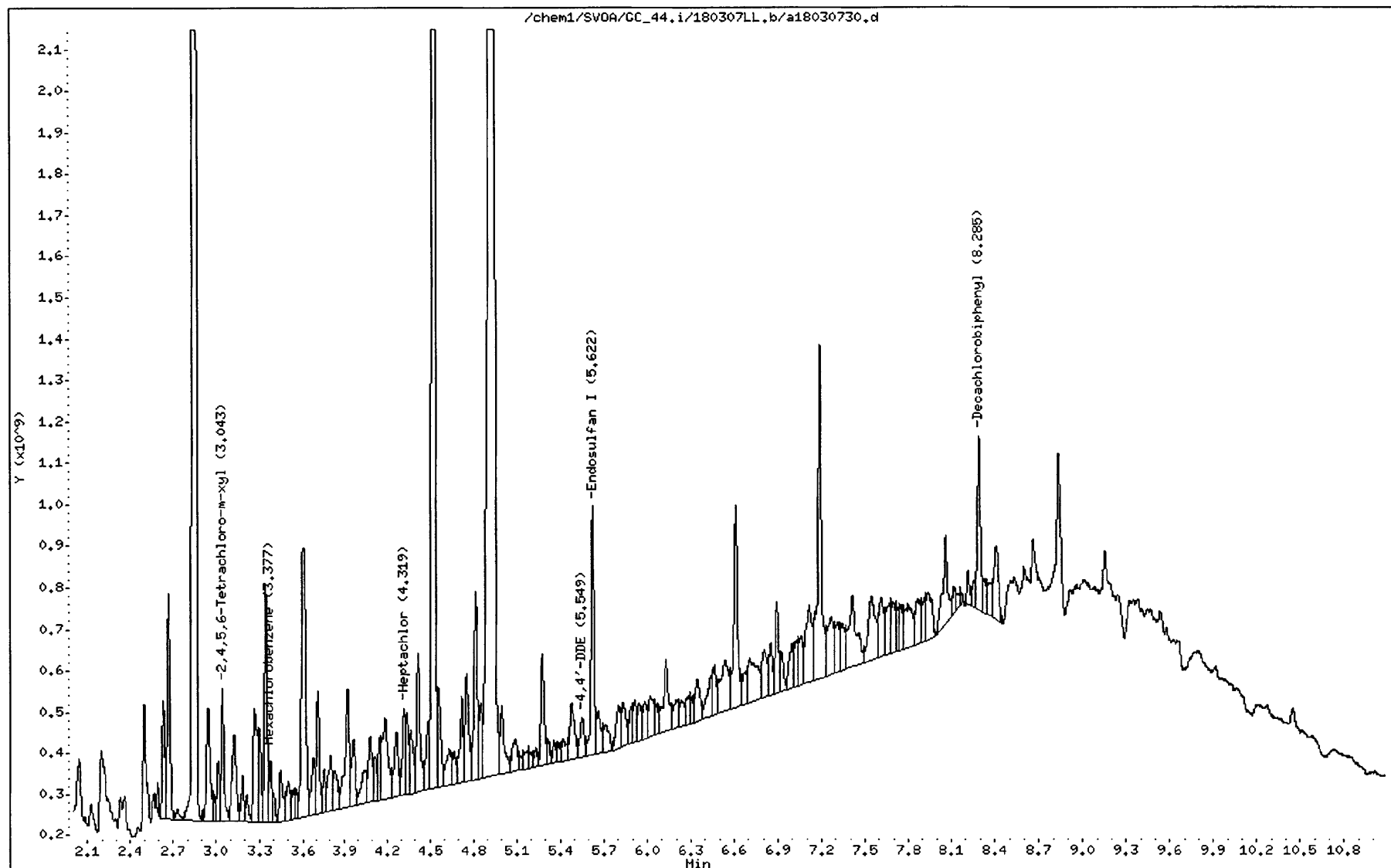
Instrument: GC_44.i

Sample Info: 18-02-1868-27

Operator: UHHN

Column phase:

Column diameter: 2.00



Data file : /chem1/SVOA/GC 44.i/180307LL.b/b18030730.d

Inst ID: GC 44.i

Processing Host: US26TAR4

Local Compound Variable

						CONCENTRATIONS	
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T	1 2,4,5,6-Tetrachloro-m-xylene	2.853	2.842	0.011	18591469453	174.894	174.894 (AR)
	2 Hexachlorobenzene		Compound	Not	Detected.		
	3 Alpha-BHC		Compound	Not	Detected.		
	4 Gamma-BHC		Compound	Not	Detected.		
	5 Beta-BHC		Compound	Not	Detected.		
	6 Delta-BHC		Compound	Not	Detected.		
	7 Heptachlor		Compound	Not	Detected.		
	8 Aldrin		Compound	Not	Detected.		
	9 4,4'-Dichlorobenzophenone		Compound	Not	Detected.		
	10 Oxychlordane		Compound	Not	Detected.		
	11 Heptachlor Epoxide		Compound	Not	Detected.		
	12 2,4'-DDE	5.162	5.155	0.007	42866713226	481.211	481.211 (AM)
	13 Gamma Chlordane		Compound	Not	Detected.		
	14 Trans-Nonachlor		Compound	Not	Detected.		
	15 Alpha Chlordane		Compound	Not	Detected.		
	16 Endosulfan I	5.363	5.366	-0.003	20100429436	171.105	171.105 (A)
	17 4,4'-DDE		Compound	Not	Detected.		
	18 Dieldrin		Compound	Not	Detected.		
	19 2,4'-DDD		Compound	Not	Detected.		
	20 Endrin		Compound	Not	Detected.		
	21 2,4'-DDT		Compound	Not	Detected.		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor				Compound Not Detected.		
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT				Compound Not Detected.		
26 Endrin Aldehyde				Compound Not Detected.		
27 Endosulfan Sulfate				Compound Not Detected.		
28 Mirex				Compound Not Detected.		
29 Methoxychlor				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
T 31 Decachlorobiphenyl	8.327	8.325	0.002	9168930918	94.8879	94.887 (A)
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/b18030730.d

Page 1

Date : 07-MAR-2018 10:08

Client ID:

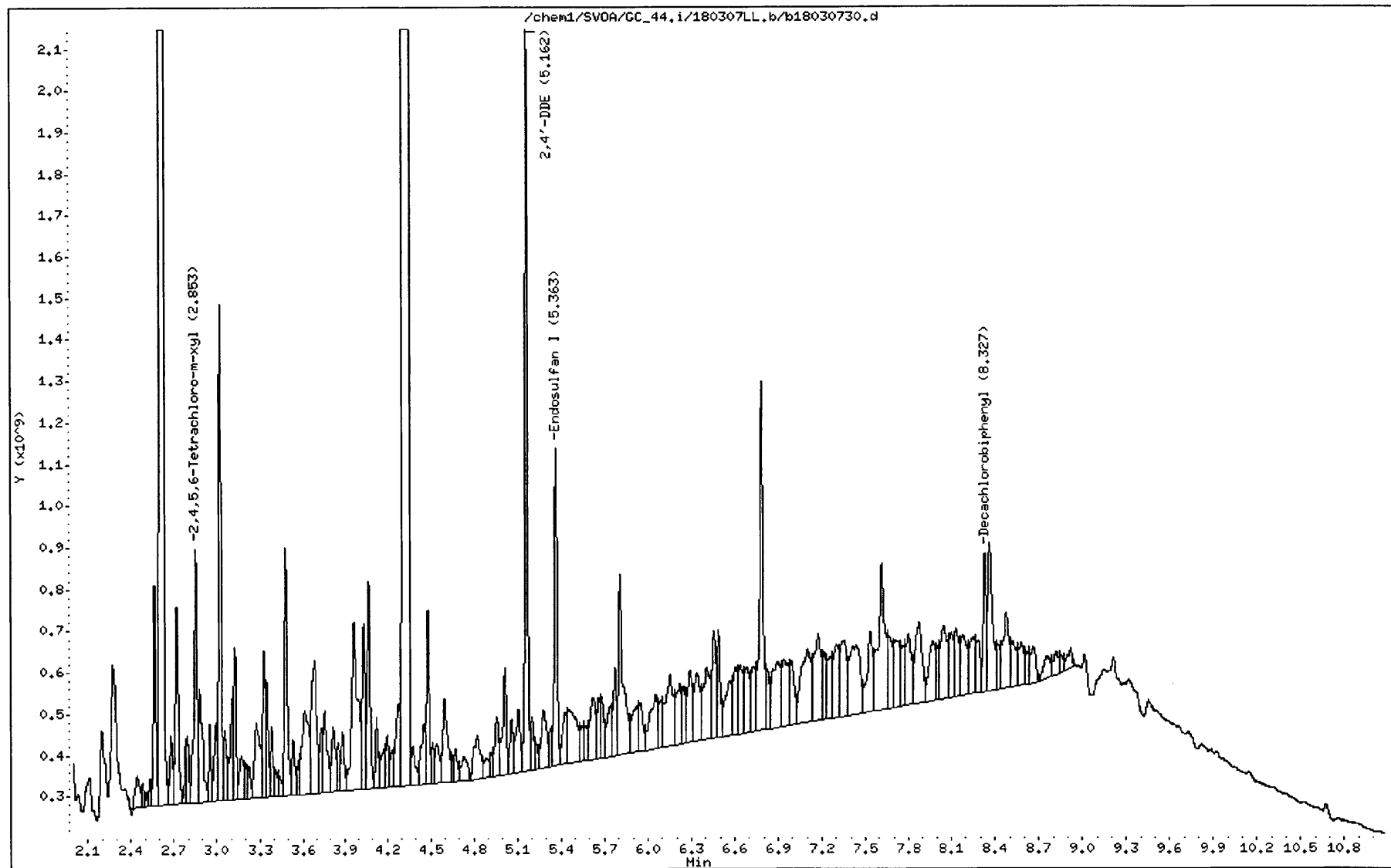
Instrument: GC_44.i

Sample Info: 18-02-1868-27

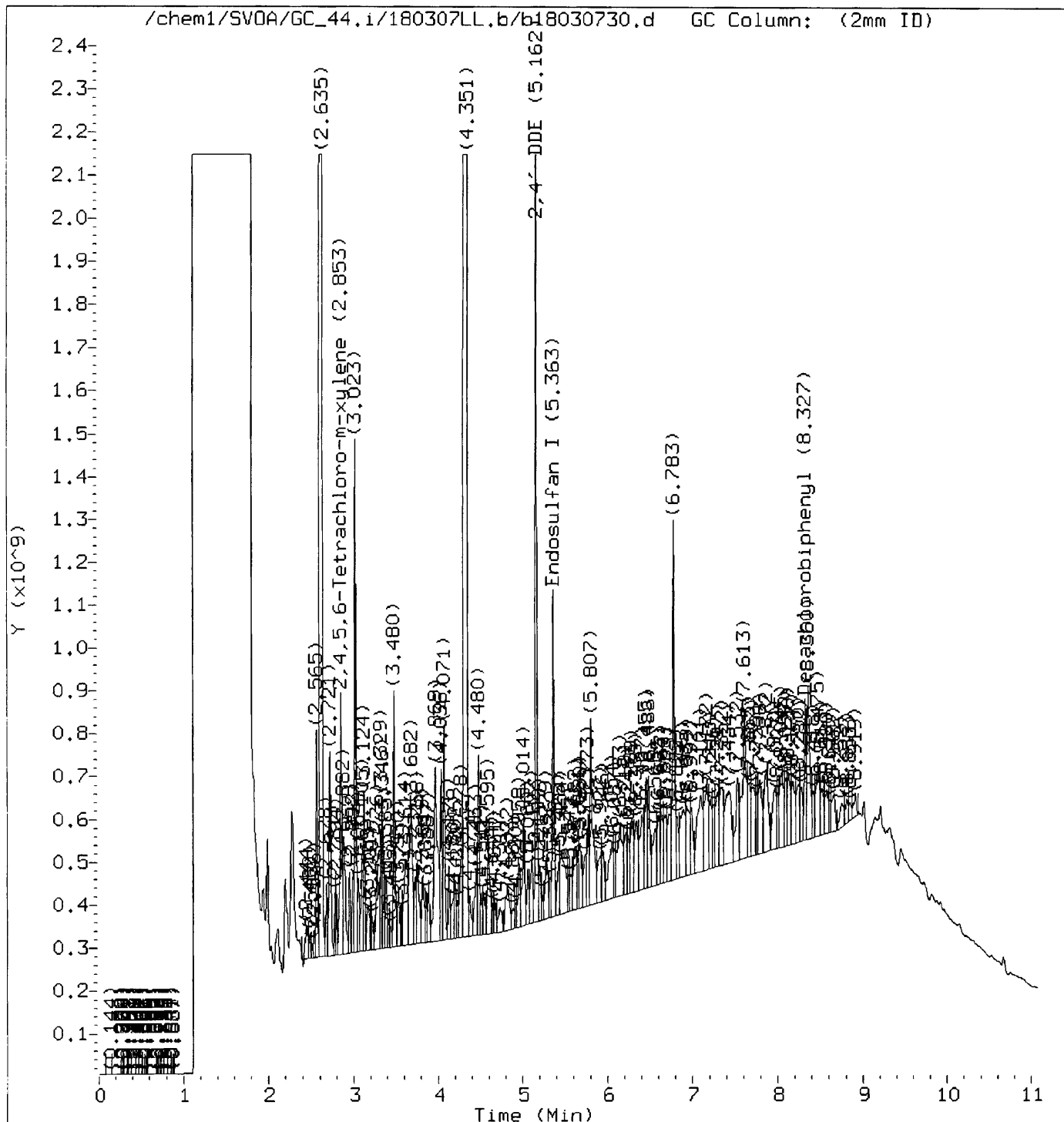
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File

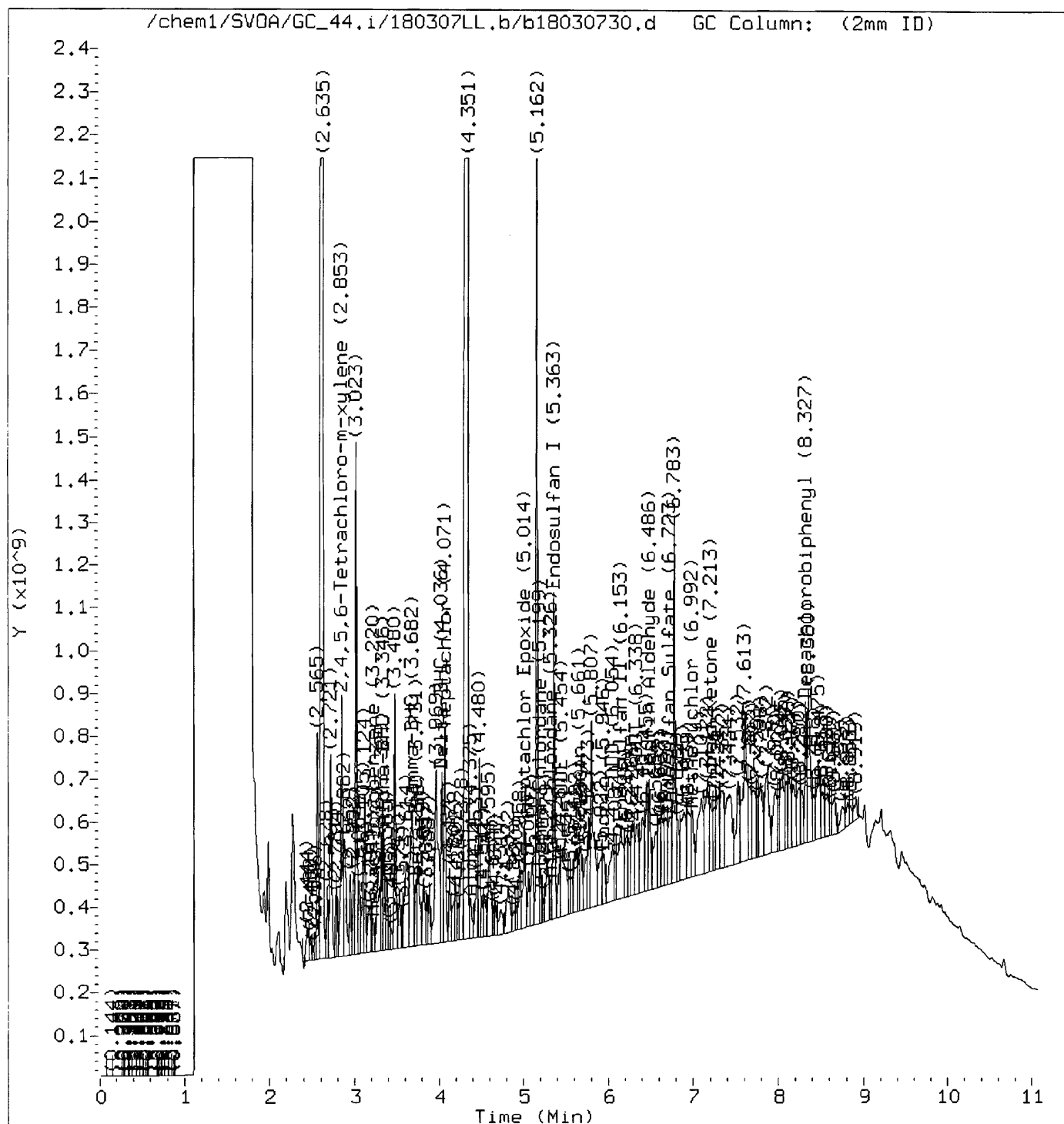


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
 Analyst responsible for change: on 03/09/2018 at 18:02.
 Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

142



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030730.d
Lab Smp Id:
Inj Date : 07-MAR-2018 10:08
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1868-27
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU	5.195	5.209	-0.014	1012331501	25.1947	25.194 <i>me</i>

Data File: /chem1/SVDA/GC_44.i/180307DDHU,b/a18030730.d

Page 1

Date : 07-MAR-2018 10:08

Client ID:

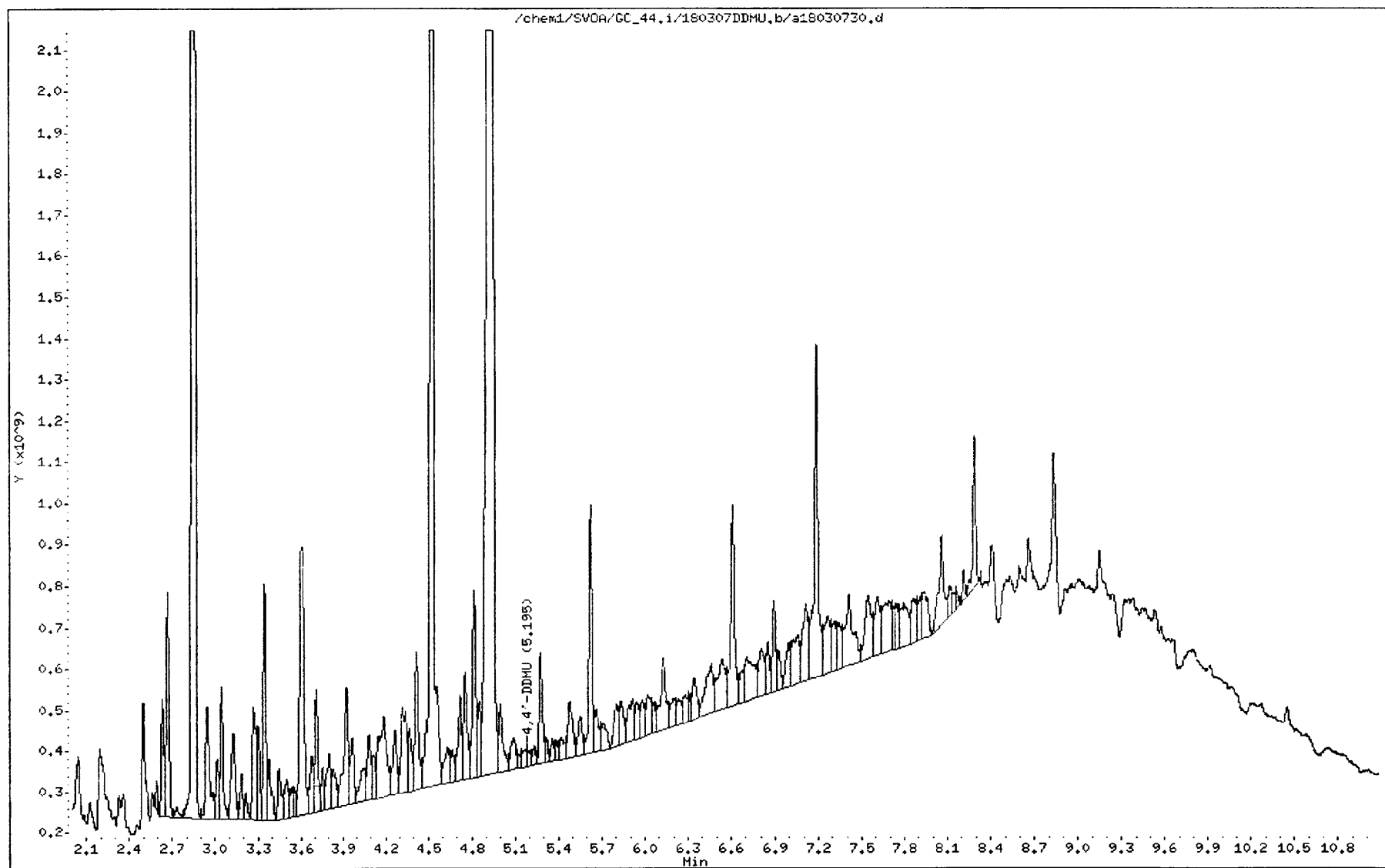
Instrument: GC_44.i

Sample Info: 18-02-1868-27

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030730.d
Lab Smp Id:
Inj Date : 07-MAR-2018 10:08
Operator : UHHN
Smp Info : 18-02-1868-27
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4

Inst ID: GC_44.i

Quant Type: ESTD

Cal File: b18030530.d

Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU	5.107	5.122	-0.015	6246371771	143.517	143.517 (A) NT

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030730.d

Page 1

Date : 07-MAR-2018 10:08

Client ID:

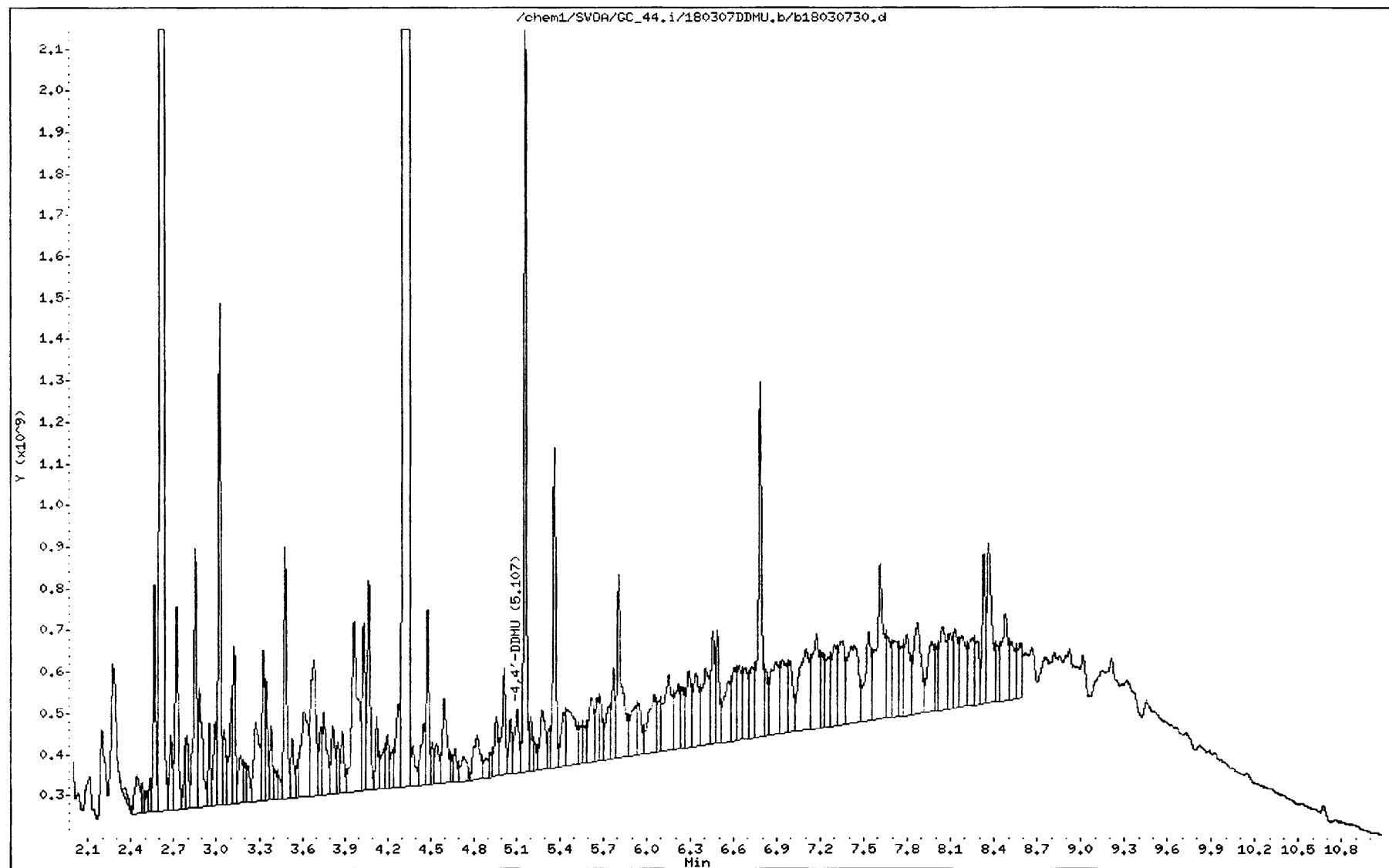
Instrument: GC_44.i

Sample Info: 18-02-1868-27

Operator: UHHN

Column phase:

Column diameter: 2.00



Analysis Method (EPA Method): <input type="checkbox"/> 608 <input checked="" type="checkbox"/> 8081 <input type="checkbox"/> 8082 <input type="checkbox"/> 8141 <input type="checkbox"/> 8310 <input type="checkbox"/> TO-13 <input type="checkbox"/> TO-4 <input checked="" type="checkbox"/> TMDL <input type="checkbox"/> 8270 (<input type="checkbox"/> Soil <input type="checkbox"/> Soil SIM SUPER <input type="checkbox"/> PAH <input type="checkbox"/> SIM PAH <input type="checkbox"/> SIM Pest <input type="checkbox"/> SIM PCB cong. <input type="checkbox"/> SIM FL)					
Extraction Method (EPA Method): <input checked="" type="checkbox"/> 3510 <input type="checkbox"/> 3520 <input type="checkbox"/> 3540 <input type="checkbox"/> 3541 <input type="checkbox"/> 3545 <input type="checkbox"/> 3550 <input type="checkbox"/> 3580					
Analyst ID#: Measuring Sample- 785 Start Extraction- 785/138 Blow Down- 681 Clean Up-					
Matrix: <input type="checkbox"/> Soil <input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Oil <input type="checkbox"/> Wipe <input type="checkbox"/> Filter <input type="checkbox"/> Tissue <input type="checkbox"/> Air					
Balance ID#:		Filter ID#:		ASE ID#:	
				Soxtherm ID#:	
				Orbit Shaker ID#: #1/2 Sonicator ID#:	
Ext. Start Date/Time: 3-1-18 20:00			Ext. End Date/Time: 3-1-18 21:50		
Sand or Wipe ID#:		Drying Agent: <input type="checkbox"/> Na ₂ SO ₄ <input type="checkbox"/> Diatomaceous Earth Drying Agent(s) ID#: 507-97-14			
Surrogate Std ID# & Volume Added (mL): 55022818A 2ppm/0.05mL					
Spike Std ID# & Volume Added (mL): 55022918A 1ppm/0.05mL Spike Added to: <input type="checkbox"/> LCS <input checked="" type="checkbox"/> LCSD <input type="checkbox"/> MS <input type="checkbox"/> MSD					
Extraction Solvent: <input checked="" type="checkbox"/> MeCl ₂ <input type="checkbox"/> 1:1 Hexane-Acetone <input type="checkbox"/> 1:1 MeCl ₂ -Acetone <input type="checkbox"/> 9:1 Hexane-Diethyl-ether <input type="checkbox"/> Acetonitrile					
Extraction Solvent ID#: 507-97-25		Exchange Solvent (<input checked="" type="checkbox"/> Hexane <input type="checkbox"/> Acetonitrile) ID#: 507-93-10			
Clean Up Start Date & Time:			Clean Up End Date & Time:		
Clean Up: <input type="checkbox"/> 3620 Florisil <input type="checkbox"/> 3630 SGC <input type="checkbox"/> 3660 Sulfur <input type="checkbox"/> 3665 Acid <input type="checkbox"/> Other					Cartridge ID#:
Clean Up Reagent ID#:					Cartridge Conditioning Column Pre-Elution Reagent ID#:
MB/LCS/MS Batch #: 180301212		Sample W (g) / V (mL)		Clean Up Performed	Comments
Cel ID#:	Initial	Final			
MB	1500	1	<input type="checkbox"/>	PH paper	507-82-07
LCS	1500	1	<input type="checkbox"/>	PH~6	
LCSD	1500	1	<input type="checkbox"/>	PH~6	
MS NA	—	—	<input type="checkbox"/>		
MSD NA	—	—	<input type="checkbox"/>		
18-02-1868- 1 F,G	1500	1	<input type="checkbox"/>	PH~7	
4 F,G	1500	1	<input type="checkbox"/>	PH~7	
7 F,G	1500	1	<input type="checkbox"/>	PH~7	
8 F,G	1500	1	<input type="checkbox"/>	PH~7	
11 F,G	1500	1	<input type="checkbox"/>	PH~7	
14 F,G	1500	1	<input type="checkbox"/>	PH~7	
17 F,G	1500	1	<input type="checkbox"/>	PH~7	
20 F,G	1500	1	<input type="checkbox"/>	PH~7	
23 F,G	1500	1	<input type="checkbox"/>	PH~7	
26 F,G	1500	1	<input type="checkbox"/>	PH~7 emulsion	
27 F,G	1500	1	<input type="checkbox"/>	PH~7 emulsion	
18-02-1891- 1 E,F	1500	1	<input type="checkbox"/>	PH~6	
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INITIAL CALIBRATION QUALITY CONTROL SUMMARY

FOR METHOD: EPA 8081A

ICAL WORK ORDER: 099-14-434-447-5941
 ICAL BATCH ID: 180305I002
 INSTRUMENT: GC 44

ANALYZED BY: 1,096
 ICAL D/T ANALYZED: 2018-03-05 16:04
 REVIEWED BY: 421
 D/T REVIEWED: 2018-03-12 09:53

COMPOUND	COMP. TYPE	CALIB. MODEL	1	2	3	4	5	6	7	8	9	Avg. RF	Min. RF	%RSD	%RSD CL	R or R^2	R or R^2 CL	STATUS
Gamma-BHC	C	Avg RF	147,978,95 4	149,289,02 4	149,082,1 49	153,333 ,759	149,200,5 97					149,7 76,89 6	0.00	1	0-20			PASS
Heptachlor	C	Avg RF	150,776,85 1	147,257,11 1	142,416,2 21	143,936 ,734	139,241,3 36					144,7 25,65 1	0.00	3	0-20			PASS
Aldrin	C	Avg RF	143,101,30 2	141,122,71 6	136,972,1 83	138,793 ,598	134,130,9 28					138,8 24,14 5	0.00	3	0-20			PASS
Heptachlor Epoxide	C	Avg RF	135,006,44 6	129,726,14 6	124,009,1 72	125,223 ,102	121,228,9 49					127,0 38,76 3	0.00	4	0-20			PASS
Gamma Chlordane	C	Avg RF	137,651,73 5	130,731,10 7	126,472,6 08	128,347 ,689	124,540,1 46					129,5 48,65 7	0.00	4	0-20			PASS
Alpha Chlordane	C	Avg RF	135,042,09 8	125,821,16 6	120,155,6 22	121,754 ,465	117,894,1 16					124,1 33,49 4	0.00	5	0-20			PASS
4,4'-DDE	C	Avg RF	114,565,98 5	113,800,40 7	113,803,0 87	116,375 ,347	112,512,1 10					114,2 11,38 7	0.00	1	0-20			PASS
Dieldrin	C	Avg RF	134,456,11 6	128,151,34 0	124,933,4 25	127,057 ,115	123,667,4 04					127,6 53,08 0	0.00	3	0-20			PASS
Endrin	C	Avg RF	124,164,56 7	119,441,74 9	115,496,7 36	117,877 ,592	114,927,1 59					118,3 81,56 0	0.00	3	0-20			PASS
4,4'-DDD	C	Avg RF	103,096,05 6	99,857,858	98,469,12 0	100,411 ,048	98,150,74 3					99,99 6,965	0.00	2	0-20			PASS
4,4'-DDT	C	Avg RF	102,982,02 8	98,899,701	97,104,80 8	102,690 ,185	98,849,54 6					100,1 05,25 3	0.00	3	0-20			PASS
4,4'-DDMU		Avg RF	42,859,133	43,907,127	40,664,05 2	35,620, 718	37,850,28 5					40,18 0,263	0.00	9	0-20			PASS
Toxaphene	C	Avg RF	19,627,747	25,166,160	25,150,68 2	24,404, 685	23,705,77 7					23,61 1,010	0.00	10	0-20			PASS

INITIAL CALIBRATION QUALITY CONTROL SUMMARY

FOR METHOD: EPA 8081A

ICAL WORK ORDER: 099-14-434-447-5941
 ICAL BATCH ID: 180305I002
 INSTRUMENT: GC 44

ANALYZED BY: 1,096
 ICAL D/T ANALYZED: 2018-03-05 16:04
 REVIEWED BY: 421
 D/T REVIEWED: 2018-03-12 09:53

COMPOUND	COMP. TYPE	CALIB. MODEL	1	2	3	4	5	6	7	8	9	Avg. RF	Min. RF	%RSD	%RSD CL	R or R^2	R or R^2 CL	STATUS
Oxychlordane	Avg RF		142,677,371	137,114,599	121,816,365	122,834,322	119,168,479					128,722,227	0.00	8	0-20			PASS
2,4'-DDE	Avg RF		100,221,353	103,706,734	98,628,480	91,999,371	93,676,893					97,646,566	0.00	5	0-20			PASS
Trans-nonachlor	Avg RF		141,952,687	154,065,591	142,781,363	147,007,962	141,972,494					145,556,019	0.00	4	0-20			PASS
2,4'-DDD	Avg RF		81,648,754	87,821,705	80,440,104	82,550,626	79,785,527					82,449,343	0.00	4	0-20			PASS
2,4'-DDT	Avg RF		89,463,360	98,490,744	92,555,307	96,375,473	93,458,049					94,068,587	0.00	4	0-20			PASS
Cis-nonachlor	Avg RF		92,786,916	99,514,954	93,817,219	97,725,464	95,120,895					95,793,090	0.00	3	0-20			PASS

Data Files:

Level #	D/T Analyzed	Data File
1	2018-03-05 16:04	/chem1/SVOA/GC_44/180305LL/a1803052018030520
2	2018-03-05 16:18	/chem1/SVOA/GC_44/180305LL/a1803052118030521
3	2018-03-05 16:32	/chem1/SVOA/GC_44/180305LL/a1803052218030522
4	2018-03-05 16:46	/chem1/SVOA/GC_44/180305LL/a1803052318030523
5	2018-03-05 17:01	/chem1/SVOA/GC_44/180305LL/a1803052418030524

INITIAL CALIBRATION VERIFICATION QUALITY CONTROL SHEET FOR METHOD: EPA 8081A

ICV WORK ORDER: 099-14-434-447-5941

INITIAL BATCH: 180305I002

INSTRUMENT: GC 44

ANALYZED BY: 1096

D/T ANALYZED:

INITIAL: 2018-03-05 16:04

ICV: 2018-03-05 17:15

REVIEWED BY: 421

D/T REVIEWED: 2018-03-12 09:53

DATA FILE: /chem1/SVOA/GC_44/180305LL/a1803052518030525

<u>COMPOUND NAME</u>	<u>COMP TYPE</u>	<u>CALIB MODEL</u>	<u>MIN RF</u>	<u>AVG RF</u>	<u>ICV RF</u>	<u>AMOUNT</u>	<u>ICV CONC</u>	<u>ICV %D</u>	<u>ICV %D CL</u>	<u>STATUS</u>
Gamma-BHC	C	Avg Resp	0.00	149776896.311	160573568.625			-7	0-15	PASS
Heptachlor	C	Avg Resp	0.00	144725650.637	153740279.025			-6	0-15	PASS
Aldrin	C	Avg Resp	0.00	138824145.347	147223797.725			-6	0-15	PASS
Heptachlor Epoxide	C	Avg Resp	0.00	127038762.936	133516948.075			-5	0-15	PASS
Gamma Chlordane	C	Avg Resp	0.00	129548657.117	136043090.850			-5	0-15	PASS
Alpha Chlordane	C	Avg Resp	0.00	124133493.626	128715152.250			-4	0-15	PASS
4,4'-DDE	C	Avg Resp	0.00	114211387.185	123387052.300			-8	0-15	PASS
Dieldrin	C	Avg Resp	0.00	127653079.898	134617264.725			-5	0-15	PASS
Endrin	C	Avg Resp	0.00	118381560.285	125026493.550			-6	0-15	PASS
4,4'-DDD	C	Avg Resp	0.00	99996965.032	106427458.450			-6	0-15	PASS
4,4'-DDT	C	Avg Resp	0.00	100105253.431	103719845.900			-4	0-15	PASS
4,4'-DDMU		Avg Resp	0.00	40180263.236	36391696.175			9	0-15	PASS
Toxaphene	C	Avg Resp	0.00	23611010.194	22766440.958			4	0-15	PASS
Oxychlordane		Avg Resp	0.00	128722227.057	119878294.375			7	0-15	PASS
2,4'-DDE		Avg Resp	0.00	97646566.327	90364430.125			7	0-15	PASS
Trans-nonachlor		Avg Resp	0.00	145556019.398	141104248.875			3	0-15	PASS
2,4'-DDD		Avg Resp	0.00	82449343.429	75240034.725			9	0-15	PASS
2,4'-DDT		Avg Resp	0.00	94068586.781	93257346.200			1	0-15	PASS
Cis-nonachlor		Avg Resp	0.00	95793089.818	93441316.525			2	0-15	PASS

MIN RF: Method Specified Minimum Response Factor

METHOD BLANK ASSOCIATION SUMMARY

FOR METHOD: EPA 8081A

MB SAMPLE ID: 099-16-704-20
MB BATCH ID: 180301L12
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-06 15:04
REVIEWED BY: 421
D/T REVIEWED: 2018-03-12 09:53
MATRIX: Water

DATA FILE: /chem1/SVOA/GC_44/180306LL/a1803062118030621

CLIENT WORK ORDER: 18-02-1868

S#	RUN TYPE	CLIENT SAMPLE ID	D/T ANALYZED	DATA FILE
1	IB-RW-13-G-S-20180227		2018-03-07 07:46	/chem1/SVOA/GC_44/180307DDMU/a1803072018030720
4	IB-RW-14-G-S-20180227		2018-03-07 08:00	/chem1/SVOA/GC_44/180307DDMU/a1803072118030721
7	IB-RW-1014-G-S-20180227		2018-03-07 08:14	/chem1/SVOA/GC_44/180307DDMU/a1803072218030722
8	IB-RW-15-G-S-20180227		2018-03-07 08:29	/chem1/SVOA/GC_44/180307DDMU/a1803072318030723
11	OB-RW-16-G-S-20180227		2018-03-07 08:43	/chem1/SVOA/GC_44/180307DDMU/a1803072418030724
14	OB-RW-17-G-S-20180227		2018-03-07 08:57	/chem1/SVOA/GC_44/180307DDMU/a1803072518030725
17	SP-RW-18-G-S-20180227		2018-03-07 09:11	/chem1/SVOA/GC_44/180307DDMU/a1803072618030726
20	SP-RW-19-G-S-20180227		2018-03-07 09:26	/chem1/SVOA/GC_44/180307DDMU/a1803072718030727
23	SP-RW-20-G-S-20180227		2018-03-07 09:40	/chem1/SVOA/GC_44/180307DDMU/a1803072818030728
26	LE-RW-21-G-S-20180227		2018-03-07 09:54	/chem1/SVOA/GC_44/180307DDMU/a1803072918030729
27	LE-RW-22-G-S-20180227		2018-03-07 10:08	/chem1/SVOA/GC_44/180307DDMU/a1803073018030730

RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 099-16-704
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-06 15:04
REVIEWED BY: 421
D/T REVIEWED: 2018-03-12 09:53

DATA FILE: /chem1/SVOA/GC 44/180306LL/a1803062118030621

MB CLIENT SAMPLE NUMBER: Method Blank

LCS/MB BATCH: 180301L12 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT:

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

SURROGATE RECOVERIES FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868

BATCH ID:

LCS/MB: 180301L12

MS:

EXTRACTION: EPA 3510C

REVIEWED BY:

D/T REVIEWED:

1 **CLIENT SAMPLE NUMBER : IB-RW-13-G-S-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072018030720

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 07:46

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	74	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	69	50-150	PASS	

4 **CLIENT SAMPLE NUMBER : IB-RW-14-G-S-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072118030721

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 08:00

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	103	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	87	50-150	PASS	

7 **CLIENT SAMPLE NUMBER : IB-RW-1014-G-S-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072218030722

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 08:14

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	90	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	80	50-150	PASS	

8 **CLIENT SAMPLE NUMBER : IB-RW-15-G-S-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072318030723

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 08:29

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	95	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	78	50-150	PASS	

SURROGATE RECOVERIES FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868

BATCH ID:

LCS/MB: 180301L12

MS:

EXTRACTION: EPA 3510C

REVIEWED BY:

D/T REVIEWED:

11 CLIENT SAMPLE NUMBER: OB-RW-16-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072418030724

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 08:43

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	94	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	74	50-150	PASS	

14 CLIENT SAMPLE NUMBER: OB-RW-17-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072518030725

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 08:57

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	91	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	73	50-150	PASS	

17 CLIENT SAMPLE NUMBER: SP-RW-18-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072618030726

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 09:11

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	95	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	58	50-150	PASS	

20 CLIENT SAMPLE NUMBER: SP-RW-19-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072718030727

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 09:26

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	88	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	76	50-150	PASS	

SURROGATE RECOVERIES FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1868

BATCH ID:

LCS/MB: 180301L12

MS:

EXTRACTION: EPA 3510C

REVIEWED BY:

D/T REVIEWED:

23 CLIENT SAMPLE NUMBER : SP-RW-20-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072818030728

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 09:40

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	79	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	60	50-150	PASS	

26 CLIENT SAMPLE NUMBER : LE-RW-21-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803072918030729

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 09:54

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	93	50-150	PASS	12SY
2,4,5,6-Tetrachloro-m-Xylene	77	50-150	PASS	Y

27 CLIENT SAMPLE NUMBER : LE-RW-22-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803073018030730

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 10:08

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	122	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	88	50-150	PASS	Y

MB CLIENT SAMPLE NUMBER : Method Blank

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-01 00:00

DATA FILE: /chem1/SVOA/GC_44/180306LL/a1803062118030621

ANALYZED BY: 669

D/T ANALYZED 2018-03-06 15:04

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	80	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	83	50-150	PASS	

LCS / LCSD QUALITY CONTROL SHEET

FOR METHOD: EPA 8081A

LCS/LCSD SAMPLE ID: 099-16-704-20
LCS/LCSD BATCH: 180301L12
INSTRUMENTS:
 LCS: GC 44
 LCSD: GC 44

EXTRACTION: EPA 3510C
D/T EXTRACTED:
 LCS: 2018-03-01 00:00
 LCSD: 2018-03-01 00:00

ANALYZED BY: 669
D/T ANALYZED:
 LCS: 2018-03-06 16:29
 LCSD: 2018-03-06 16:44
REVIEWED BY: 421
D/T REVIEWED: 2018-03-12 09:53

COMMENT:

COMPOUND	ADDED	LCS CONC	LCS%REC	LCSD CON	LCSD%REC	% REC CL	ME CL	RPD	RPD CL	STATUS	QUALIFIERS
Alpha-BHC	33.35	31.82	95	32.86	99	50-150	33-167	3	0-25	PASS	
Gamma-BHC	33.35	33.02	99	34.22	103	50-150	33-167	4	0-25	PASS	
Beta-BHC	33.35	30.55	92	31.44	94	50-150	33-167	3	0-25	PASS	
Heptachlor	33.35	33.52	101	34.64	104	50-150	33-167	3	0-25	PASS	
Delta-BHC	33.35	32.90	99	32.56	98	50-150	33-167	1	0-25	PASS	
Aldrin	33.35	31.36	94	32.45	97	50-150	33-167	3	0-25	PASS	
Heptachlor Epoxide	33.35	31.84	95	33.02	99	50-150	33-167	4	0-25	PASS	
Endosulfan I	33.35	32.44	97	33.04	99	50-150	33-167	2	0-25	PASS	
Dieldrin	33.35	31.76	95	30.60	92	50-150	33-167	4	0-25	PASS	
4,4'-DDE	33.35	34.91	105	36.20	109	50-150	33-167	4	0-25	PASS	
Endrin	33.35	31.68	95	33.00	99	50-150	33-167	4	0-25	PASS	
Endrin Aldehyde	33.35	32.90	99	33.28	100	50-150	33-167	1	0-25	PASS	
4,4'-DDD	33.35	33.06	99	34.74	104	50-150	33-167	5	0-25	PASS	
Endosulfan II	33.35	33.31	100	34.63	104	50-150	33-167	4	0-25	PASS	
4,4'-DDT	33.35	36.22	109	39.08	117	50-150	33-167	8	0-25	PASS	
Endosulfan Sulfate	33.35	31.37	94	29.31	88	50-150	33-167	7	0-25	PASS	
Methoxychlor	33.35	34.84	104	37.48	112	50-150	33-167	7	0-25	PASS	
Alpha Chlordane	33.35	31.72	95	32.58	98	50-150	33-167	3	0-25	PASS	
Gamma Chlordane	33.35	31.01	93	30.88	93	50-150	33-167	0	0-25	PASS	

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

Data Files:

TYPE	DATA FILE	DATA FILE PATH
LCS	18030625	/chem1/SVOA/GC_44/180306LL/a18030625
LCSD	18030626	/chem1/SVOA/GC_44/180306LL/a18030626

CONTINUING CALIBRATION VERIFICATION QUALITY CONTROL SHEET FOR METHOD: EPA 8081A

CCV WORK ORDER: 099-14-434-449-5941

BATCH ID:

INITIAL: 180305I002

CCV: 180307A029

INSTRUMENT: GC 44

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803071218030712

ANALYZED BY: 669

D/T ANALYZED:

INITIAL: 2018-03-05 16:04

CCV: 2018-03-07 05:52

REVIEWED BY: 421

D/T REVIEWED: 2018-03-12 09:53

COMPOUND NAME	TYPE	CALIB MODEL	MIN RF	AVG RF	CCV RF	AMOUNT	CCV CONC	CCV %D	CCV %D CL	STATUS
Gamma-BHC	C	Avg Resp	0.00	149776896.311	165751312.500			-11	0-20	PASS
Heptachlor	C	Avg Resp	0.00	144725650.637	160031652.200			-11	0-20	PASS
Aldrin	C	Avg Resp	0.00	138824145.347	149834326.425			-8	0-20	PASS
Heptachlor Epoxide	C	Avg Resp	0.00	127038762.936	137645448.550			-8	0-20	PASS
Gamma Chlordane	C	Avg Resp	0.00	129548657.117	139160300.725			-7	0-20	PASS
Alpha Chlordane	C	Avg Resp	0.00	124133493.626	131780283.800			-6	0-20	PASS
4,4'-DDE	C	Avg Resp	0.00	114211387.185	128269332.825			-12	0-20	PASS
Dieldrin	C	Avg Resp	0.00	127653079.898	138221584.925			-8	0-20	PASS
Endrin	C	Avg Resp	0.00	118381560.285	128200389.850			-8	0-20	PASS
4,4'-DDD	C	Avg Resp	0.00	99996965.032	109772465.225			-10	0-20	PASS
4,4'-DDT	C	Avg Resp	0.00	100105253.431	110036173.175			-10	0-20	PASS
4,4'-DDMU		Avg Resp	0.00	40180263.236	36683376.900			9	0-20	PASS
Toxaphene	C	Avg Resp	0.00	23611010.194	24557727.271			-4	0-20	PASS
Oxychlordane		Avg Resp	0.00	128722227.057	118925473.125			8	0-20	PASS
2,4'-DDE		Avg Resp	0.00	97646566.327	88957377.550			9	0-20	PASS
Trans-nonachlor		Avg Resp	0.00	145556019.398	140181915.025			4	0-20	PASS
2,4'-DDD		Avg Resp	0.00	82449343.429	75427280.525			9	0-20	PASS
2,4'-DDT		Avg Resp	0.00	94068586.781	93655724.925			0	0-20	PASS
Cis-nonachlor		Avg Resp	0.00	95793089.818	93382229.375			3	0-20	PASS

MIN RF: Method Specified Minimum Response Factor

**WORK ORDER NUMBER: 18-02-1868***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** ANCHOR QEA, LLC**Client Project Name:** GWMA - TMDL Compliance Monitoring**Attention:** Andrew Martin
27201 Puerta Real
Suite 350
Mission Viejo, CA 92691-8306

A handwritten signature in black ink, appearing to read "Richard Villafania".

Approved for release on 03/14/2018 by:
Richard Villafania
Project Manager

ResultLink ▶

Email your PM ▶

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



Calscience

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 Work Order Number: 18-02-1868

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 02/27/18. They were assigned to Work Order 18-02-1868.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

SM 2540D Total Suspended Solids: Due to a laboratory error, the requested duplicate analyses were not performed for samples (-22) SP-RW-19-G-B-20180227 and (-26) LE-RW-21-G-S-20180227.

EPA 1640 Metals: Concentrations of Copper detected in the parent sample was four times or greater than those of the matrix spikes; therefore the control limits do not apply. The results have been flagged with the appropriate qualifier.

Sample Summary

Client: ANCHOR QEA, LLC	Work Order: 18-02-1868
27201 Puerta Real, Suite 350	Project Name: GWMA - TMDL Compliance Monitoring
Mission Viejo, CA 92691-8306	PO Number:
	Date/Time Received: 02/27/18 14:34
	Number of Containers: 110
Attn: Andrew Martin	

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
IB-RW-13-G-S-20180227	18-02-1868-1	02/27/18 09:23	8	Aqueous
IB-RW-13-G-M-20180227	18-02-1868-2	02/27/18 09:25	1	Aqueous
IB-RW-13-G-B-20180227	18-02-1868-3	02/27/18 09:27	1	Aqueous
IB-RW-14-G-S-20180227	18-02-1868-4	02/27/18 08:30	8	Aqueous
IB-RW-14-G-M-20180227	18-02-1868-5	02/27/18 08:35	1	Aqueous
IB-RW-14-G-B-20180227	18-02-1868-6	02/27/18 08:40	1	Aqueous
IB-RW-1014-G-S-20180227	18-02-1868-7	02/27/18 08:30	8	Aqueous
IB-RW-15-G-S-20180227	18-02-1868-8	02/27/18 09:55	8	Aqueous
IB-RW-15-G-M-20180227	18-02-1868-9	02/27/18 09:57	1	Aqueous
IB-RW-15-G-B-20180227	18-02-1868-10	02/27/18 09:59	1	Aqueous
OB-RW-16-G-S-20180227	18-02-1868-11	02/27/18 10:25	8	Aqueous
OB-RW-16-G-M-20180227	18-02-1868-12	02/27/18 10:27	1	Aqueous
OB-RW-16-G-B-20180227	18-02-1868-13	02/27/18 10:29	1	Aqueous
OB-RW-17-G-S-20180227	18-02-1868-14	02/27/18 11:05	8	Aqueous
OB-RW-17-G-M-20180227	18-02-1868-15	02/27/18 11:07	1	Aqueous
OB-RW-17-G-B-20180227	18-02-1868-16	02/27/18 11:09	1	Aqueous
SP-RW-18-G-S-20180227	18-02-1868-17	02/27/18 11:37	8	Aqueous
SP-RW-18-G-M-20180227	18-02-1868-18	02/27/18 11:39	1	Aqueous
SP-RW-18-G-B-20180227	18-02-1868-19	02/27/18 11:41	1	Aqueous
SP-RW-19-G-S-20180227	18-02-1868-20	02/27/18 14:30	8	Aqueous
SP-RW-19-G-M-20180227	18-02-1868-21	02/27/18 14:32	1	Aqueous
SP-RW-19-G-B-20180227	18-02-1868-22	02/27/18 14:34	2	Aqueous
SP-RW-20-G-S-20180227	18-02-1868-23	02/27/18 14:05	8	Aqueous
SP-RW-20-G-M-20180227	18-02-1868-24	02/27/18 14:07	1	Aqueous
SP-RW-20-G-B-20180227	18-02-1868-25	02/27/18 14:09	1	Aqueous
LE-RW-21-G-S-20180227	18-02-1868-26	02/27/18 12:46	9	Aqueous
LE-RW-22-G-S-20180227	18-02-1868-27	02/27/18 12:15	8	Aqueous
FB-20180227	18-02-1868-28	02/27/18 07:55	4	Aqueous

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20180227	18-02-1868-1-H	02/27/18 09:23	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-13-G-M-20180227	18-02-1868-2-A	02/27/18 09:25	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	0.90	1.0	0.83	1.00	J

IB-RW-13-G-B-20180227	18-02-1868-3-A	02/27/18 09:27	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-14-G-S-20180227	18-02-1868-4-H	02/27/18 08:30	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-14-G-M-20180227	18-02-1868-5-A	02/27/18 08:35	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.0	1.0	0.83	1.00	

IB-RW-14-G-B-20180227	18-02-1868-6-A	02/27/18 08:40	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.8	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-1014-G-S-20180227	18-02-1868-7-H	02/27/18 08:30	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IB-RW-15-G-S-20180227	18-02-1868-8-H	02/27/18 09:55	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.5	1.0	0.83	1.00	

IB-RW-15-G-M-20180227	18-02-1868-9-A	02/27/18 09:57	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.0	1.0	0.83	1.00	

IB-RW-15-G-B-20180227	18-02-1868-10-A	02/27/18 09:59	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.2	1.0	0.83	1.00	

OB-RW-16-G-S-20180227	18-02-1868-11-H	02/27/18 10:25	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.1	1.0	0.83	1.00	

OB-RW-16-G-M-20180227	18-02-1868-12-A	02/27/18 10:27	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-B-20180227	18-02-1868-13-A	02/27/18 10:29	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.8	1.0	0.83	1.00	

OB-RW-17-G-S-20180227	18-02-1868-14-H	02/27/18 11:05	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.8	1.0	0.83	1.00	

OB-RW-17-G-M-20180227	18-02-1868-15-A	02/27/18 11:07	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.2	1.0	0.83	1.00	

OB-RW-17-G-B-20180227	18-02-1868-16-A	02/27/18 11:09	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.4	1.0	0.83	1.00	

SP-RW-18-G-S-20180227	18-02-1868-17-H	02/27/18 11:37	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.4	1.0	0.83	1.00	

SP-RW-18-G-M-20180227	18-02-1868-18-A	02/27/18 11:39	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.1	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: N/A
Method: SM 2540 D
Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-B-20180227	18-02-1868-19-A	02/27/18 11:41	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	5.4	1.0	0.83	1.00	

SP-RW-19-G-S-20180227	18-02-1868-20-H	02/27/18 14:30	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.1	1.0	0.83	1.00	

SP-RW-19-G-M-20180227	18-02-1868-21-A	02/27/18 14:32	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.9	1.0	0.83	1.00	

SP-RW-19-G-B-20180227	18-02-1868-22-B	02/27/18 14:34	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.5	1.0	0.83	1.00	

SP-RW-20-G-S-20180227	18-02-1868-23-H	02/27/18 14:05	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.4	1.0	0.83	1.00	

SP-RW-20-G-M-20180227	18-02-1868-24-A	02/27/18 14:07	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	0.90	1.0	0.83	1.00	J

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-B-20180227	18-02-1868-25-A	02/27/18 14:09	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.3	1.0	0.83	1.00	

LE-RW-21-G-S-20180227	18-02-1868-26-H	02/27/18 12:46	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	11	1.0	0.83	1.00	

LE-RW-22-G-S-20180227	18-02-1868-27-H	02/27/18 12:15	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	17	1.0	0.83	1.00	

Method Blank	099-09-010-8954	N/A	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8922	N/A	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20180227	18-02-1868-1-A	02/27/18 09:23	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.332	0.500	0.113	1.00	J

IB-RW-14-G-S-20180227	18-02-1868-4-A	02/27/18 08:30	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

IB-RW-1014-G-S-20180227	18-02-1868-7-A	02/27/18 08:30	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.636	0.500	0.113	1.00	

IB-RW-15-G-S-20180227	18-02-1868-8-A	02/27/18 09:55	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.514	0.500	0.113	1.00	

OB-RW-16-G-S-20180227	18-02-1868-11-A	02/27/18 10:25	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.239	0.500	0.113	1.00	J

OB-RW-17-G-S-20180227	18-02-1868-14-A	02/27/18 11:05	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	2.30	0.500	0.113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180227	18-02-1868-17-A	02/27/18 11:37	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	1.20	0.500	0.113	1.00	

SP-RW-19-G-S-20180227	18-02-1868-20-A	02/27/18 14:30	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.196	0.500	0.113	1.00	J

SP-RW-20-G-S-20180227	18-02-1868-23-A	02/27/18 14:05	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.155	0.500	0.113	1.00	J

LE-RW-21-G-S-20180227	18-02-1868-26-A	02/27/18 12:46	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	4.24	0.500	0.113	1.00	

LE-RW-22-G-S-20180227	18-02-1868-27-A	02/27/18 12:15	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	5.27	0.500	0.113	1.00	

FB-20180227	18-02-1868-28-A	02/27/18 07:55	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

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

Analytical Report

ANCHOR QEA, LLC	Date Received:	02/27/18
27201 Puerta Real, Suite 350	Work Order:	18-02-1868
Mission Viejo, CA 92691-8306	Preparation:	EPA 1631E Total
	Method:	EPA 1631E
	Units:	ng/L
Project: GWMA - TMDL Compliance Monitoring		Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-224-214	N/A	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.500	0.113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: Filtered
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20180227	18-02-1868-1-B	02/27/18 09:23	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

IB-RW-14-G-S-20180227	18-02-1868-4-B	02/27/18 08:30	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

IB-RW-1014-G-S-20180227	18-02-1868-7-B	02/27/18 08:30	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.466	0.500	0.113	1.00	J

IB-RW-15-G-S-20180227	18-02-1868-8-B	02/27/18 09:55	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.215	0.500	0.113	1.00	J

OB-RW-16-G-S-20180227	18-02-1868-11-B	02/27/18 10:25	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.143	0.500	0.113	1.00	J

OB-RW-17-G-S-20180227	18-02-1868-14-B	02/27/18 11:05	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.128	0.500	0.113	1.00	J

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: Filtered
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180227	18-02-1868-17-B	02/27/18 11:37	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.156	0.500	0.113	1.00	J

SP-RW-19-G-S-20180227	18-02-1868-20-B	02/27/18 14:30	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

SP-RW-20-G-S-20180227	18-02-1868-23-B	02/27/18 14:05	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

LE-RW-21-G-S-20180227	18-02-1868-26-B	02/27/18 12:46	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	1.28	0.500	0.113	1.00	

LE-RW-22-G-S-20180227	18-02-1868-27-B	02/27/18 12:15	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	1.49	0.500	0.113	1.00	

FB-20180227	18-02-1868-28-B	02/27/18 07:55	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: Filtered
Method: EPA 1631E
Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-226-148	N/A	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.500	0.113	1.00	

Method Blank	099-15-226-149	N/A	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.500	0.113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20180227	18-02-1868-1-D	02/27/18 09:23	Aqueous	ICP/MS 06	03/05/18	03/06/18 07:41	180305L05

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0429	0.0300	0.00567	1.00	
Chromium	0.400	0.500	0.164	1.00	J
Copper	1.27	0.0300	0.00898	1.00	
Lead	0.102	0.0300	0.0135	1.00	B
Zinc	6.71	0.500	0.176	1.00	

IB-RW-14-G-S-20180227	18-02-1868-4-D	02/27/18 08:30	Aqueous	ICP/MS 06	03/05/18	03/06/18 07:49	180305L05
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0404	0.0300	0.00567	1.00	
Chromium	0.427	0.500	0.164	1.00	J
Copper	1.17	0.0300	0.00898	1.00	
Lead	0.163	0.0300	0.0135	1.00	B
Zinc	2.99	0.500	0.176	1.00	

IB-RW-1014-G-S-20180227	18-02-1868-7-D	02/27/18 08:30	Aqueous	ICP/MS 06	03/05/18	03/06/18 07:57	180305L05
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0409	0.0300	0.00567	1.00	
Chromium	0.484	0.500	0.164	1.00	J
Copper	1.03	0.0300	0.00898	1.00	
Lead	0.148	0.0300	0.0135	1.00	B
Zinc	2.41	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180227	18-02-1868-8-D	02/27/18 09:55	Aqueous	ICP/MS 06	03/05/18	03/06/18 08:05	180305L05

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0425	0.0300	0.00567	1.00	
Chromium	0.480	0.500	0.164	1.00	J
Copper	0.963	0.0300	0.00898	1.00	
Lead	0.0825	0.0300	0.0135	1.00	B
Zinc	2.58	0.500	0.176	1.00	

OB-RW-16-G-S-20180227	18-02-1868-11-D	02/27/18 10:25	Aqueous	ICP/MS 06	03/05/18	03/06/18 08:13	180305L05
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0433	0.0300	0.00567	1.00	
Chromium	0.438	0.500	0.164	1.00	J
Copper	0.723	0.0300	0.00898	1.00	
Lead	0.0946	0.0300	0.0135	1.00	B
Zinc	1.40	0.500	0.176	1.00	

OB-RW-17-G-S-20180227	18-02-1868-14-D	02/27/18 11:05	Aqueous	ICP/MS 06	03/05/18	03/06/18 08:21	180305L05
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0406	0.0300	0.00567	1.00	
Chromium	0.399	0.500	0.164	1.00	J
Copper	0.565	0.0300	0.00898	1.00	
Lead	0.0691	0.0300	0.0135	1.00	B
Zinc	1.02	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180227	18-02-1868-17-D	02/27/18 11:37	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:17	180305L05

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0678	0.0300	0.00567	1.00	
Chromium	0.575	0.500	0.164	1.00	
Copper	2.64	0.0300	0.00898	1.00	
Lead	0.491	0.0300	0.0135	1.00	B
Zinc	13.1	0.500	0.176	1.00	

SP-RW-19-G-S-20180227	18-02-1868-20-D	02/27/18 14:30	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:25	180305L05
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0482	0.0300	0.00567	1.00	
Chromium	0.440	0.500	0.164	1.00	J
Copper	1.08	0.0300	0.00898	1.00	
Lead	0.149	0.0300	0.0135	1.00	B
Zinc	2.28	0.500	0.176	1.00	

SP-RW-20-G-S-20180227	18-02-1868-23-D	02/27/18 14:05	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:33	180305L05
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0440	0.0300	0.00567	1.00	
Chromium	0.442	0.500	0.164	1.00	J
Copper	0.629	0.0300	0.00898	1.00	
Lead	0.126	0.0300	0.0135	1.00	B
Zinc	1.23	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-21-G-S-20180227	18-02-1868-26-D	02/27/18 12:46	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:41	180305L05

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.120	0.0300	0.00567	1.00	
Chromium	1.09	0.500	0.164	1.00	
Copper	10.9	0.0300	0.00898	1.00	
Lead	2.63	0.0300	0.0135	1.00	B
Zinc	57.7	0.500	0.176	1.00	

LE-RW-22-G-S-20180227	18-02-1868-27-D	02/27/18 12:15	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:49	180305L05
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.129	0.0300	0.00567	1.00	
Chromium	1.02	0.500	0.164	1.00	
Copper	11.7	0.0300	0.00898	1.00	
Lead	2.54	0.0300	0.0135	1.00	B
Zinc	63.2	0.500	0.176	1.00	

FB-20180227	18-02-1868-28-D	02/27/18 07:55	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:09	180305L05
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	0.0145	0.0300	0.00898	1.00	J
Lead	0.0367	0.0300	0.0135	1.00	B
Zinc	ND	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-13-067-769	N/A	Aqueous	ICP/MS 06	03/05/18	03/09/18 18:24	180305L05

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	0.0148	0.0300	0.0135	1.00	J
Zinc	ND	0.500	0.176	1.00	

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Filt.
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20180227	18-02-1868-1-C	02/27/18 09:23	Aqueous	ICP/MS 06	03/05/18	03/06/18 19:59	180305L05F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0523	0.0300	0.00567	1.00	
Chromium	0.210	0.500	0.164	1.00	J
Copper	1.23	0.0300	0.00898	1.00	
Lead	0.134	0.0300	0.0135	1.00	B
Zinc	4.53	0.500	0.0736	1.00	

IB-RW-14-G-S-20180227	18-02-1868-4-C	02/27/18 08:30	Aqueous	ICP/MS 06	03/05/18	03/09/18 19:44	180305L05F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0396	0.0300	0.00567	1.00	
Chromium	0.372	0.500	0.164	1.00	J
Copper	0.875	0.0300	0.00898	1.00	
Lead	0.0929	0.0300	0.0135	1.00	B
Zinc	2.94	0.500	0.0736	1.00	

IB-RW-1014-G-S-20180227	18-02-1868-7-C	02/27/18 08:30	Aqueous	ICP/MS 06	03/05/18	03/06/18 20:15	180305L05F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0482	0.0300	0.00567	1.00	
Chromium	0.286	0.500	0.164	1.00	J
Copper	0.868	0.0300	0.00898	1.00	
Lead	0.0772	0.0300	0.0135	1.00	B
Zinc	2.40	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180227	18-02-1868-8-C	02/27/18 09:55	Aqueous	ICP/MS 06	03/05/18	03/06/18 20:23	180305L05F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0490	0.0300	0.00567	1.00	
Chromium	0.250	0.500	0.164	1.00	J
Copper	0.844	0.0300	0.00898	1.00	
Lead	0.0531	0.0300	0.0135	1.00	B
Zinc	2.70	0.500	0.0736	1.00	

OB-RW-16-G-S-20180227	18-02-1868-11-C	02/27/18 10:25	Aqueous	ICP/MS 06	03/05/18	03/06/18 20:31	180305L05F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0484	0.0300	0.00567	1.00	
Chromium	0.164	0.500	0.164	1.00	J
Copper	0.583	0.0300	0.00898	1.00	
Lead	0.0559	0.0300	0.0135	1.00	B
Zinc	1.86	0.500	0.0736	1.00	

OB-RW-17-G-S-20180227	18-02-1868-14-C	02/27/18 11:05	Aqueous	ICP/MS 06	03/05/18	03/07/18 02:32	180305L05F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Cadmium	0.0434	0.0300	0.00567	1.00	
Chromium	0.355	0.500	0.164	1.00	J
Copper	0.516	0.0300	0.00898	1.00	
Lead	0.0647	0.0300	0.0135	1.00	B
Zinc	1.41	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Filt.
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180227	18-02-1868-17-C	02/27/18 11:37	Aqueous	ICP/MS 06	03/05/18	03/07/18 02:40	180305L05F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0668	0.0300	0.00567	1.00	
Chromium	0.460	0.500	0.164	1.00	J
Copper	2.21	0.0300	0.00898	1.00	
Lead	0.209	0.0300	0.0135	1.00	B
Zinc	9.73	0.500	0.0736	1.00	

SP-RW-19-G-S-20180227	18-02-1868-20-C	02/27/18 14:30	Aqueous	ICP/MS 06	03/05/18	03/07/18 02:49	180305L05F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0452	0.0300	0.00567	1.00	
Chromium	0.378	0.500	0.164	1.00	J
Copper	0.728	0.0300	0.00898	1.00	
Lead	0.100	0.0300	0.0135	1.00	B
Zinc	1.75	0.500	0.0736	1.00	

SP-RW-20-G-S-20180227	18-02-1868-23-C	02/27/18 14:05	Aqueous	ICP/MS 06	03/05/18	03/07/18 02:57	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0425	0.0300	0.00567	1.00	
Chromium	0.372	0.500	0.164	1.00	J
Copper	0.604	0.0300	0.00898	1.00	
Lead	0.0893	0.0300	0.0135	1.00	B
Zinc	1.47	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-21-G-S-20180227	18-02-1868-26-C	02/27/18 12:46	Aqueous	ICP/MS 06	03/05/18	03/07/18 03:05	180305L04F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.107	0.0300	0.00567	1.00	
Chromium	0.718	0.500	0.164	1.00	
Copper	7.73	0.0300	0.00898	1.00	
Lead	0.442	0.0300	0.0135	1.00	B
Zinc	52.0	0.500	0.0736	1.00	

LE-RW-22-G-S-20180227	18-02-1868-27-C	02/27/18 12:15	Aqueous	ICP/MS 06	03/05/18	03/07/18 03:13	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.111	0.0300	0.00567	1.00	
Chromium	0.729	0.500	0.164	1.00	
Copper	8.42	0.0300	0.00898	1.00	
Lead	0.490	0.0300	0.0135	1.00	B
Zinc	57.0	0.500	0.0736	1.00	

FB-20180227	18-02-1868-28-C	02/27/18 07:55	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:01	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	0.0269	0.0300	0.00898	1.00	J
Lead	0.0362	0.0300	0.0135	1.00	B
Zinc	ND	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Filt.
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-823-309	N/A	Aqueous	ICP/MS 06	03/05/18	03/09/18 18:16	180305L04F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	0.0149	0.0300	0.0135	1.00	J
Zinc	ND	0.500	0.0736	1.00	

Method Blank	099-15-823-310	N/A	Aqueous	ICP/MS 06	03/05/18	03/09/18 19:04	180305L05F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	0.0153	0.0300	0.0135	1.00	J
Zinc	ND	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20180227	18-02-1868-1-FG	02/27/18 09:23	Aqueous	GC 44	03/01/18	03/07/18 07:46	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	5.1	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	74	50-150	
2,4,5,6-Tetrachloro-m-Xylene	69	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-14-G-S-20180227	18-02-1868-4-FG	02/27/18 08:30	Aqueous	GC 44	03/01/18	03/07/18 08:00	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	103	50-150	
2,4,5,6-Tetrachloro-m-Xylene	87	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-1014-G-S-20180227	18-02-1868-7-FG	02/27/18 08:30	Aqueous	GC 44	03/01/18	03/07/18 08:14	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	90	50-150	
2,4,5,6-Tetrachloro-m-Xylene	80	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180227	18-02-1868-8-FG	02/27/18 09:55	Aqueous	GC 44	03/01/18	03/07/18 08:29	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	50-150	
2,4,5,6-Tetrachloro-m-Xylene	78	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20180227	18-02-1868-11-FG	02/27/18 10:25	Aqueous	GC 44	03/01/18	03/07/18 08:43	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	94	50-150	
2,4,5,6-Tetrachloro-m-Xylene	74	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-17-G-S-20180227	18-02-1868-14-FG	02/27/18 11:05	Aqueous	GC 44	03/01/18	03/07/18 08:57	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	50-150	
2,4,5,6-Tetrachloro-m-Xylene	73	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180227	18-02-1868-17-FG	02/27/18 11:37	Aqueous	GC 44	03/01/18	03/07/18 09:11	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	95	50-150	
2,4,5,6-Tetrachloro-m-Xylene	58	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20180227	18-02-1868-20-FG	02/27/18 14:30	Aqueous	GC 44	03/01/18	03/07/18 09:26	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	3.8	1.3	0.50	1.00	
4,4'-DDT	1.5	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	88	50-150	
2,4,5,6-Tetrachloro-m-Xylene	76	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20180227	18-02-1868-23-FG	02/27/18 14:05	Aqueous	GC 44	03/01/18	03/07/18 09:40	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	2.8	1.3	0.50	1.00	
4,4'-DDT	0.88	1.3	0.50	1.00	J
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	79	50-150	
2,4,5,6-Tetrachloro-m-Xylene	60	50-150	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-21-G-S-20180227	18-02-1868-26-FG	02/27/18 12:46	Aqueous	GC 44	03/01/18	03/07/18 09:54	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	50-150	
2,4,5,6-Tetrachloro-m-Xylene	77	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20180227	18-02-1868-27-FG	02/27/18 12:15	Aqueous	GC 44	03/01/18	03/07/18 10:08	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	122	50-150	
2,4,5,6-Tetrachloro-m-Xylene	88	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-704-20	N/A	Aqueous	GC 44	03/01/18	03/06/18 15:04	180301L12

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	50-150	
2,4,5,6-Tetrachloro-m-Xylene	83	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-13-G-S-20180227	18-02-1868-1-E	02/27/18 09:23	Aqueous	GC/MS HHH	03/01/18	03/02/18 20:47	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	107	50-150	
p-Terphenyl-d14	113	50-150	

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-14-G-S-20180227	18-02-1868-4-E	02/27/18 08:30	Aqueous	GC/MS HHH	03/01/18	03/02/18 21:10	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	123	50-150			
p-Terphenyl-d14	130	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-1014-G-S-20180227	18-02-1868-7-E	02/27/18 08:30	Aqueous	GC/MS HHH	03/01/18	03/02/18 21:33	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	110	50-150			
p-Terphenyl-d14	121	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-15-G-S-20180227	18-02-1868-8-E	02/27/18 09:55	Aqueous	GC/MS HHH	03/01/18	03/02/18 21:57	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	106	50-150			
p-Terphenyl-d14	105	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-16-G-S-20180227	18-02-1868-11-E	02/27/18 10:25	Aqueous	GC/MS HHH	03/01/18	03/02/18 22:20	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	115	50-150			
p-Terphenyl-d14	114	50-150			

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OB-RW-17-G-S-20180227	18-02-1868-14-E	02/27/18 11:05	Aqueous	GC/MS HHH	03/01/18	03/02/18 22:44	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	116	50-150	
p-Terphenyl-d14	124	50-150	

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-18-G-S-20180227	18-02-1868-17-E	02/27/18 11:37	Aqueous	GC/MS HHH	03/01/18	03/02/18 23:07	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	123	50-150			
p-Terphenyl-d14	127	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-19-G-S-20180227	18-02-1868-20-E	02/27/18 14:30	Aqueous	GC/MS HHH	03/01/18	03/02/18 23:30	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	112	50-150			
p-Terphenyl-d14	121	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SP-RW-20-G-S-20180227	18-02-1868-23-E	02/27/18 14:05	Aqueous	GC/MS HHH	03/01/18	03/02/18 23:54	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	100	50-150	
p-Terphenyl-d14	113	50-150	

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-21-G-S-20180227	18-02-1868-26-E	02/27/18 12:46	Aqueous	GC/MS HHH	03/01/18	03/09/18 12:42	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	66	50-150			
p-Terphenyl-d14	63	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
LE-RW-22-G-S-20180227	18-02-1868-27-E	02/27/18 12:15	Aqueous	GC/MS HHH	03/01/18	03/03/18 00:40	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	106	50-150			
p-Terphenyl-d14	109	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-414-121	N/A	Aqueous	GC/MS HHH	03/01/18	03/02/18 18:27	180301L09

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1868
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	125	50-150	
p-Terphenyl-d14	135	50-150	

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



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Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-02-1366-1	Sample	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301S01
18-02-1366-1	Matrix Spike	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301S01
18-02-1366-1	Matrix Spike Duplicate	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	12.03	20.00	29.68	88	29.66	88	71-125	0	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-02-1869-1	Sample	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301S01A
18-02-1869-1	Matrix Spike	Aqueous	Hg/AF 1	03/01/18	03/14/18 00:00	180301S01A
18-02-1869-1	Matrix Spike Duplicate	Aqueous	Hg/AF 1	03/01/18	03/14/18 00:00	180301S01A

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	20.00	23.93	120	24.30	121	71-125	2	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IB-RW-13-G-S-20180227	Sample	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301S02
IB-RW-13-G-S-20180227	Matrix Spike	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301S02
IB-RW-13-G-S-20180227	Matrix Spike Duplicate	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	20.00	20.52	103	18.43	92	71-125	11	0-24	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SP-RW-20-G-S-20180227	Sample	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:33	180305S05
SP-RW-20-G-S-20180227	Matrix Spike	Aqueous	ICP/MS 06	03/05/18	03/06/18 09:57	180305S05
SP-RW-20-G-S-20180227	Matrix Spike Duplicate	Aqueous	ICP/MS 06	03/05/18	03/06/18 19:19	180305S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.04404	0.5000	0.6223	116	0.5975	111	50-150	4	0-20	
Chromium	ND	5.000	6.599	132	6.370	127	50-150	4	0-20	
Copper	0.6288	0.5000	1.258	126	1.166	107	50-150	8	0-20	
Lead	0.1258	0.5000	0.6063	96	0.6138	98	50-150	1	0-20	
Zinc	1.227	5.000	8.503	146	8.173	139	50-150	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-02-1890-11	Sample	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:48	180305S04
18-02-1890-11	Matrix Spike	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:44	180305S04
18-02-1890-11	Matrix Spike Duplicate	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:52	180305S04

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.06356	0.5000	0.5850	104	0.5904	105	50-150	1	0-20	
Chromium	0.5385	5.000	6.197	113	6.209	113	50-150	0	0-20	
Copper	2.350	0.5000	2.635	4X	2.658	4X	50-150	4X	0-20	Q
Lead	0.07300	0.5000	0.5207	90	0.5033	86	50-150	3	0-20	
Zinc	4.624	5.000	10.55	119	10.69	121	50-150	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	02/27/18
27201 Puerta Real, Suite 350	Work Order:	18-02-1868
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-02-1849-2	Sample	Aqueous	N/A	03/02/18 00:00	03/02/18 18:00	I0302TSSD5
18-02-1849-2	Sample Duplicate	Aqueous	N/A	03/02/18 00:00	03/02/18 18:00	I0302TSSD5

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	1064	1104	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	02/27/18
27201 Puerta Real, Suite 350	Work Order:	18-02-1868
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-02-1964-2	Sample	Aqueous	N/A	03/02/18 00:00	03/02/18 18:00	I0302TSSD6
18-02-1964-2	Sample Duplicate	Aqueous	N/A	03/02/18 00:00	03/02/18 18:00	I0302TSSD6

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	1426	1434	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 02/27/18 Work Order: 18-02-1868 Preparation: N/A Method: SM 2540 D Page 3 of 3
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-02-1614-2	Sample	Aqueous	N/A	03/03/18 00:00	03/03/18 14:00	I0303TSSD1
18-02-1614-2	Sample Duplicate	Aqueous	N/A	03/03/18 00:00	03/03/18 14:00	I0303TSSD1
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended		131.0	137.0	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8954	LCS	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3			
099-09-010-8954	LCSD	Aqueous	N/A	03/02/18	03/02/18 18:00	I0302TSSL3			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	100.0	90.00	90	93.00	93	80-120	3	0-20	

[Return to Contents](#)

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-8922	LCS	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1
099-09-010-8922	LCSD	Aqueous	N/A	03/03/18	03/03/18 14:00	I0303TSSL1

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	93.00	93	94.00	94	80-120	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

ANCHOR QEA, LLC 27201 Puerta Real, Suite 350 Mission Viejo, CA 92691-8306 Project: GWMA - TMDL Compliance Monitoring	Date Received: 02/27/18 Work Order: 18-02-1868 Preparation: EPA 1631E Total Method: EPA 1631E Page 3 of 10
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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-224-214	LCS	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01			
099-15-224-214	LCSD	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	20.00	21.54	108	21.69	108	71-125	1	0-20	



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-226-148	LCS	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01F
099-15-226-148	LCSD	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L01F

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	20.00	21.54	108	21.69	108	71-125	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-226-149	LCS	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F
099-15-226-149	LCSD	Aqueous	Hg/AF 1	03/01/18	03/01/18 00:00	180301L02F

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	20.00	23.09	115	22.51	113	71-125	3	0-20	



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-067-769	LCS	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:04	180305L05
099-13-067-769	LCSD	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:12	180305L05

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5252	105	0.5203	104	70-130	1	0-20	
Chromium	5.000	5.144	103	5.148	103	70-130	0	0-20	
Copper	0.5000	0.5269	105	0.5241	105	70-130	1	0-20	
Lead	0.5000	0.4781	96	0.4728	95	70-130	1	0-20	
Zinc	5.000	4.996	100	4.963	99	70-130	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-823-309	LCS	Aqueous	ICP/MS 06	03/05/18	03/09/18 14:38	180305L04F
099-15-823-309	LCSD	Aqueous	ICP/MS 06	03/05/18	03/09/18 14:46	180305L04F

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.4997	100	0.5026	101	70-130	1	0-20	
Chromium	5.000	5.128	103	5.154	103	70-130	0	0-20	
Copper	0.5000	0.5629	113	0.5733	115	70-130	2	0-20	
Lead	0.5000	0.4740	95	0.4343	87	70-130	9	0-20	
Zinc	5.000	5.292	106	5.378	108	70-130	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-823-310	LCS	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:04	180305L05F
099-15-823-310	LCSD	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:12	180305L05F

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5252	105	0.5203	104	70-130	1	0-20	
Chromium	5.000	5.144	103	5.148	103	70-130	0	0-20	
Copper	0.5000	0.5269	105	0.5241	105	70-130	1	0-20	
Lead	0.5000	0.4781	96	0.4728	95	70-130	1	0-20	
Zinc	5.000	4.996	100	4.963	99	70-130	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-704-20	LCS	Aqueous	GC 44	03/01/18	03/06/18 16:29	180301L12
099-16-704-20	LCSD	Aqueous	GC 44	03/01/18	03/06/18 16:44	180301L12

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	33.35	31.36	94	32.45	97	50-150	33-167	3	0-25	
4,4'-DDD	33.35	33.06	99	34.74	104	50-150	33-167	5	0-25	
4,4'-DDE	33.35	34.91	105	36.20	109	50-150	33-167	4	0-25	
4,4'-DDT	33.35	36.22	109	39.08	117	50-150	33-167	8	0-25	
Alpha Chlordane	33.35	31.72	95	32.58	98	50-150	33-167	3	0-25	
Dieldrin	33.35	31.76	95	30.60	92	50-150	33-167	4	0-25	
Gamma Chlordane	33.35	31.01	93	30.88	93	50-150	33-167	0	0-25	
Endrin	33.35	31.68	95	33.00	99	50-150	33-167	4	0-25	
Gamma-BHC	33.35	33.02	99	34.22	103	50-150	33-167	4	0-25	
Heptachlor	33.35	33.52	101	34.64	104	50-150	33-167	3	0-25	
Heptachlor Epoxide	33.35	31.84	95	33.02	99	50-150	33-167	4	0-25	

Total number of LCS compounds: 11

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1868
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-414-121	LCS	Aqueous	GC/MS HHH	03/01/18	03/02/18 18:50	180301L09
099-16-414-121	LCSD	Aqueous	GC/MS HHH	03/01/18	03/02/18 19:13	180301L09

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB018	0.5000	0.4144	83	0.4452	89	50-150	33-167	7	0-25	
PCB028	0.5000	0.4532	91	0.4907	98	50-150	33-167	8	0-25	
PCB044	0.5000	0.4263	85	0.4681	94	50-150	33-167	9	0-25	
PCB052	0.5000	0.4074	81	0.4472	89	50-150	33-167	9	0-25	
PCB066	0.5000	0.5032	101	0.5616	112	50-150	33-167	11	0-25	
PCB077	0.5000	0.4473	89	0.4939	99	50-150	33-167	10	0-25	
PCB101	0.5000	0.4204	84	0.4700	94	50-150	33-167	11	0-25	
PCB105	0.5000	0.4545	91	0.5073	101	50-150	33-167	11	0-25	
PCB118	0.5000	0.4412	88	0.4906	98	50-150	33-167	11	0-25	
PCB126	0.5000	0.4299	86	0.4786	96	50-150	33-167	11	0-25	
PCB128	0.5000	0.3987	80	0.4463	89	50-150	33-167	11	0-25	
PCB170	0.5000	0.3926	79	0.4399	88	50-150	33-167	11	0-25	
PCB180	0.5000	0.4284	86	0.4888	98	50-150	33-167	13	0-25	
PCB187	0.5000	0.4224	84	0.4774	95	50-150	33-167	12	0-25	
PCB195	0.5000	0.3256	65	0.3770	75	50-150	33-167	15	0-25	
PCB206	0.5000	0.3448	69	0.4100	82	50-150	33-167	17	0-25	
PCB209	0.5000	0.2479	50	0.3114	62	50-150	33-167	23	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Sample Analysis Summary Report

Work Order: 18-02-1868

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 1631E	Filtered	1080	Hg/AF 1	1
EPA 1631E	EPA 1631E Total	1080	Hg/AF 1	1
EPA 1640	EPA 3005A Total	110	ICP/MS 06	1
EPA 1640	EPA 3005A Filt.	110	ICP/MS 06	1
EPA 8081A	EPA 3510C	669	GC 44	1
EPA 8270C SIM PCB Congeners	EPA 3510C	907	GC/MS HHH	1
SM 2540 D	N/A	1136	N/A	1

Glossary of Terms and Qualifiers

Work Order: 18-02-1868

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:

Date:

Project Name: **GWMA-TMDL Compliance Monitoring**

Project Number: 141205-01.01

Project Manager: **Andy Martin**

Phone Number: **(949) 334-9630**

Shipment Method: **Courier**

Field Team: LB/SPB

Test Parameters

18-02-1868

[illegible]

Notes:

Relinquished By:

Company:

Another GEN

Signature/Printed Name

Date/Time

Received By:

Company:

66

2/27/18 14:34

Signature/Printed Name

Date/Time

Relinquished By:

Company:

Signature/Printed Name

Date/Time

Received By:

Company:

Signature/Printed Name

Date/Time

1868

Date: 2/18/2017

Project Number: 141205-01.03

Phone Number: **(949) 334-9630**

Field Team: LB Harbor/San Pedro Bay

 ANCHOR
OEA 

Notes:

Company: Anchor & ER

Signature/Printed Name Wenny

2/27/18 1434
Date/Time

Company: EL

Signature/Printed Name Dannyle Cz

2/27/18 14:34
Date/Time

Company: _____

Signature/Printed Name

Date/Time

Company: _____

Signature/Printed Name _____

Date/Time _____

Chain of Custody Record & Laboratory Analysis Request

1868

Laboratory Number:

Date:

Project Name: **GWMA-TMDL Compliance Monitoring**

Project Number: **141205-01.03**

Project Manager: **Andy Martin**

Phone Number: **(949) 334-9630**

Shipment Method: **Courier**

Field Team: **LB Harbor/San Pedro Bay**



Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	TSS	Total and dissolved metals	Total and dissolved mercury	Organochlorine pesticides	PCB Congeners	MS/MSD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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Notes:

Relinquished By: [Signature] Company: Anchor OEA
 Signature/Printed Name: [Signature] Date/Time: 2/27/18 1737

Received By: [Signature] Company: Anchor OEA
 Signature/Printed Name: [Signature] Date/Time: 2/27/18 14:34

Relinquished By: _____ Company: _____
 Signature/Printed Name: _____ Date/Time: _____

Received By: _____ Company: _____
 Signature/Printed Name: _____ Date/Time: _____

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SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 5

CLIENT: Anchor QEA

DATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.2 °C (w/ CF): 4.4 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 619

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☒ Yes ☐ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☒ Yes ☐ No ☐ N/A

Sample container label(s) consistent with COC ☐ Yes ☒ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1053

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 619

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 5

CLIENT: Anchor REA

DATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.7 °C (w/ CF): 4.9 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ Filter

Checked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/A

Checked by: 619

Sample(s) ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ Yes ☐ No ☐ N/ASample container label(s) consistent with COC ☐ Yes ☒ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_{na} (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1053s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 619

SAMPLE RECEIPT CHECKLIST

COOLER 3 OF 5

CLIENT: Anchor & EA

DATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 510 °C (w/ CF): 512 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 619

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1053

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☐ Yes ☐ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☒ Yes ☐ No ☐ N/A

Sample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace..... ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznn (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1053

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znn = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 619

SAMPLE RECEIPT CHECKLIST

COOLER 4 OF 5CLIENT: Anchor QEADATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.6 °C (w/ CF): 4.8 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 619Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 1053

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBz_{na} (pH__9)☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄,Labeled/Checked by: 1053s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z_{na} = Zn (CH₃CO₂)₂ + NaOHReviewed by: 619

SAMPLE RECEIPT CHECKLIST

COOLER 5 OF 5

CLIENT: Anchor QEA

DATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 4.9 °C (w/ CF): 5.1 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 619

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 619

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1053

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBz₂na (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1053

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z₂na = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 619

SAMPLE ANOMALY REPORT

DATE: **02/27/2018**

SAMPLES, CONTAINERS, AND LABELS:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☒ Client sample label(s) do not match COC (comment)
 - ☐ Project information
 - ☒ Client sample ID
 - ☐ Sampling date and/or time
 - ☐ Number of container(s)
 - ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
 - ☐ Broken
 - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
 - ☐ Flat
 - ☐ Very low in volume
 - ☐ Leaking (not transferred; duplicate bag submitted)
 - ☐ Leaking (transferred into ECI Tedlar™ bags*)
 - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

MISCELLANEOUS: (Describe)

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

Comments

(-7) Labeled as
LE-RW-1014-G-S-20180227
(Date/time match)

(-14) 1 of 2 OC Pesticides
containers labeled as
OB-RW-17-G-S-2017905
(Date/time match)

Comments

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: _____

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

Reported by: **1053**
Reviewed by: **659**

RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 13:00
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074018030740

1 **CLIENT SAMPLE NUMBER:** CS-RW-01-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	2.92	1.95	1.00	1.3	Y	193%	2	105
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	1.35	0.900	1.00	1.3	JY	71%	2	1.90
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	7.47	ND	1.00	2.0	#		2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030740.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:00
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-1
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds		CONCENTRATIONS				
		ON-COLUMN			FINAL	
		RT	EXP RT	DLT RT	RESPONSE (ppb)	(ug/Kg)
-----	=====	==	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene		3.043	3.036	0.007	4957991646	49.7361 49.736
2 Hexachlorobenzene		Compound Not Detected.				
3 Alpha-BHC		Compound Not Detected.				
4 Gamma-BHC		Compound Not Detected.				
5 Beta-BHC		Compound Not Detected.				
6 Delta-BHC		Compound Not Detected.				
7 Heptachlor		Compound Not Detected.				
8 Aldrin		Compound Not Detected.				
9 4,4'-Dichlorobenzophenone		4.999	4.976	0.023	560848222	19.9848 19.984 (M) M
10 Oxychlordan		Compound Not Detected.				
11 2,4'-DDE		5.206	5.198	0.008	285423518	2.92303 2.923 (MH)
12 Heptachlor Epoxide		Compound Not Detected.				
13 Gamma Chlordane		Compound Not Detected.				
14 Trans-Nonachlor		Compound Not Detected.				
15 Alpha Chlordane		Compound Not Detected.				
16 4,4'-DDE		5.546	5.539	0.007	154459017	1.35240 1.352 (aMH) —
17 Endosulfan I		5.627	5.625	0.002	488264981	4.09436 4.094
18 2,4'-DDD		Compound Not Detected.				
19 Dieldrin		Compound Not Detected.				
20 2,4'-DDT		Compound Not Detected.				
21 Endrin		Compound Not Detected.				

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT						Compound Not Detected.		
26 Endrin Aldehyde						Compound Not Detected.		
27 Methoxychlor						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Endosulfan Sulfate						Compound Not Detected.		
30 Endrin Ketone	7.373	7.389	-0.016		445939705	3.84204	3.842	<i>M</i>
\$ 31 Decachlorobiphenyl	8.290	8.284	0.006		9146933816	87.6267	87.626	
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030740.d

Page 1

Date : 07-MAR-2018 13:00

Client ID:

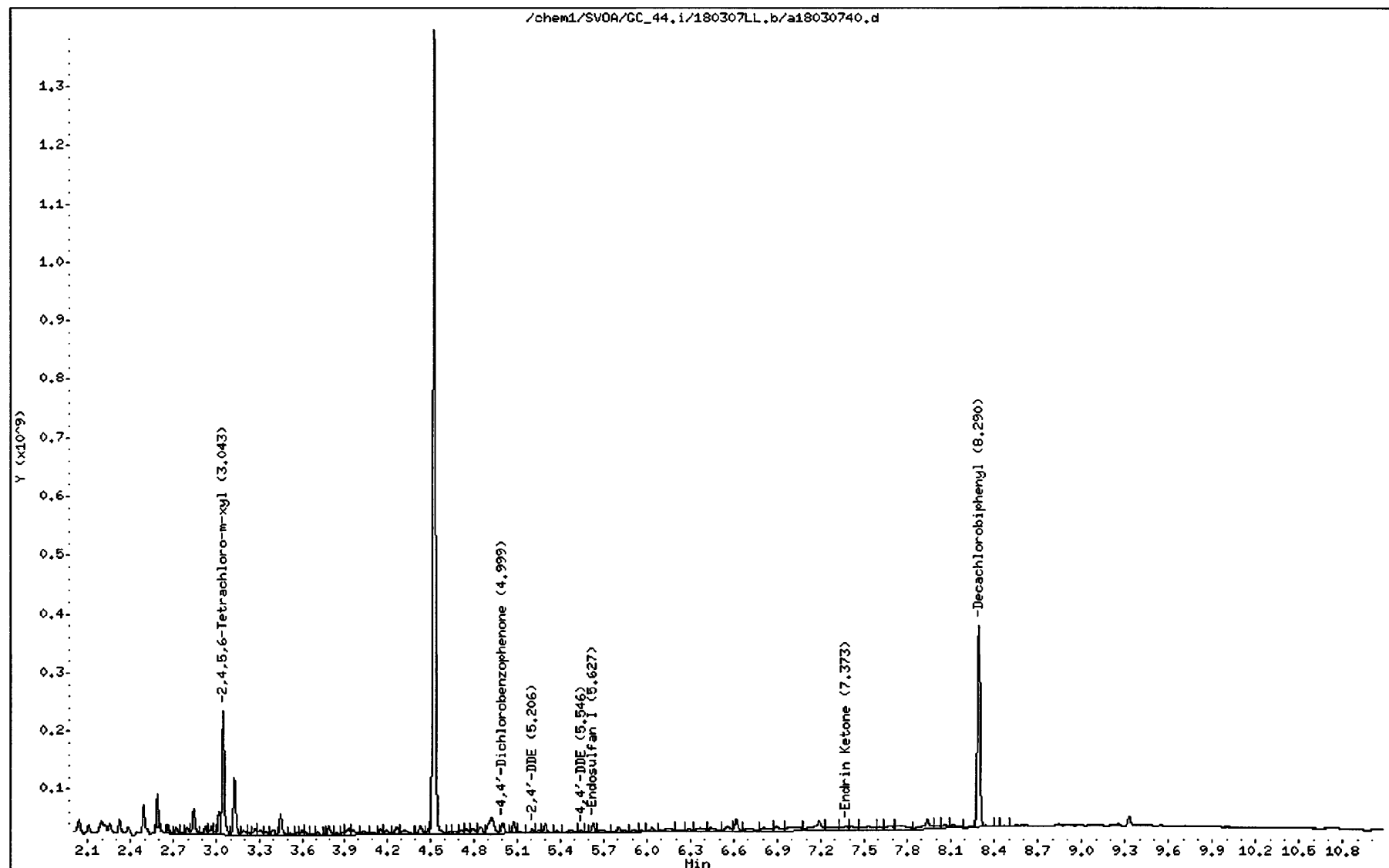
Instrument: GC_44.i

Sample Info: 18-02-1890-1

Operator: UHHN

Column phase:

Column diameter: 2.00



/chem1/SVQA/GC_44.1/180307LL.b/a18030740.d GC Column: (2mm ID)

Y (x10⁹)

Time (Min)

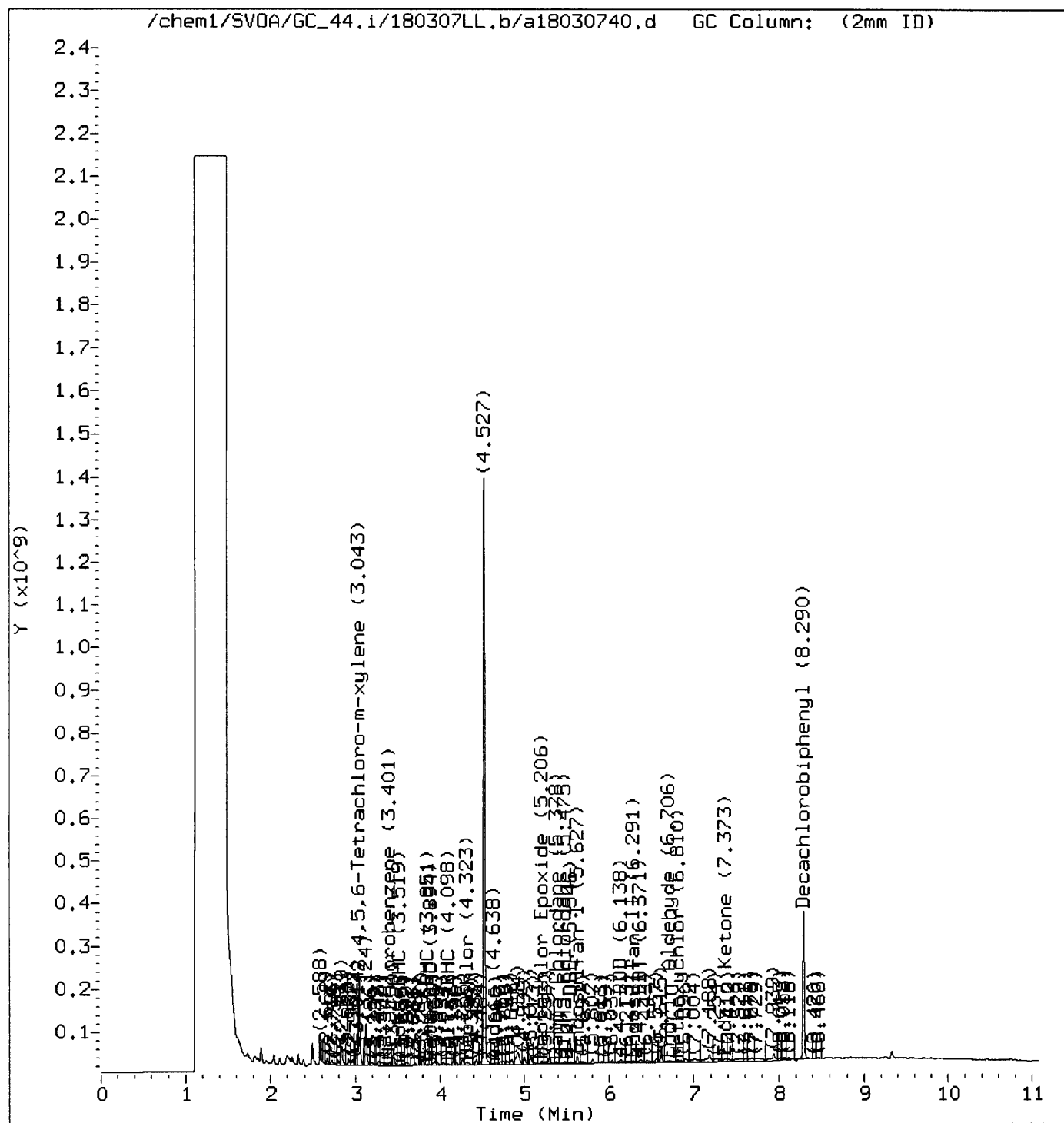
2,4,5,6-Tetrachloro-m-xylene (3.043)

Chlorobenzophenone (4.999)

Decachlorobiphenyl (8.290)

Audit/management approval: _____

44



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030740.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:00
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-1
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds		CONCENTRATIONS					
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
T	1 2,4,5,6-Tetrachloro-m-xylene	2.842	2.842	0.000	5471118591	51.4681	51.468
	2 Hexachlorobenzene	3.225	3.226	-0.001	298122074	1.92438	1.924 (a)
	3 Alpha-BHC	Compound Not Detected.					
	4 Gamma-BHC	3.664	3.656	0.008	1624116626	10.2466	10.246 (H)
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordan	Compound Not Detected.					
	11 Heptachlor Epoxide	Compound Not Detected.					
	12 2,4'-DDE	5.159	5.155	0.004	14088066236	158.149	158.149 (AM)
	13 Gamma Chlordane	Compound Not Detected.					
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.358	5.366	-0.008	834447742	7.10324	7.103
	17 4,4'-DDE	5.459	5.463	-0.004	337163395	2.84686	2.846
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT	6.335	6.325	0.010	443551755	4.43998	4.439		
26 Endrin Aldehyde	6.453	6.450	0.003	655660077	7.29102	7.291		
27 Endosulfan Sulfate						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Methoxychlor						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
T 31 Decachlorobiphenyl	8.327	8.325	0.002	8630955297	89.3205	89.320 (A)		
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030740.d

Date : 07-MAR-2018 13:00

Client ID:

Sample Info: 18-02-1890-1

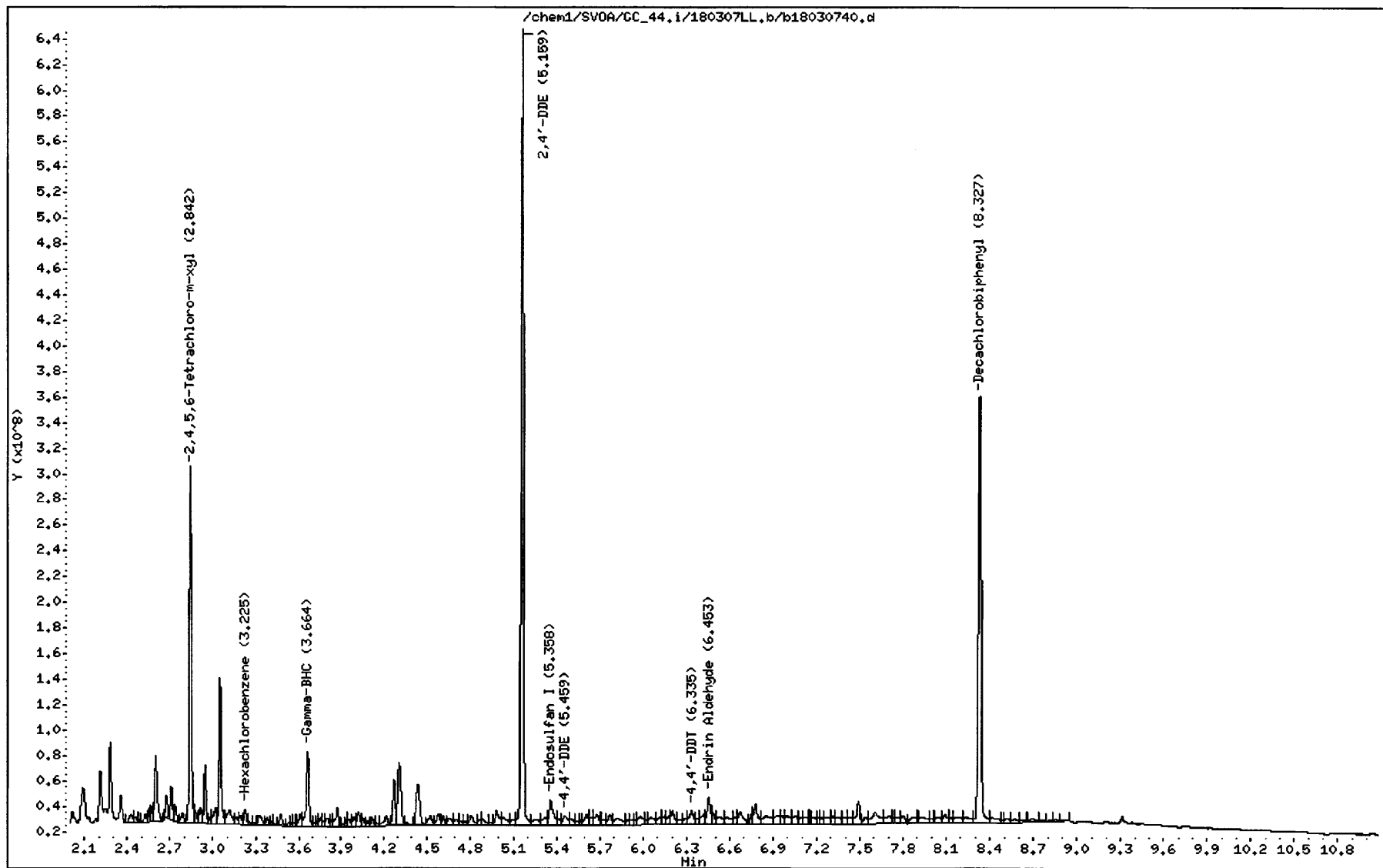
Page 1

Instrument: GC_44.i

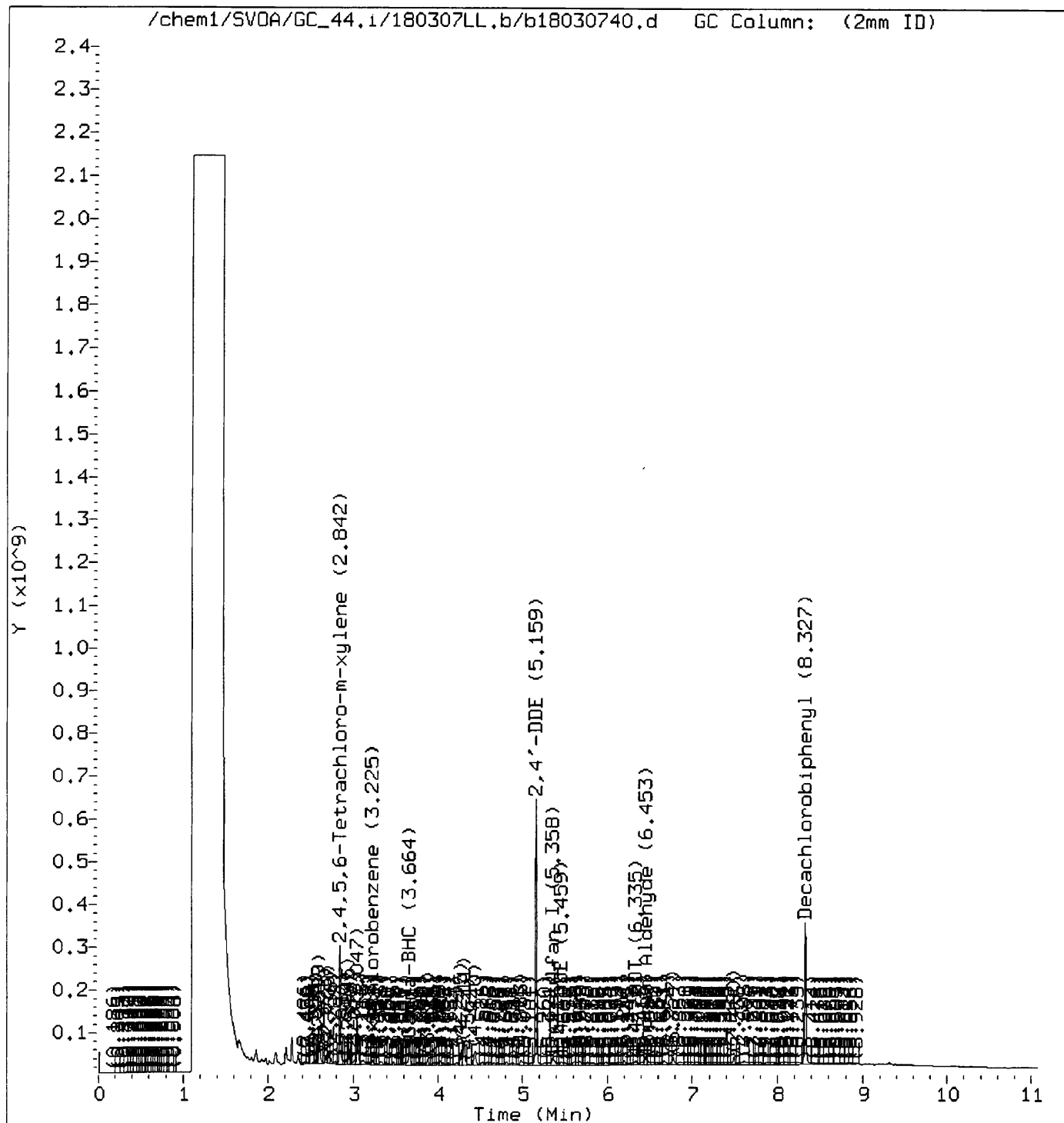
Operator: UHHN

Column diameter: 2.00

Column phase:



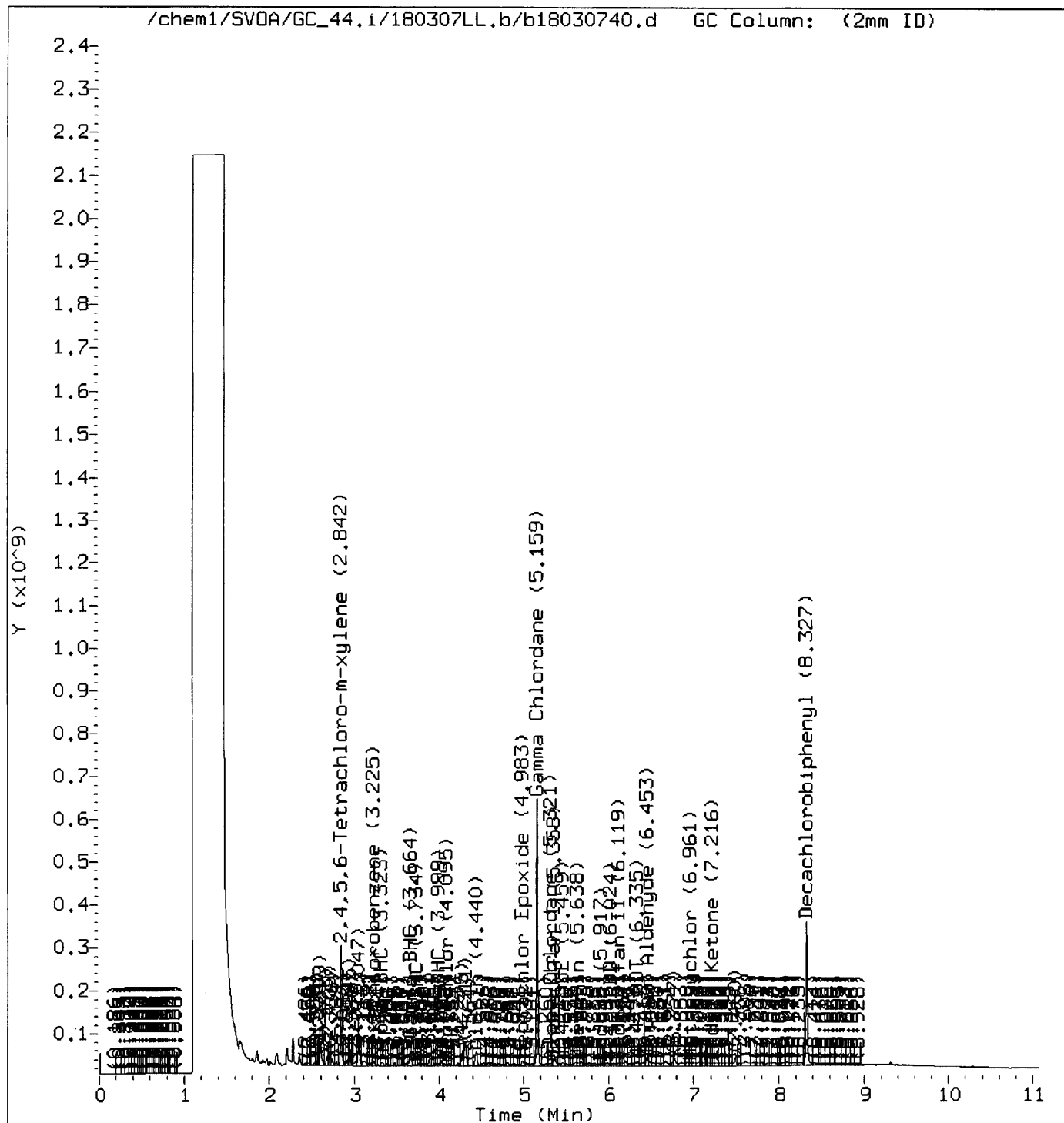
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhn

Audit/management approval: _____



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030740.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:00
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-1
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:11 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====		=====	=====	=====
2 4,4'-DDMU	5.205	5.208	-0.003		300232286	7.47213	7.432 <i>PT</i>

Data File: /chem1/SVDA/GC_44.i/180307DDHU.b/a18030740.d

Page 1

Date : 07-MAR-2018 13:00

Client ID:

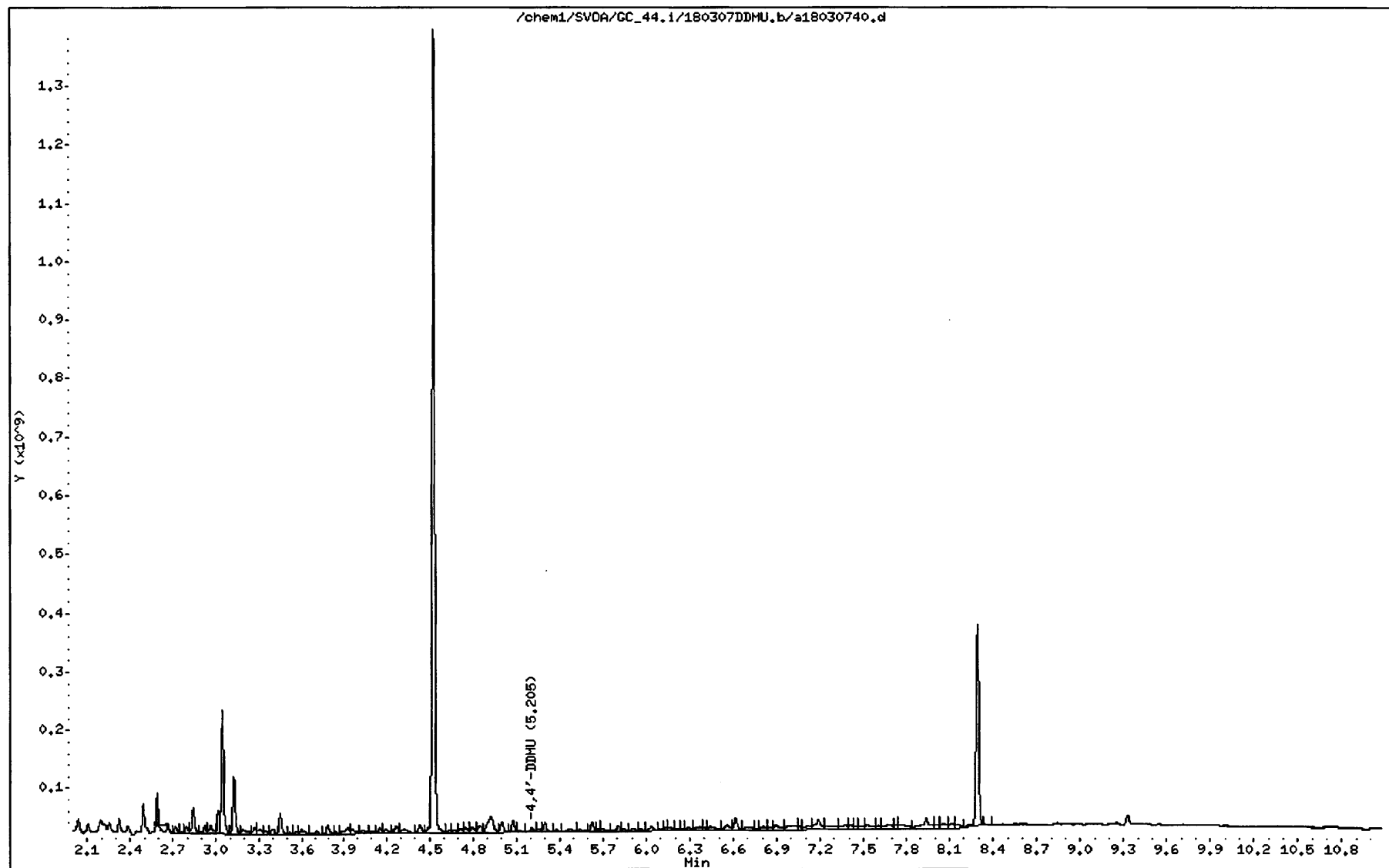
Instrument: GC_44.i

Sample Info: 18-02-1890-1

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030740.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:00
Operator : UHHN
Smp Info : 18-02-1890-1
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 40
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4

Inst ID: GC_44.i
Quant Type: ESTD
Cal File: b18030530.d
Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030740.d

Page 1

Date : 07-MAR-2018 13:00

Client ID:

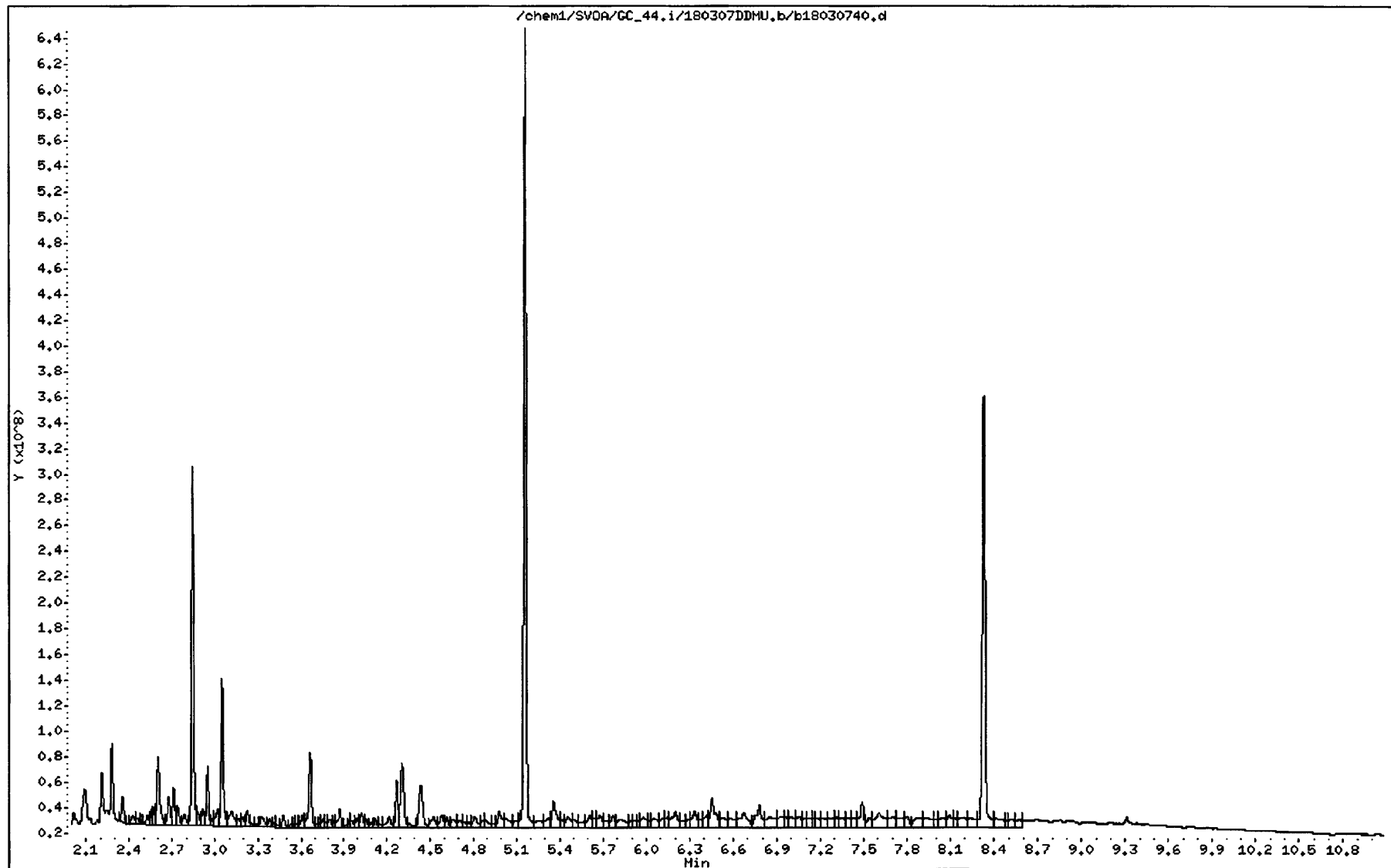
Instrument: GC_44.i

Sample Info: 18-02-1890-1

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 13:14
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074118030741

4 **CLIENT SAMPLE NUMBER:** IA-RW-02-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	1.25	ND	1.00	1.3	#		2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	3.56	2.37	1.00	1.3	Y	114%	2	8.70
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	1.19	0.794	1.00	1.3	JY	58%	2	1.45
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

```
Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030741.d
Lab Smp Id:
Inj Date  : 07-MAR-2018 13:14
Operator  : UHHN                      Inst ID: GC_44.i
Smp Info  : 18-02-1890-4
Misc Info :
Comment   :
Method    : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn    Quant Type: ESTD
Cal Date  : 05-MAR-2018 11:34        Cal File: a18030502.d
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP Genie                  Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4
```

Cpnd Variable	Local Compound Variable
---------------	-------------------------

						CONCENTRATIONS	
Compounds		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$	1 2,4,5,6-Tetrachloro-m-xylene	3.037	3.036	0.001	4965285849	49.8092	49.809
	2 Hexachlorobenzene	3.395	3.382	0.013	237574648	1.63672	1.636 (aH)
	3 Alpha-BHC		Compound Not	Detected.			
	4 Gamma-BHC		Compound Not	Detected.			
	5 Beta-BHC		Compound Not	Detected.			
	6 Delta-BHC		Compound Not	Detected.			
	7 Heptachlor		Compound Not	Detected.			
	8 Aldrin	4.631	4.622	0.009	173554725	1.25018	1.250 (a) N
	9 4,4'-Dichlorobenzophenone	4.991	4.976	0.015	508800772	18.1302	18.130 (M) ✓
	10 Oxychlordane		Compound Not	Detected.			
	11 2,4'-DDE	5.200	5.198	0.002	347554186	3.55931	3.559 (M)
	12 Heptachlor Epoxide		Compound Not	Detected.			
	13 Gamma Chlordane		Compound Not	Detected.			
	14 Trans-Nonachlor		Compound Not	Detected.			
	15 Alpha Chlordane		Compound Not	Detected.			
	16 4,4'-DDE	5.538	5.539	-0.001	136461839	1.19482	1.194 (aM)
	17 Endosulfan I	5.621	5.625	-0.004	358859999	3.00923	3.009
	18 2,4'-DDD		Compound Not	Detected.			
	19 Dieldrin		Compound Not	Detected.			
	20 2,4'-DDT		Compound Not	Detected.			
	21 Endrin		Compound Not	Detected.			

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.		
23 4,4'-DDD					Compound Not Detected.		
24 Endosulfan II					Compound Not Detected.		
25 4,4'-DDT					Compound Not Detected.		
26 Endrin Aldehyde					Compound Not Detected.		
27 Methoxychlor					Compound Not Detected.		
28 Mirex					Compound Not Detected.		
29 Endosulfan Sulfate					Compound Not Detected.		
30 Endrin Ketone					Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.285	8.284	0.001	9740171621		93.3099	93.309
M 32 Chlordane					Compound Not Detected.		
33 CHLD (1)					Compound Not Detected.		
34 CHLD (2)					Compound Not Detected.		
35 CHLD (3)					Compound Not Detected.		
36 CHLD (4)					Compound Not Detected.		
37 CHLD (5)					Compound Not Detected.		
M 38 Toxaphene					Compound Not Detected.		
39 TOXAPHENE (1)					Compound Not Detected.		
40 TOXAPHENE (2)					Compound Not Detected.		
41 TOXAPHENE (3)					Compound Not Detected.		
42 TOXAPHENE (4)					Compound Not Detected.		
43 TOXAPHENE (5)					Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SVOA/GC_44.i/180307LL.b/a18030741.d

Page 1

Date : 07-MAR-2018 13:14

Client ID:

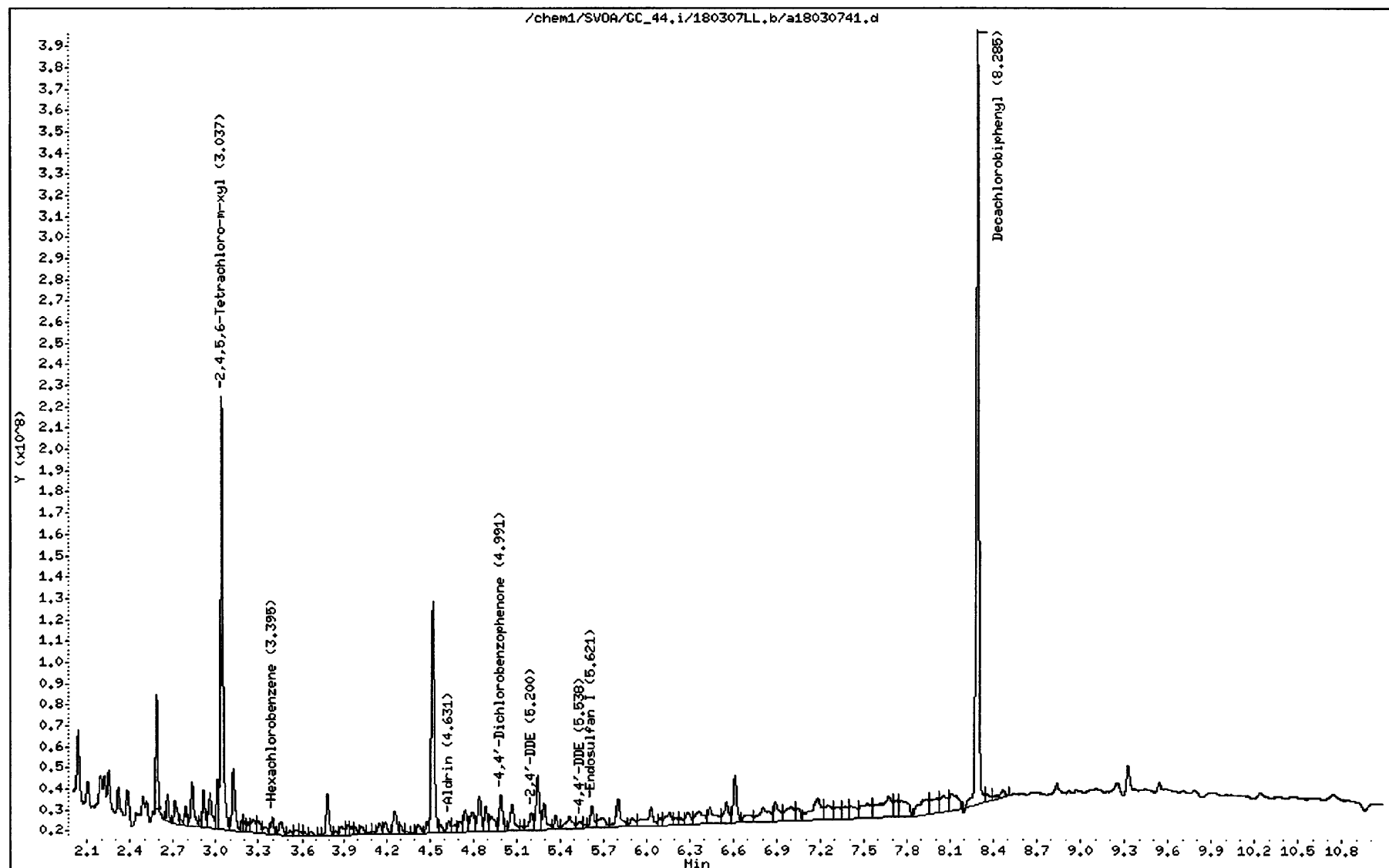
Instrument: GC_44.i

Sample Info: 18-02-1890-4

Operator: UHHN

Column phase:

Column diameter: 2.00

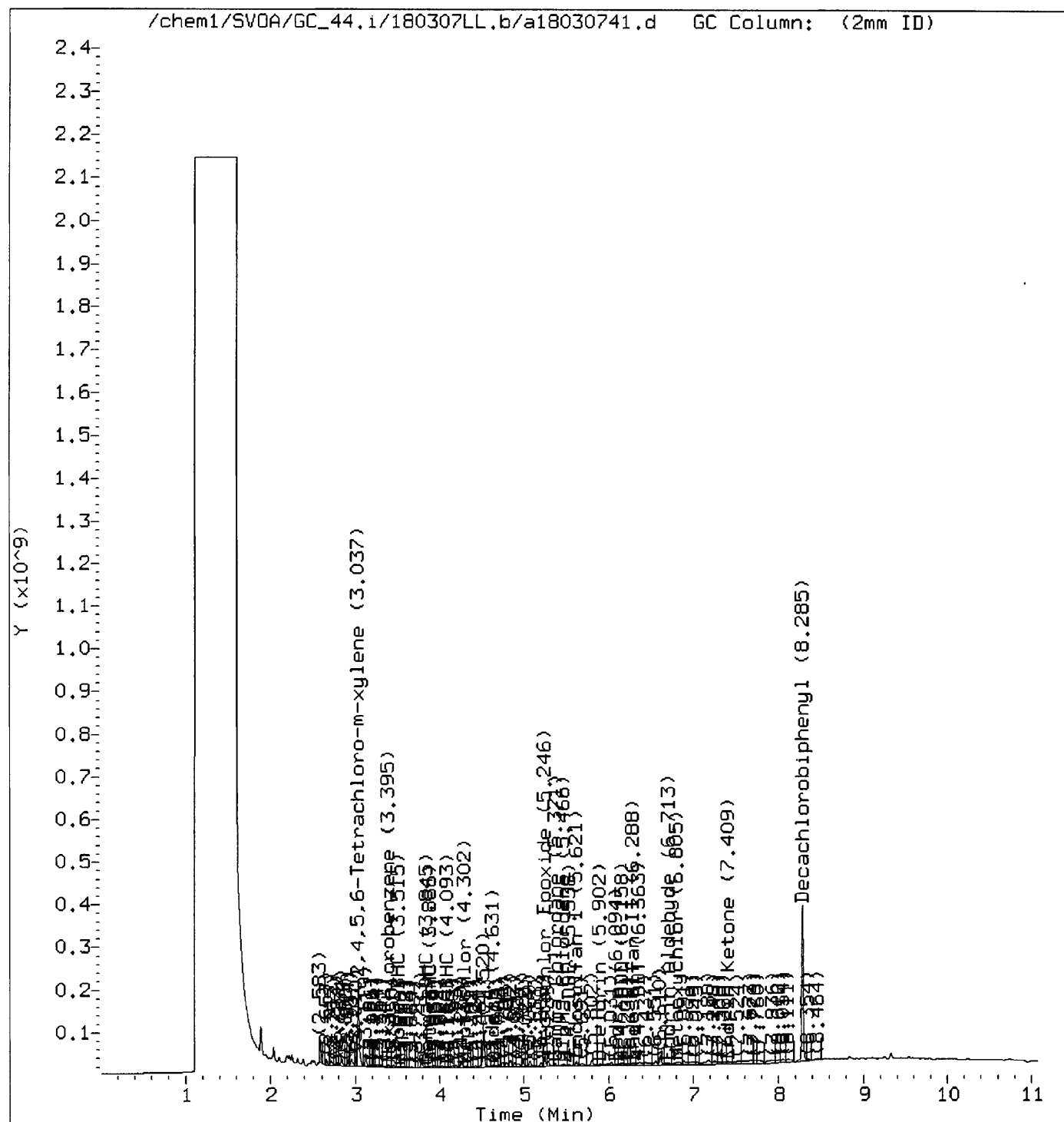


Chromatogram showing detector response (Y-axis, labeled Y (x10⁹)) versus Time (Min). The Y-axis ranges from 0.1 to 2.4. The X-axis ranges from 1 to 11 minutes. A large peak is observed at approximately 1.2 minutes. Several smaller peaks are labeled with their retention times and chemical names:

- 2.583
- 3.037 (4,5,6-Tetrachloro-m-xylene)
- 3.395 (m-xylene)
- 4.631
- 4.991 (chlorobenzophenone)
- 5.200
- 5.385
- 5.621
- 8.285 (Decachlorobiphenyl)

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhhn





Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030741.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:14
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-4
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS		
					ON-COLUMN	FINAL	
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T	1 2,4,5,6-Tetrachloro-m-xylene	2.843	2.842	0.001	5279796771	49.6683	49.668 (R)
	2 Hexachlorobenzene	3.226	3.226	0.000	267993639	1.72990	1.729 (a)
	3 Alpha-BHC	3.338	3.337	0.001	203389155	1.12019	1.120 (a)
	4 Gamma-BHC	3.665	3.656	0.009	1335578076	8.42619	8.426
	5 Beta-BHC	3.736	3.724	0.012	111878254	1.60696	1.606 (a)
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordane	Compound Not Detected.					
	11 Heptachlor Epoxide	Compound Not Detected.					
	12 2,4'-DDE	5.159	5.155	0.004	1162806030	13.0534	13.053 (M)
	13 Gamma Chlordane	5.159	5.162	-0.003	1162806030	8.91605	8.916
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.358	5.366	-0.008	246912057	2.10184	2.101 (H)
	17 4,4'-DDE	5.459	5.463	-0.004	257236553	2.17200	2.171
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor				Compound Not Detected.		
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT	6.335	6.325	0.010	461591133	4.62055	4.620
26 Endrin Aldehyde	6.453	6.450	0.003	732869762	8.14960	8.149
27 Endosulfan Sulfate				Compound Not Detected.		
28 Mirex				Compound Not Detected.		
29 Methoxychlor				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
T 31 Decachlorobiphenyl	8.326	8.325	0.001	8918979561	92.3012	92.301(A)
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030741.d

Date : 07-MAR-2018 13:14

Client ID:

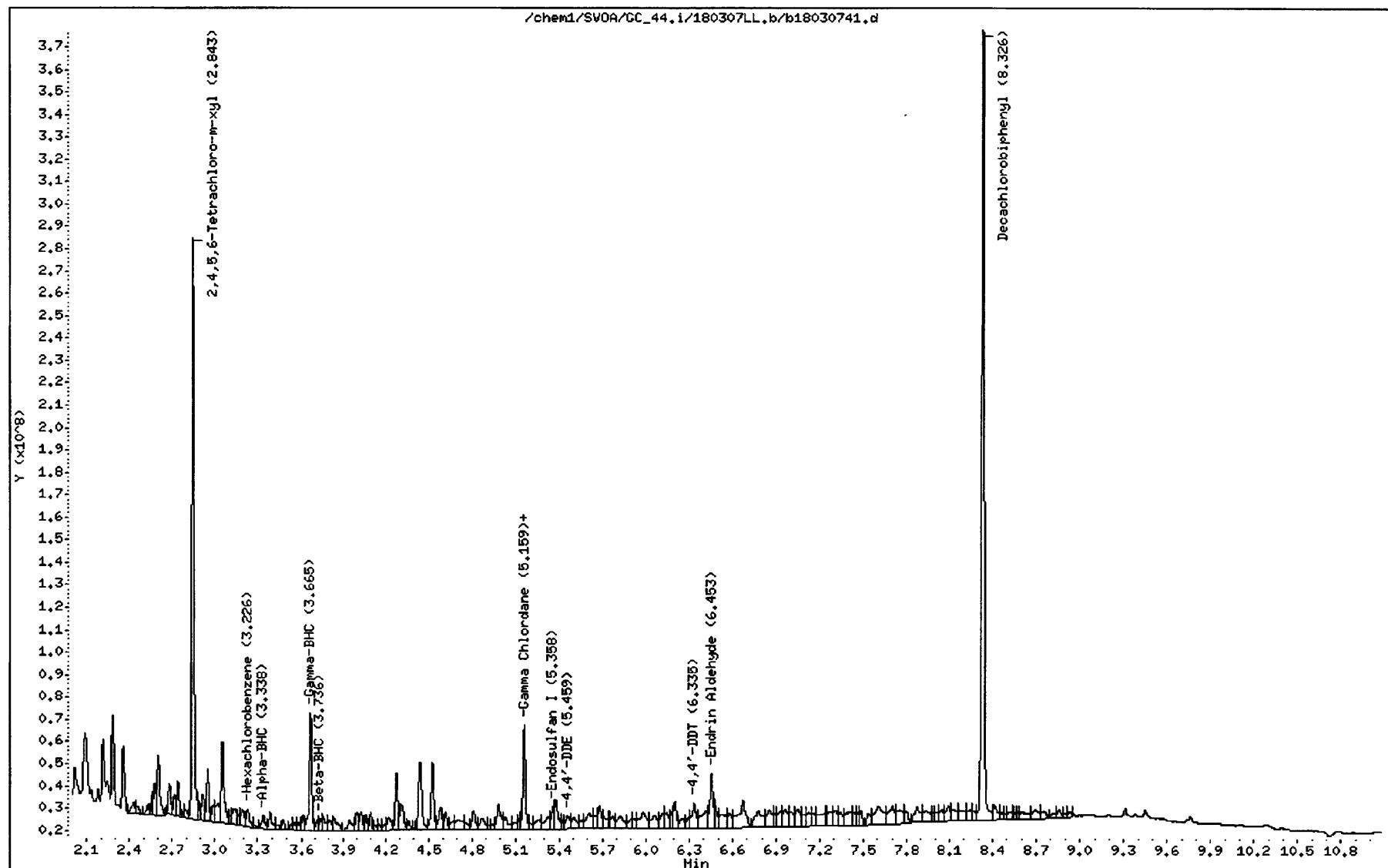
Sample Info: 18-02-1890-4

Instrument: GC_44.i

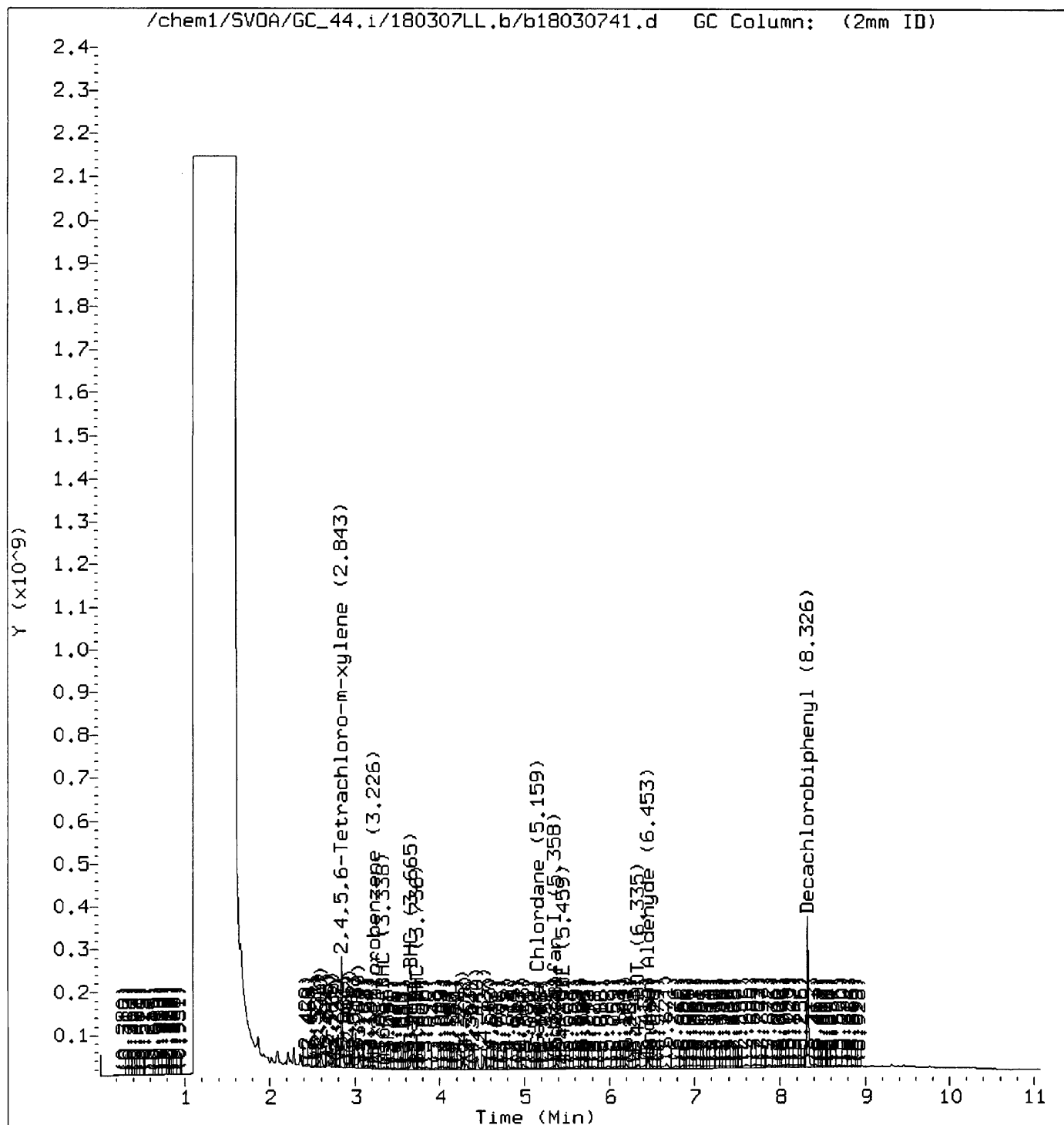
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File



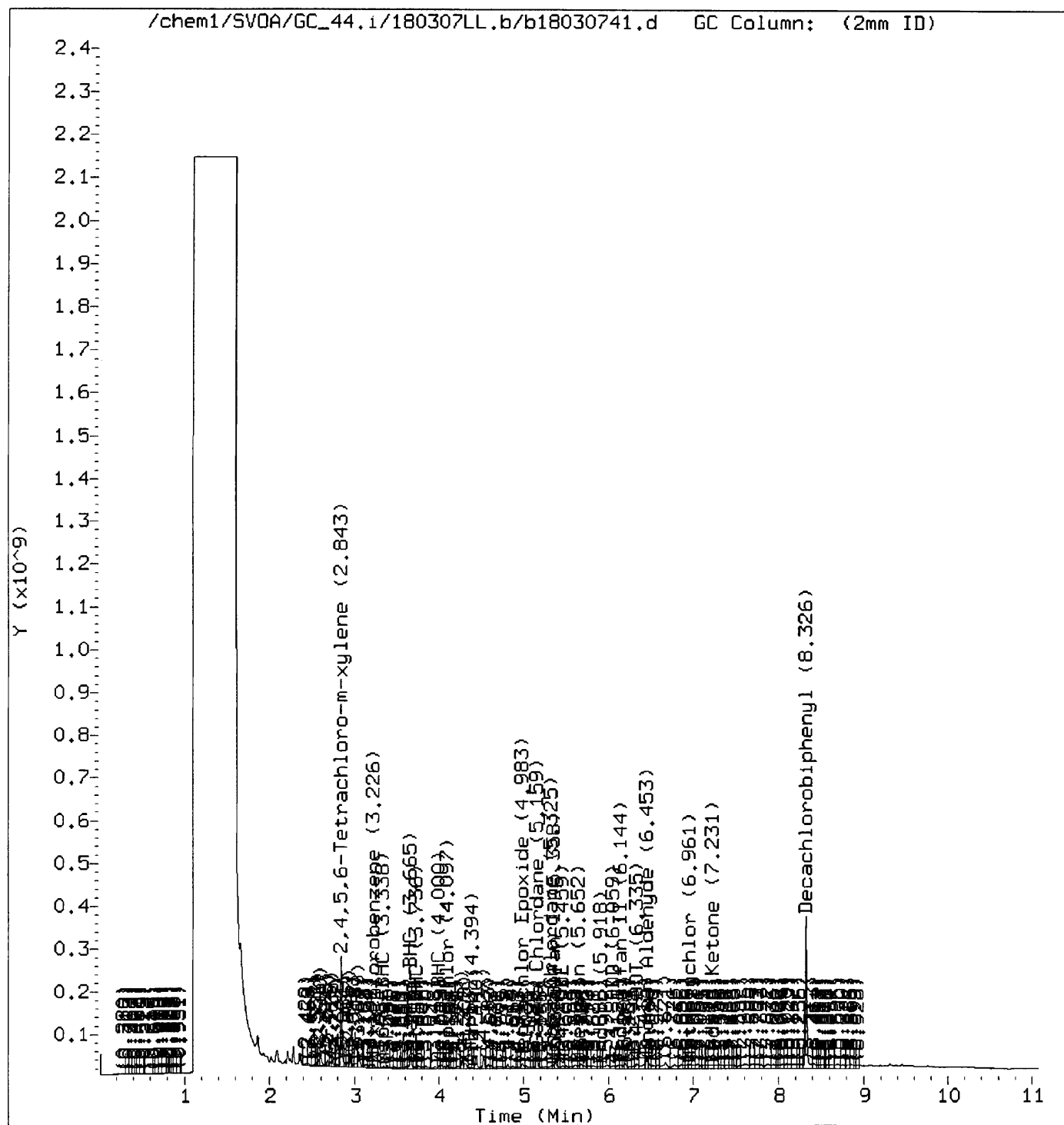
Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:41.

Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

um



Data File: /chem1/SVOA/GC_44.i/180307DDMU.b/a18030741.d
Report Date: 08-Mar-2018 18:14

Page 1

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030741.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:14
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-4
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
-----	==	=====	=====	=====	=====	=====
2,4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/a18030741.d

Page 1

Date : 07-MAR-2018 13:14

Client ID:

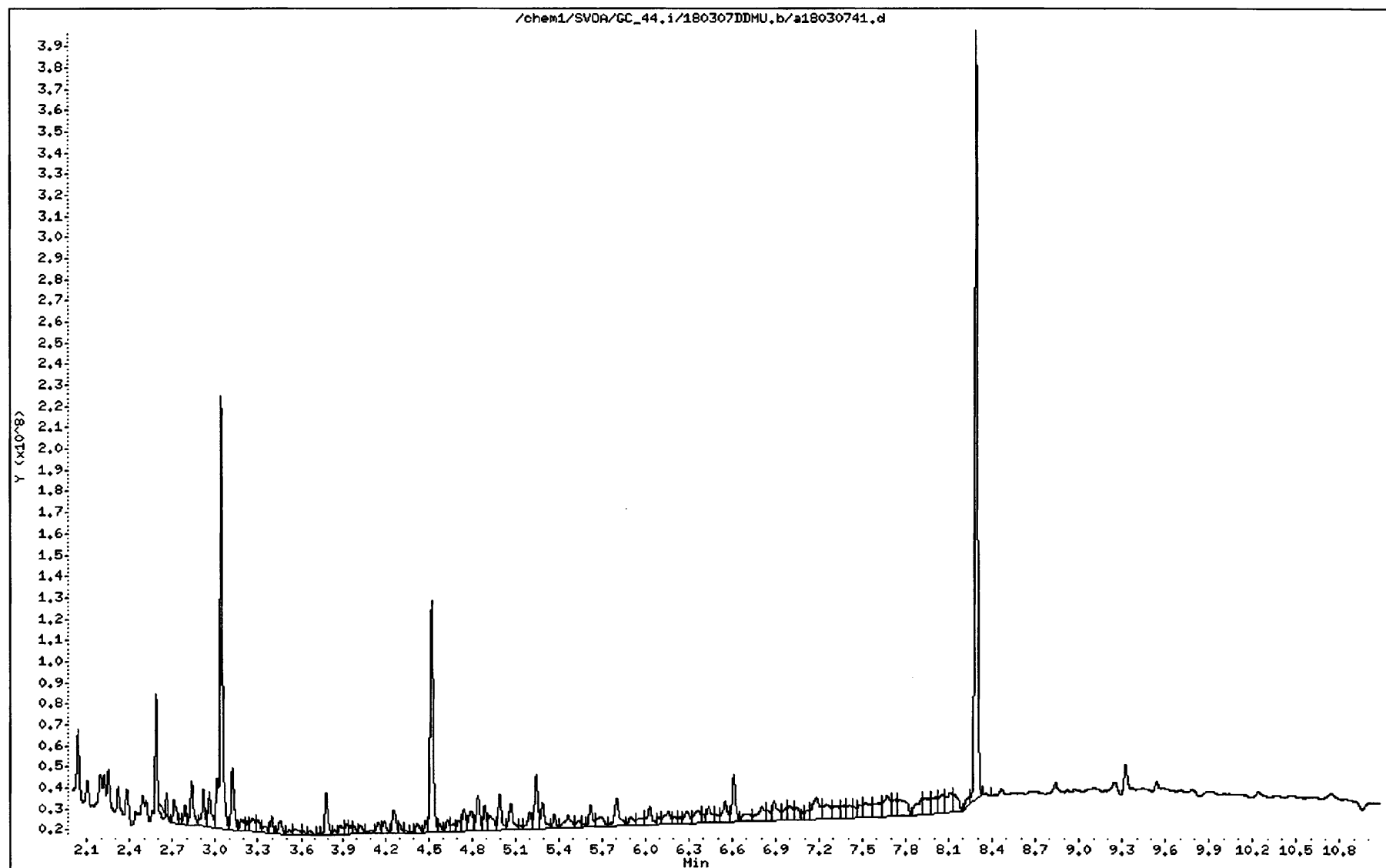
Instrument: GC_44.i

Sample Info: 18-02-1890-4

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030741.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:14
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-4
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 41
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.100	5.122	-0.022	168826856	3.87898	3.878

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/b18030741.d

Page 1

Date : 07-MAR-2018 13:14

Client ID:

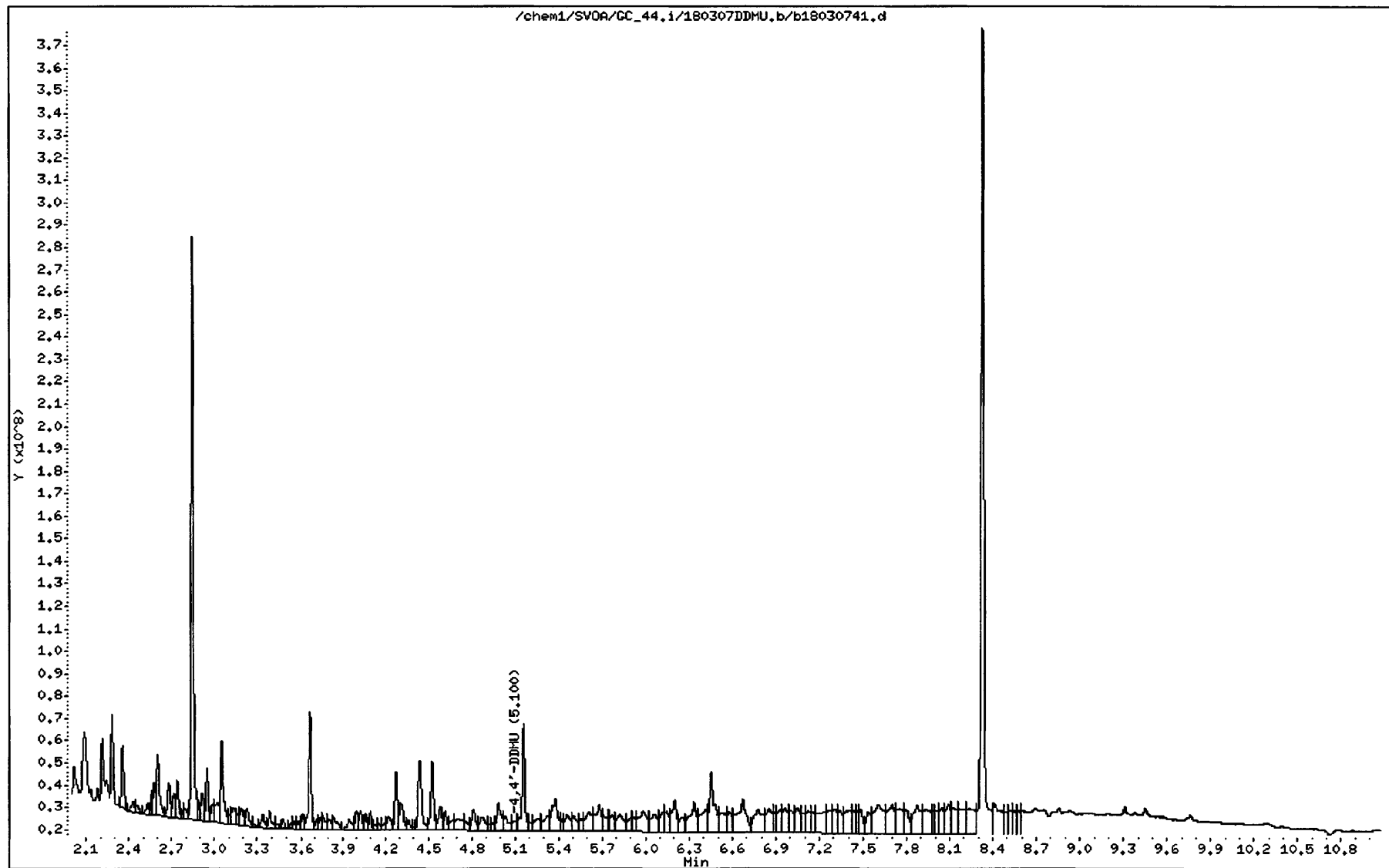
Instrument: GC_44.i

Sample Info: 18-02-1890-4

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 13:28
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074218030742

8 **CLIENT SAMPLE NUMBER:** IA-RW-03-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	3.18	2.12	1.00	1.3	Y	148%	2	14.1
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Data file : /chem1/SVOA/GC 44.i/180307LL.b/a18030742.d

Inst ID: GC 44.i

Processing Host: US26TAR4

Local Compound Variable

						CONCENTRATIONS	
Compounds		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$	1 2,4,5,6-Tetrachloro-m-xylene	3.037	3.036	0.001	6535187486	65.5577	65.557
	2 Hexachlorobenzene	3.395	3.382	0.013	407558784	2.80779	2.807 b
	3 Alpha-BHC	Compound Not Detected.					
	4 Gamma-BHC	Compound Not Detected.					
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	4.990	4.976	0.014	527621766	18.8008	18.800 (M) MC
	10 Oxychlordane	Compound Not Detected.					
	11 2,4'-DDE	5.198	5.198	0.000	310963183	3.18458	3.184 (M) —
	12 Heptachlor Epoxide	Compound Not Detected.					
	13 Gamma Chlordane	Compound Not Detected.					
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 4,4'-DDE	Compound Not Detected.					
	17 Endosulfan I	5.620	5.625	-0.005	480913328	4.03272	4.032 —
	18 2,4'-DDD	Compound Not Detected.					
	19 Dieldrin	Compound Not Detected.					
	20 2,4'-DDT	Compound Not Detected.					
	21 Endrin	Compound Not Detected.					

Compounds						CONCENTRATIONS	
	RT	EXP	RT	DLT	RT	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.		
23 4,4'-DDD					Compound Not Detected.		
24 Endosulfan II					Compound Not Detected.		
25 4,4'-DDT					Compound Not Detected.		
26 Endrin Aldehyde					Compound Not Detected.		
27 Methoxychlor					Compound Not Detected.		
28 Mirex					Compound Not Detected.		
29 Endosulfan Sulfate					Compound Not Detected.		
30 Endrin Ketone					Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.284	8.284	0.000	10680543537		102.319	102.318
M 32 Chlordane					Compound Not Detected.		
33 CHLD (1)					Compound Not Detected.		
34 CHLD (2)					Compound Not Detected.		
35 CHLD (3)					Compound Not Detected.		
36 CHLD (4)					Compound Not Detected.		
37 CHLD (5)					Compound Not Detected.		
M 38 Toxaphene					Compound Not Detected.		
39 TOXAPHENE (1)					Compound Not Detected.		
40 TOXAPHENE (2)					Compound Not Detected.		
41 TOXAPHENE (3)					Compound Not Detected.		
42 TOXAPHENE (4)					Compound Not Detected.		
43 TOXAPHENE (5)					Compound Not Detected.		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030742.d

Page 1

Date : 07-MAR-2018 13:28

Client ID:

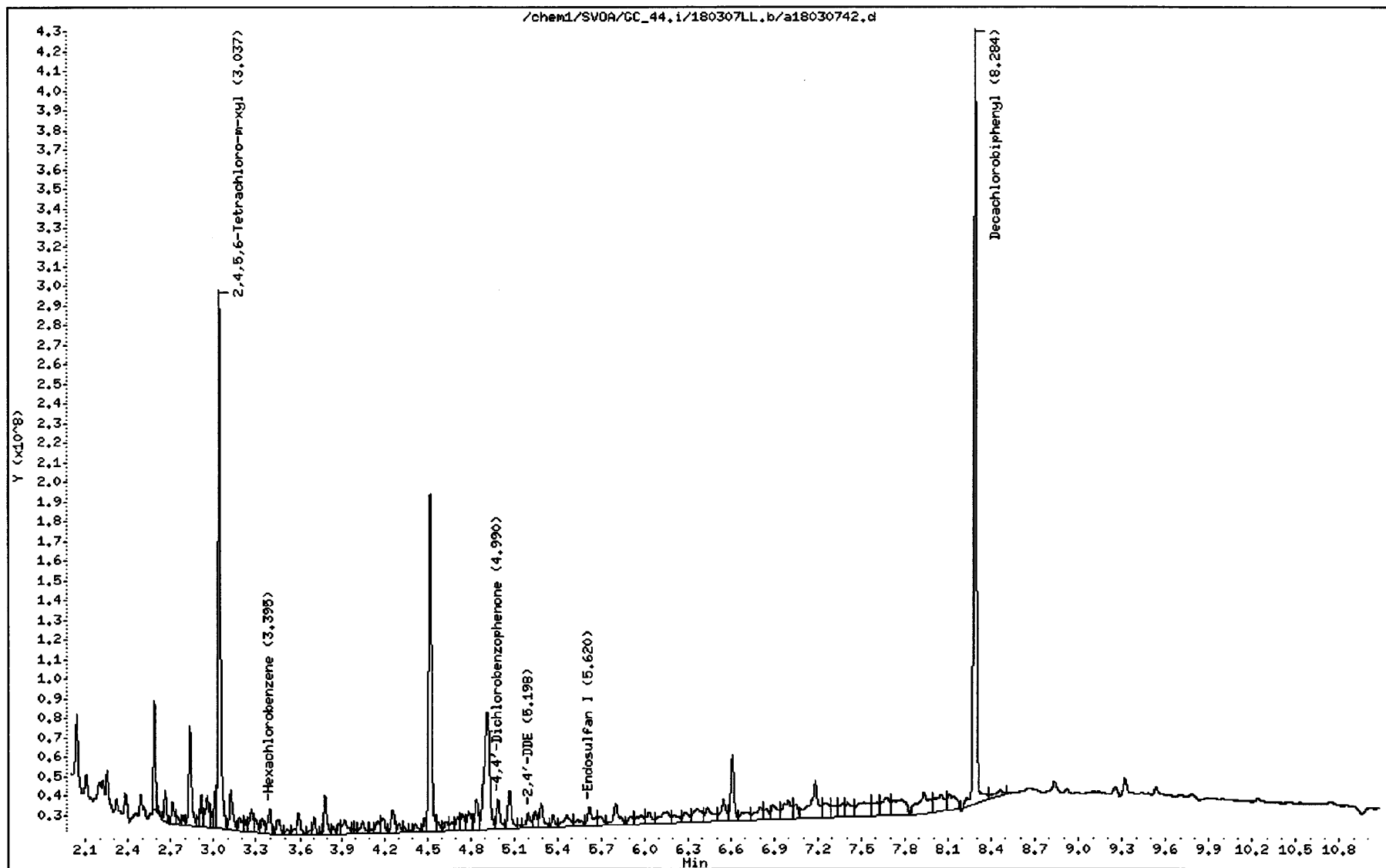
Instrument: GC_44.i

Sample Info: 18-02-1890-8

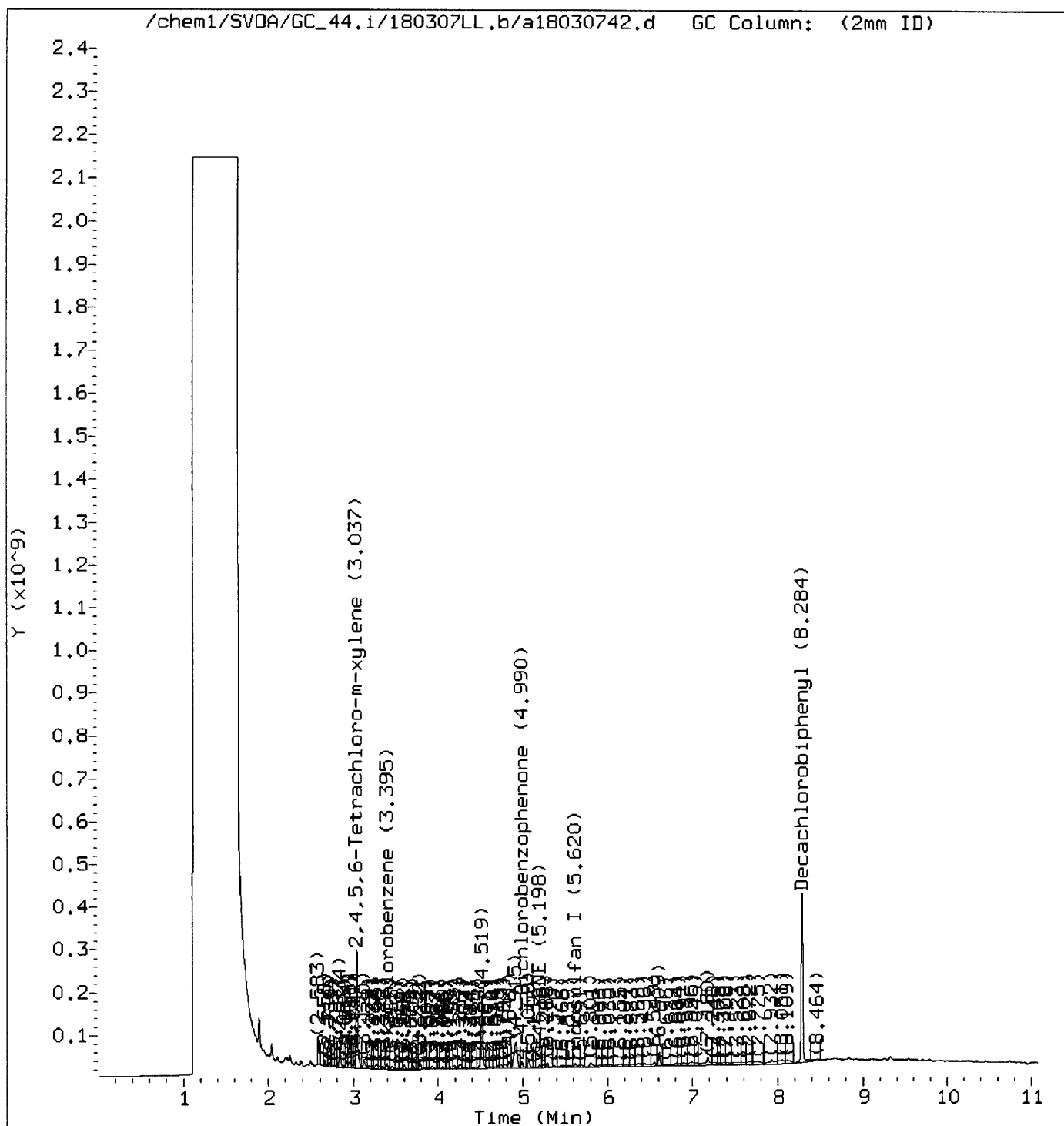
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File



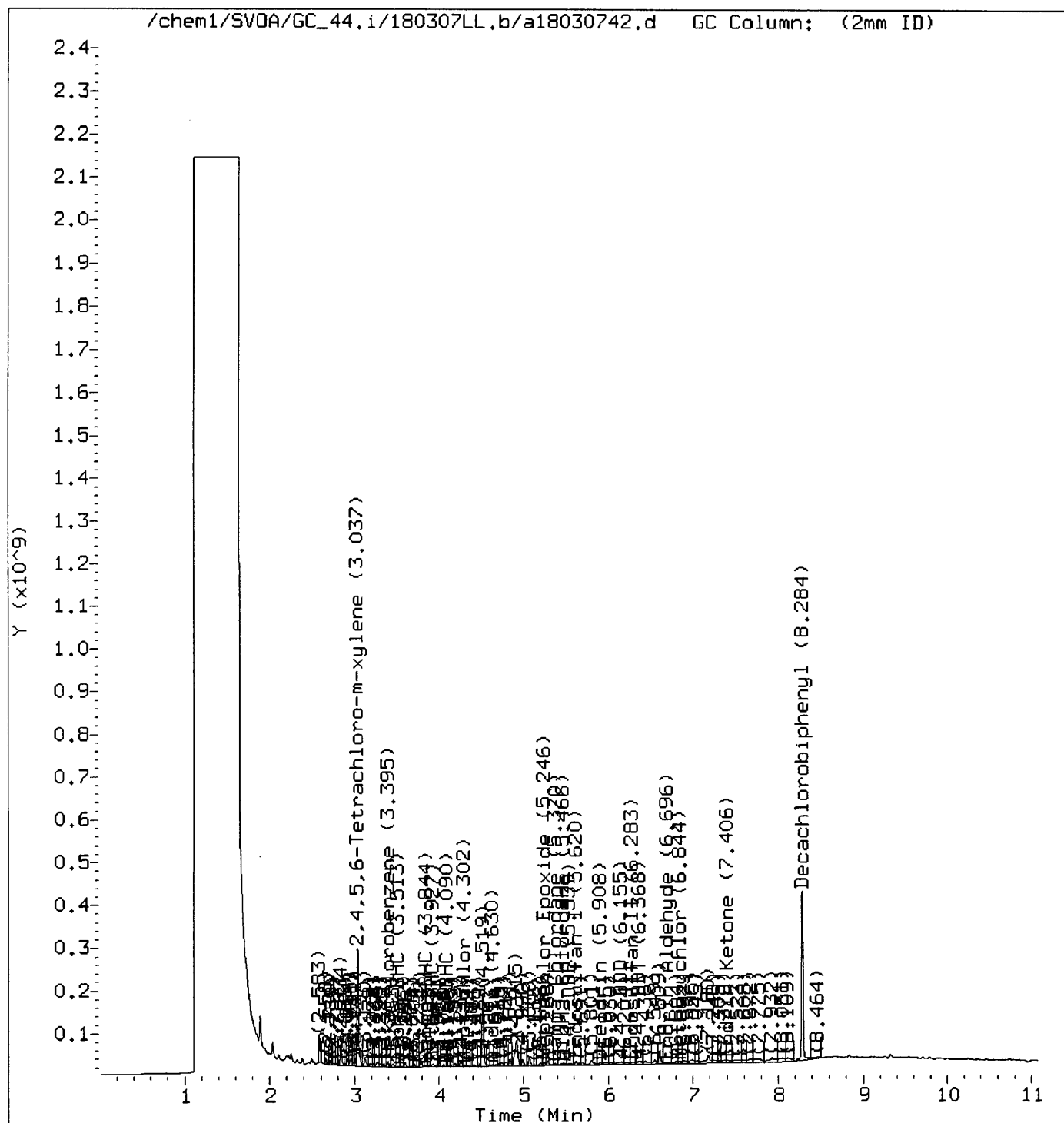
Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

um

Original Data File



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030742.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:28
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-8
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 42
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL
=====		==	=====	=====	=====	(ppb)	(ug/Kg)
T	1 2,4,5,6-Tetrachloro-m-xylene	2.843	2.842	0.001	7069614152	66.5055	66.505
	2 Hexachlorobenzene	3.227	3.226	0.001	195724722	1.26341	1.263 (a)
	3 Alpha-BHC	Compound Not Detected.					
	4 Gamma-BHC	3.665	3.656	0.009	1158099099	7.30647	7.306 (H)
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordane	Compound Not Detected.					
	11 Heptachlor Epoxide	4.983	4.975	0.008	463045965	3.64761	3.647
	12 2,4'-DDE	5.159	5.155	0.004	1876661950	21.0669	21.066 (M)
	13 Gamma Chlordane	5.159	5.162	-0.003	1876661950	14.3897	14.389
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.377	5.366	0.011	340866873	2.90163	2.901 (MH)
	17 4,4'-DDE	5.460	5.463	-0.003	283736655	2.39575	2.395 (H)
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

						CONCENTRATIONS	
Compounds	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)	
=====	==	=====	=====	=====	=====	=====	
22 Cis-Nonachlor		Compound	Not	Detected.			
23 4,4'-DDD		Compound	Not	Detected.			
24 Endosulfan II		Compound	Not	Detected.			
25 4,4'-DDT	6.336	6.325	0.011	491898478	4.92393	4.923	
26 Endrin Aldehyde	6.453	6.450	0.003	1195305169	13.2919	13.291	
27 Endosulfan Sulfate		Compound	Not	Detected.			
28 Mirex		Compound	Not	Detected.			
29 Methoxychlor		Compound	Not	Detected.			
30 Endrin Ketone		Compound	Not	Detected.			
T 31 Decachlorobiphenyl	8.325	8.325	0.000	9735995334	100.756	100.756 (A)	
M 32 Chlordane		Compound	Not	Detected.			
33 CHLD (1)		Compound	Not	Detected.			
34 CHLD (2)		Compound	Not	Detected.			
35 CHLD (3)		Compound	Not	Detected.			
36 CHLD (4)		Compound	Not	Detected.			
37 CHLD (5)		Compound	Not	Detected.			
M 38 Toxaphene		Compound	Not	Detected.			
39 TOXAPHENE (1)		Compound	Not	Detected.			
40 TOXAPHENE (2)		Compound	Not	Detected.			
41 TOXAPHENE (3)		Compound	Not	Detected.			
42 TOXAPHENE (4)		Compound	Not	Detected.			
43 TOXAPHENE (5)		Compound	Not	Detected.			

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030742.d

Page 1

Date : 07-MAR-2018 13:28

Client ID:

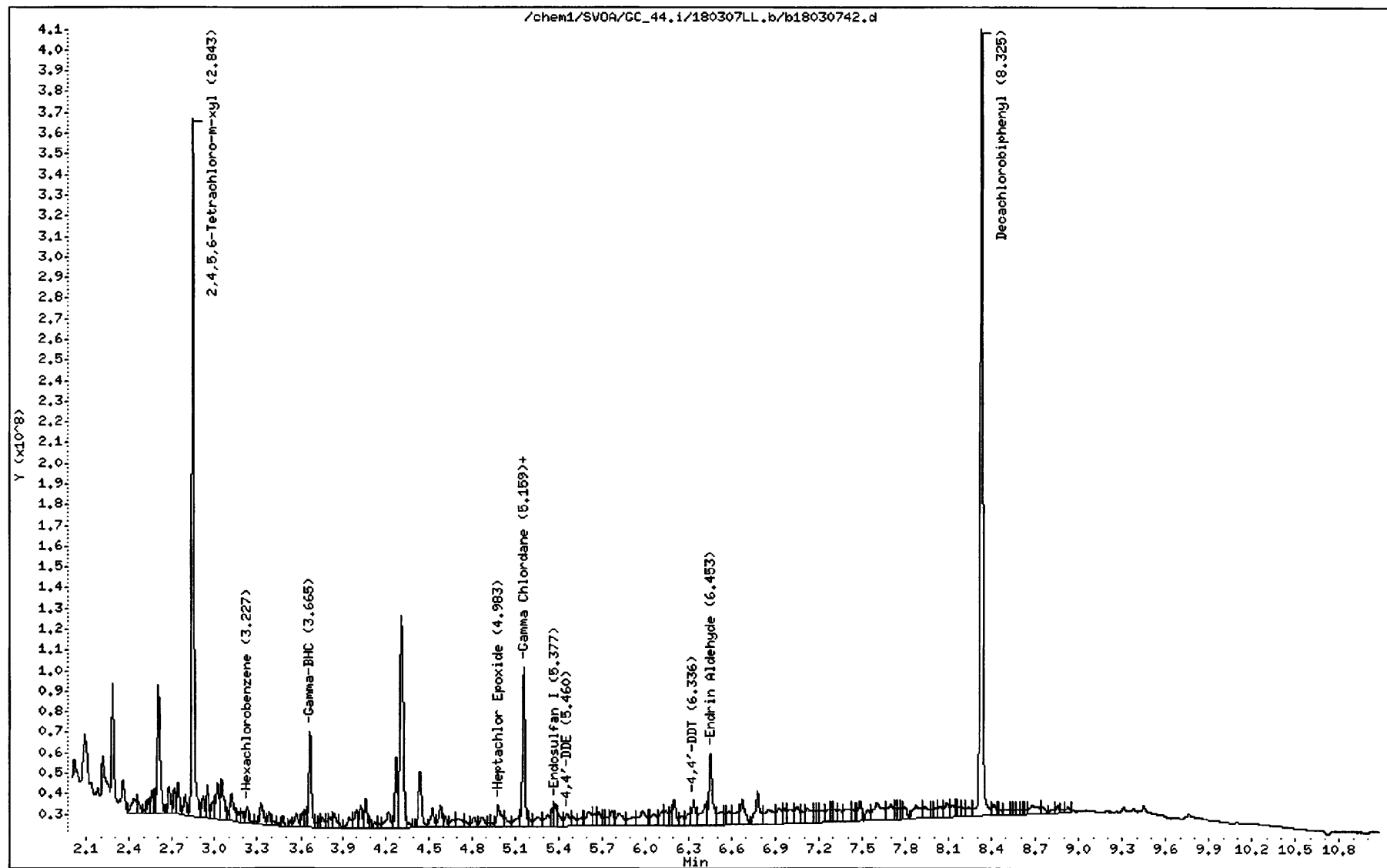
Instrument: GC_44.i

Sample Info: 18-02-1890-8

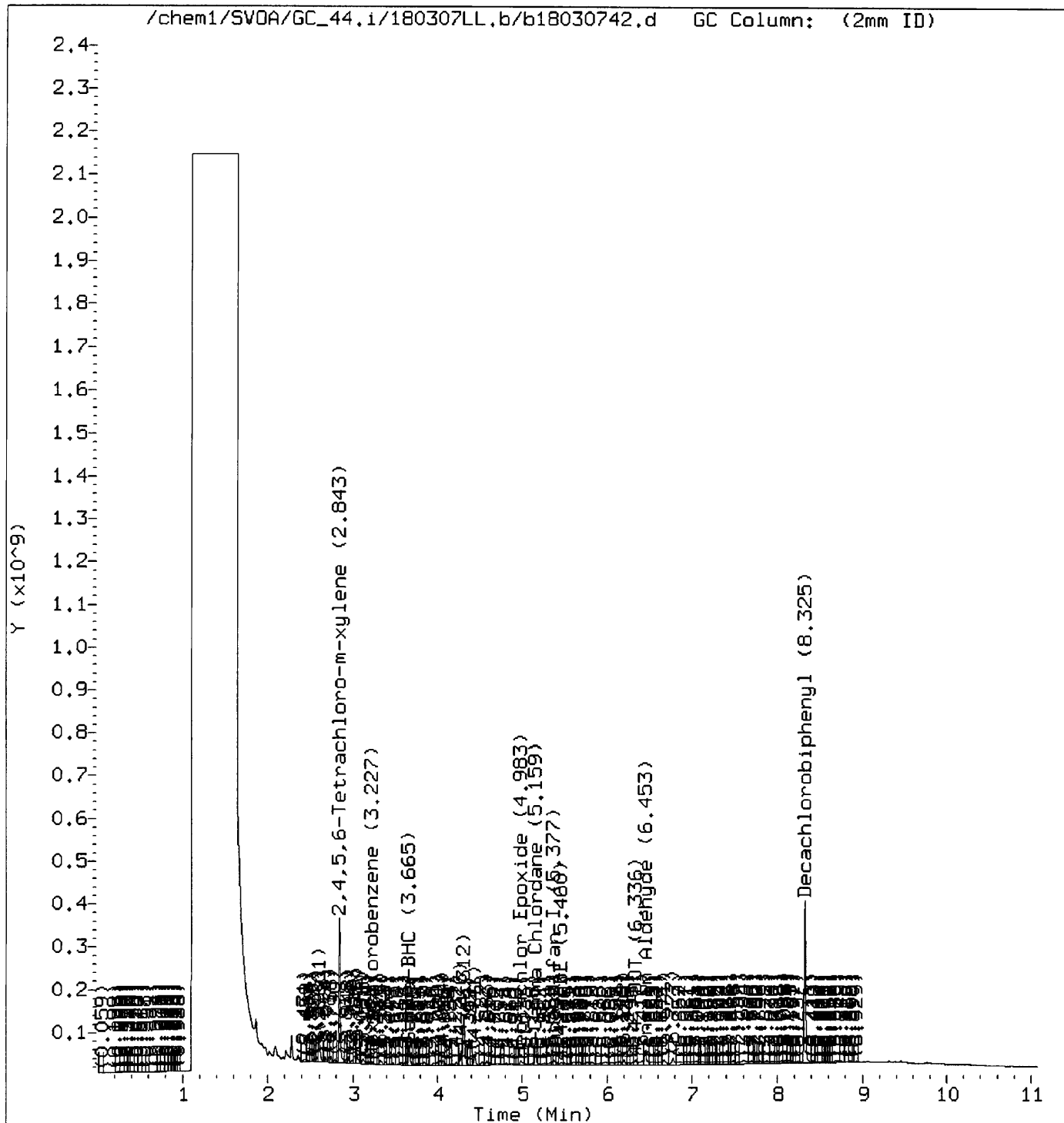
Operator: UHHN

Column phase:

Column diameter: 2.00



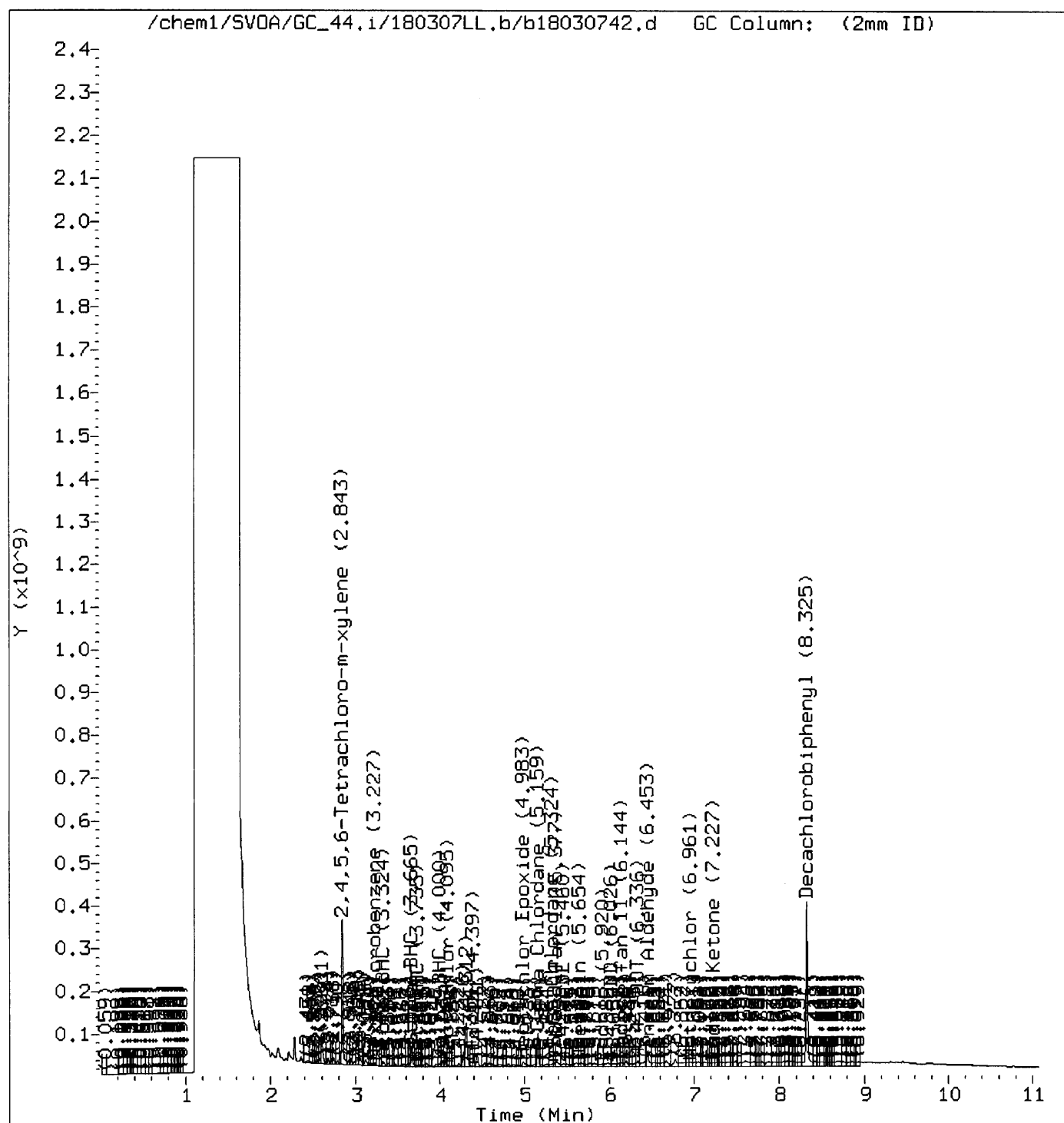
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhnn

Audit/management approval: _____



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030742.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:28
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-8
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 42
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	CONCENTRATIONS				
	RT	EXP RT	DLT RT	RESPONSE	
				(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.	

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030742.d

Page 1

Date : 07-MAR-2018 13:28

Client ID:

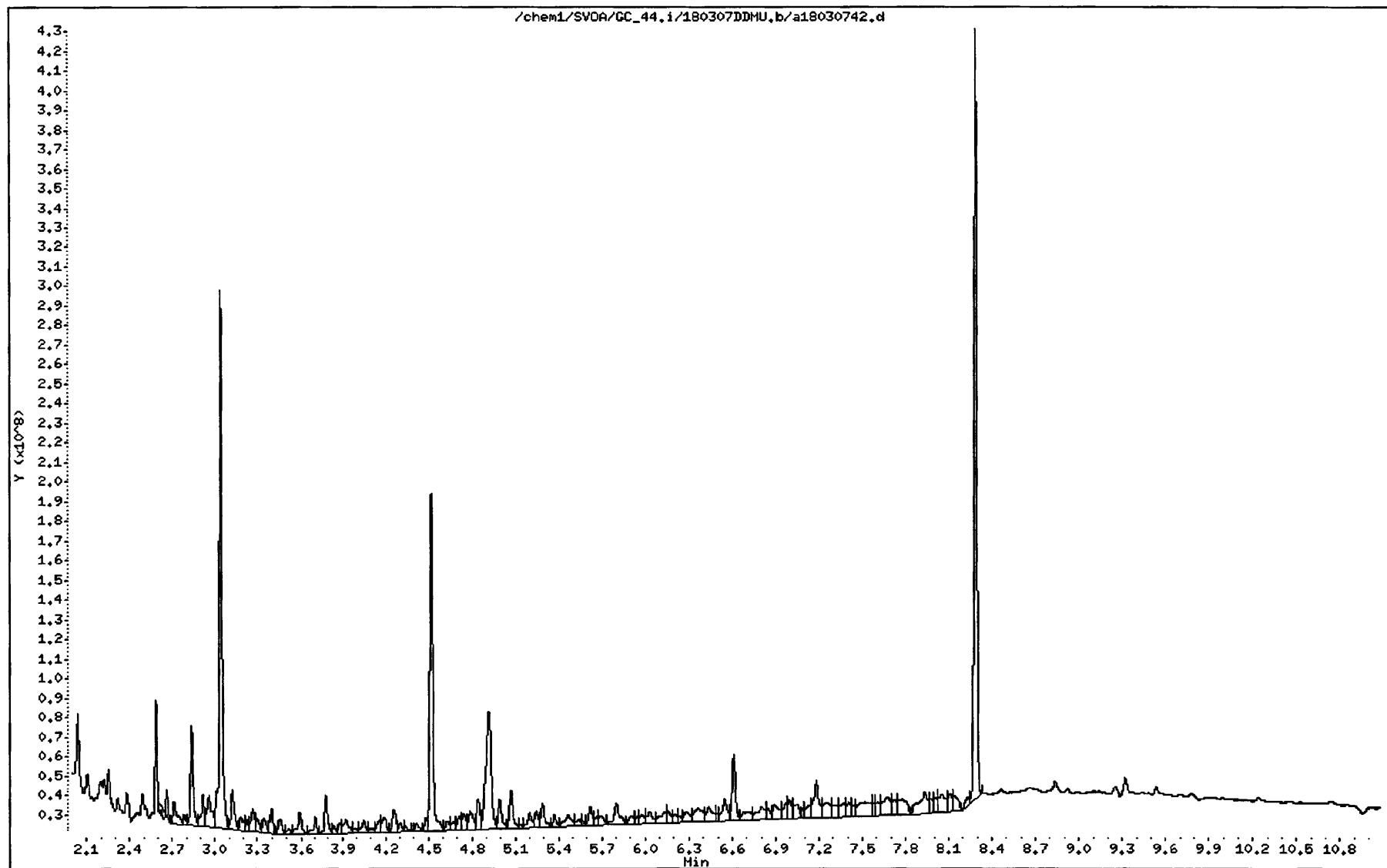
Instrument: GC_44.i

Sample Info: 18-02-1890-8

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030742.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:28
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-8
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 42
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.159	5.122	0.037	2348666790	53.9632	53.963

Data File: /chem1/SV0A/GC_44.i/180307DDMU,b/b18030742.d

Page 1

Date : 07-MAR-2018 13:28

Client ID:

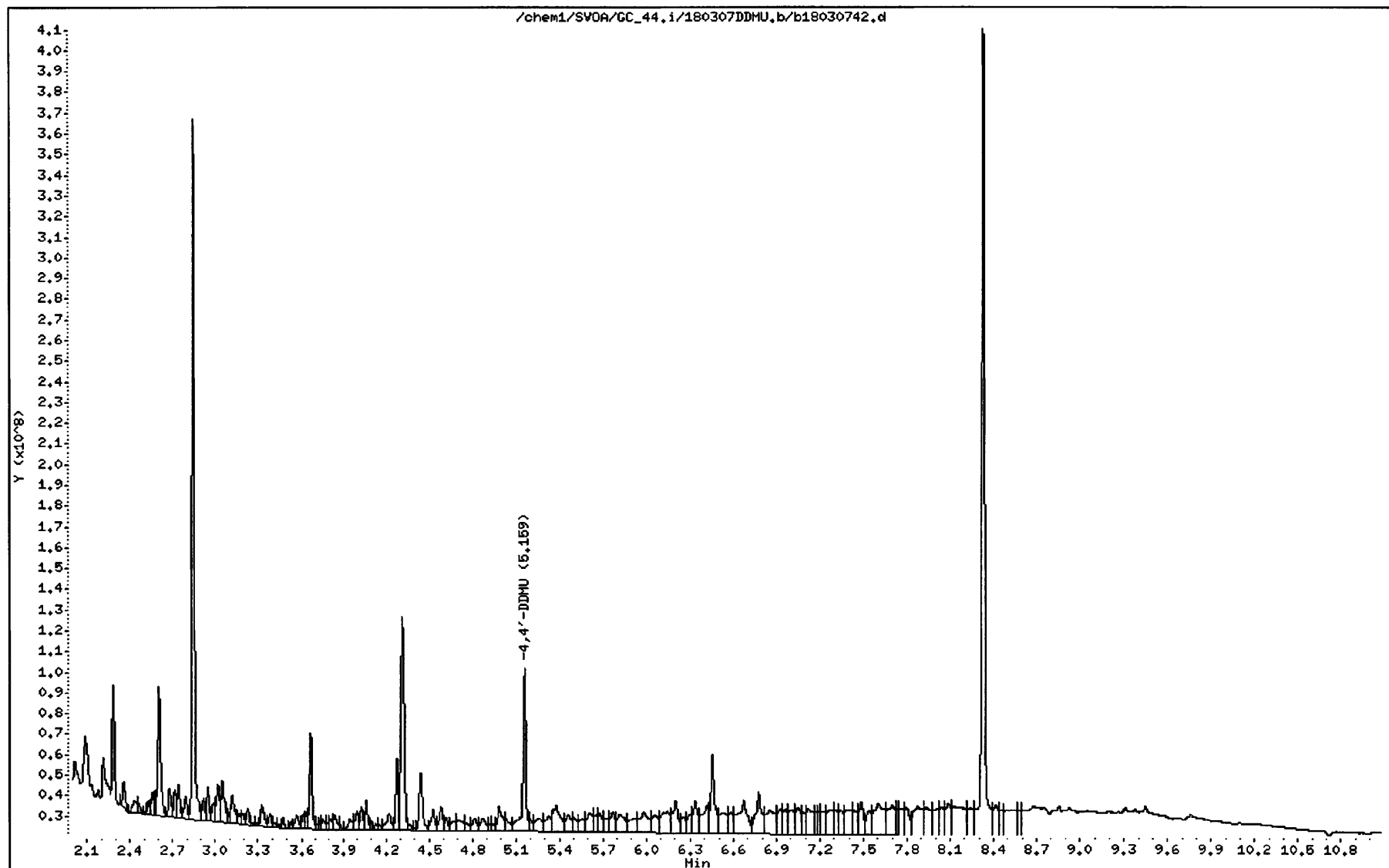
Instrument: GC_44.i

Sample Info: 18-02-1890-8

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 13:42
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074318030743

11 **CLIENT SAMPLE NUMBER:** IA-RW-04-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	2.76	1.84	1.00	1.3	Y	81%	2	4.36
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	1.31	0.874	1.00	1.3	JY	45%	2	1.39
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030743.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:42
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-11
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.036	3.036	0.000	5470736376	54.8797	54.879
2 Hexachlorobenzene	3.393	3.382	0.011	339957782	2.34207	2.342 M
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	4.991	4.976	0.015	451141142	16.0756	16.075 (M) V
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	5.199	5.198	0.001	269968237	2.76475	2.764 (M) —
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 4,4'-DDE	5.535	5.539	-0.004	149180179	1.30618	1.306 (aM) —
17 Endosulfan I	5.620	5.625	-0.005	298854728	2.50606	2.506 —
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor		Compound	Not	Detected.				
23 4,4'-DDD		Compound	Not	Detected.				
24 Endosulfan II		Compound	Not	Detected.				
25 4,4'-DDT		Compound	Not	Detected.				
26 Endrin Aldehyde		Compound	Not	Detected.				
27 Methoxychlor		Compound	Not	Detected.				
28 Mirex		Compound	Not	Detected.				
29 Endosulfan Sulfate		Compound	Not	Detected.				
30 Endrin Ketone		Compound	Not	Detected.				
\$ 31 Decachlorobiphenyl	8.285	8.284	0.001	10009421850		95.8893		95.889
M 32 Chlordane		Compound	Not	Detected.				
33 CHLD (1)		Compound	Not	Detected.				
34 CHLD (2)		Compound	Not	Detected.				
35 CHLD (3)		Compound	Not	Detected.				
36 CHLD (4)		Compound	Not	Detected.				
37 CHLD (5)		Compound	Not	Detected.				
M 38 Toxaphene		Compound	Not	Detected.				
39 TOXAPHENE (1)		Compound	Not	Detected.				
40 TOXAPHENE (2)		Compound	Not	Detected.				
41 TOXAPHENE (3)		Compound	Not	Detected.				
42 TOXAPHENE (4)		Compound	Not	Detected.				
43 TOXAPHENE (5)		Compound	Not	Detected.				

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030743.d

Page 1

Date : 07-MAR-2018 13:42

Client ID:

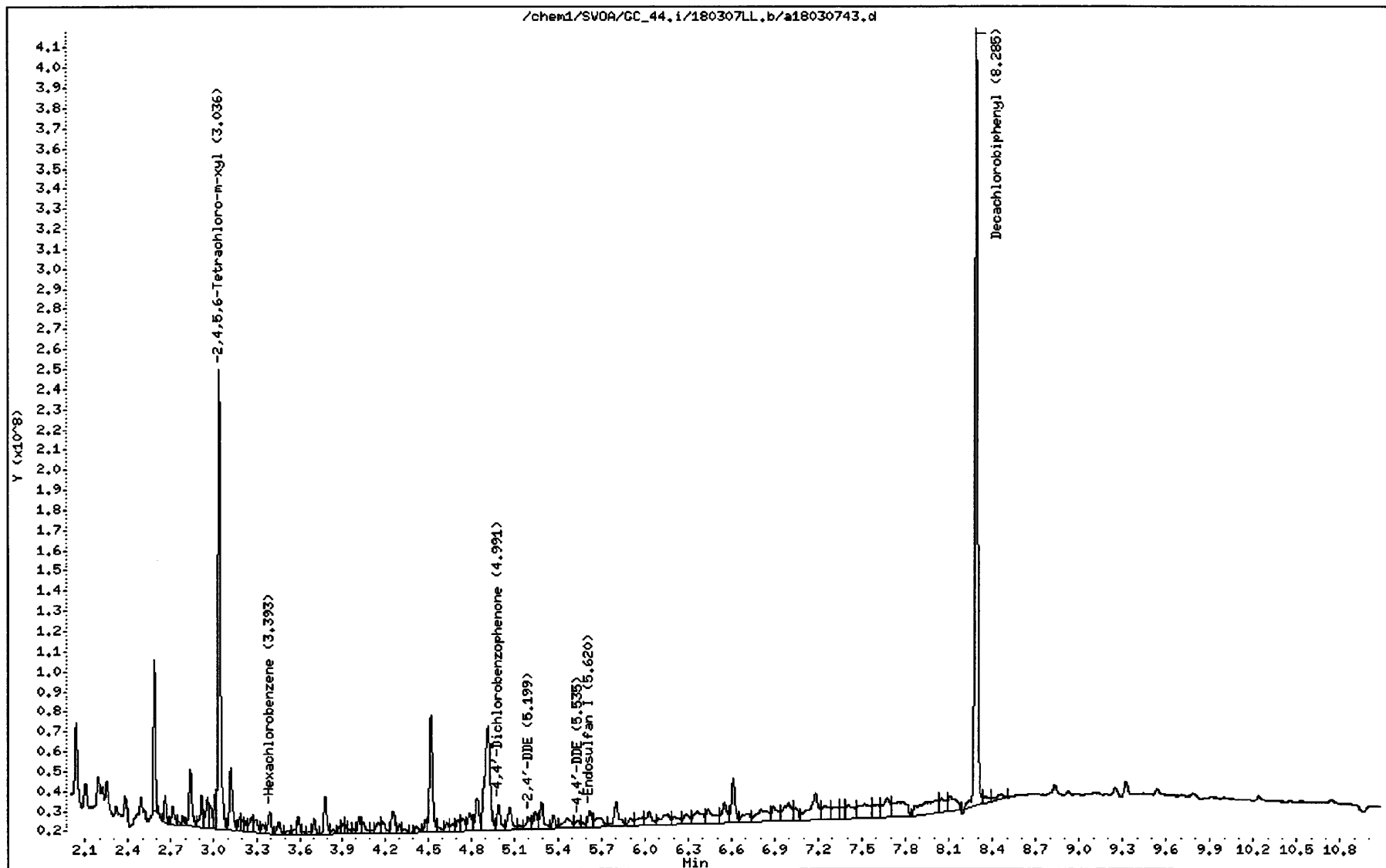
Instrument: GC_44.i

Sample Info: 18-02-1890-11

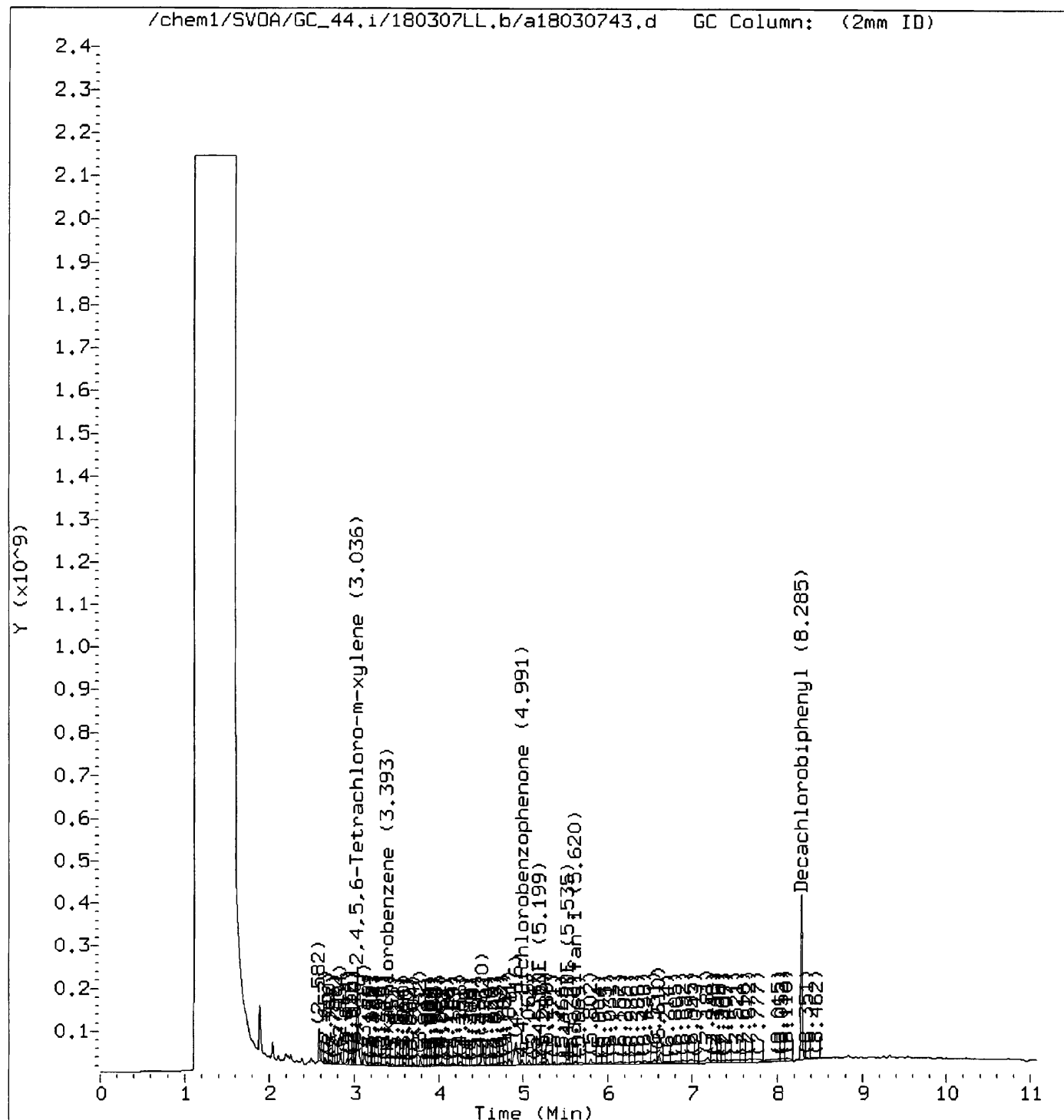
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File

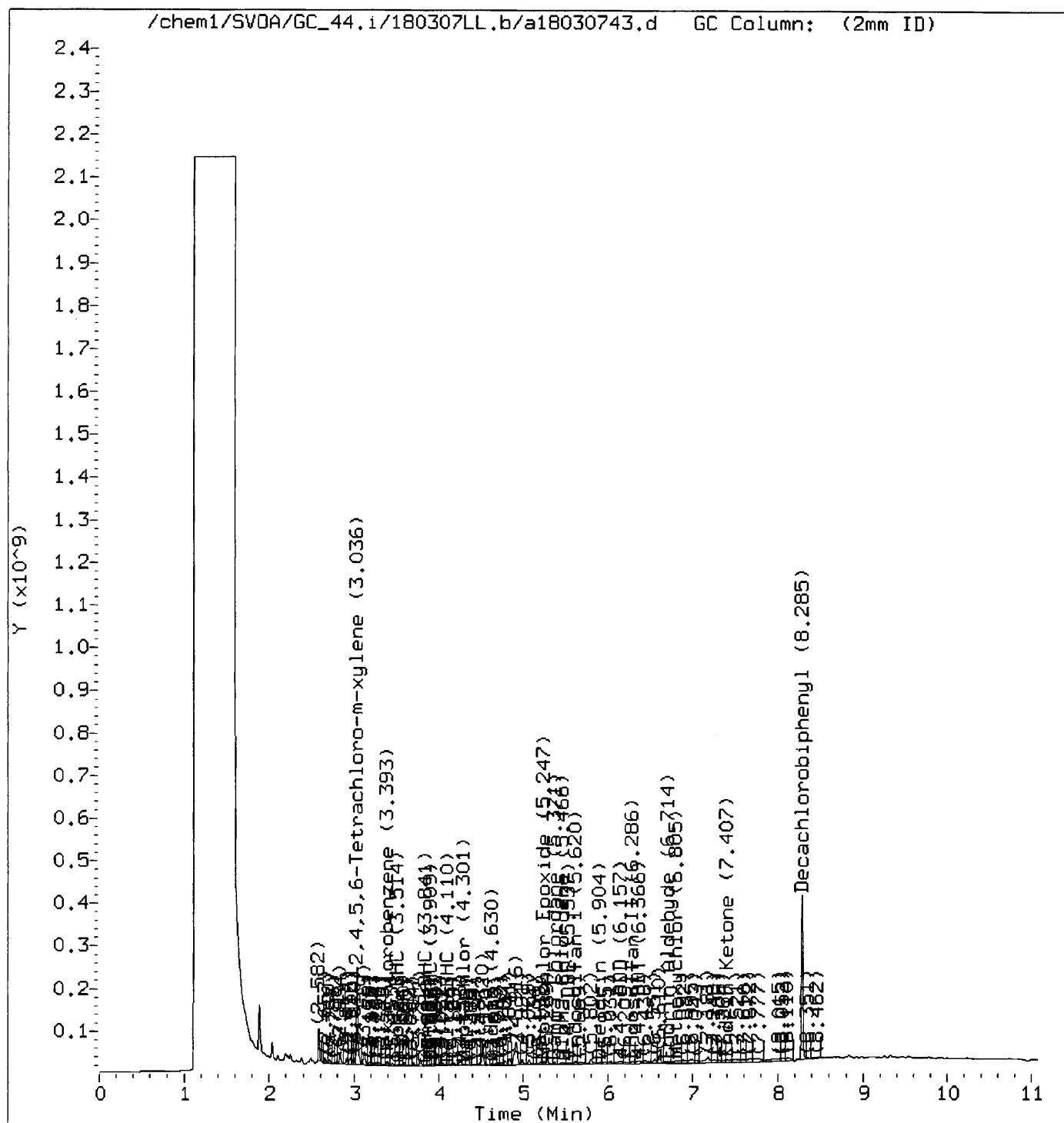


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
 Analyst responsible for change: on 03/09/2018 at 10:40.
 Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

WM



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030743.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:42
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-11
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T 1	2,4,5,6-Tetrachloro-m-xylene	2.844	2.842	0.002	5783663017	54.4083	54.408
2	Hexachlorobenzene	Compound Not Detected.					
3	Alpha-BHC	Compound Not Detected.					
4	Gamma-BHC	3.666	3.656	0.010	1066632497	6.72941	6.729
5	Beta-BHC	Compound Not Detected.					
6	Delta-BHC	4.001	4.008	-0.007	236183557	1.46255	1.462 (a)
7	Heptachlor	Compound Not Detected.					
8	Aldrin	Compound Not Detected.					
9	4,4'-Dichlorobenzophenone	Compound Not Detected.					
10	Oxychlordane	Compound Not Detected.					
11	Heptachlor Epoxide	4.985	4.975	0.010	255651966	2.01388	2.013 (MH)
12	2,4'-DDE	5.160	5.155	0.005	581371387	6.52633	6.526 (M)
13	Gamma Chlordane	5.160	5.162	-0.002	581371387	4.45778	4.457
14	Trans-Nonachlor	Compound Not Detected.					
15	Alpha Chlordane	Compound Not Detected.					
16	Endosulfan I	5.379	5.366	0.013	411164564	3.50004	3.500
17	4,4'-DDE	5.461	5.463	-0.002	246780042	2.08371	2.083
18	Dieldrin	Compound Not Detected.					
19	2,4'-DDD	Compound Not Detected.					
20	Endrin	Compound Not Detected.					
21	2,4'-DDT	Compound Not Detected.					

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor				Compound Not Detected.		
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT	6.336	6.325	0.011	449201994	4.49654	4.496
26 Endrin Aldehyde	6.453	6.450	0.003	915682386	10.1825	10.182
27 Endosulfan Sulfate				Compound Not Detected.		
28 Mirex				Compound Not Detected.		
29 Methoxychlor				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
T 31 Decachlorobiphenyl	8.325	8.325	0.000	9268114730	95.9144	95.914 (A)
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030743.d

Date : 07-MAR-2018 13:42

Client ID:

Sample Info: 18-02-1890-11

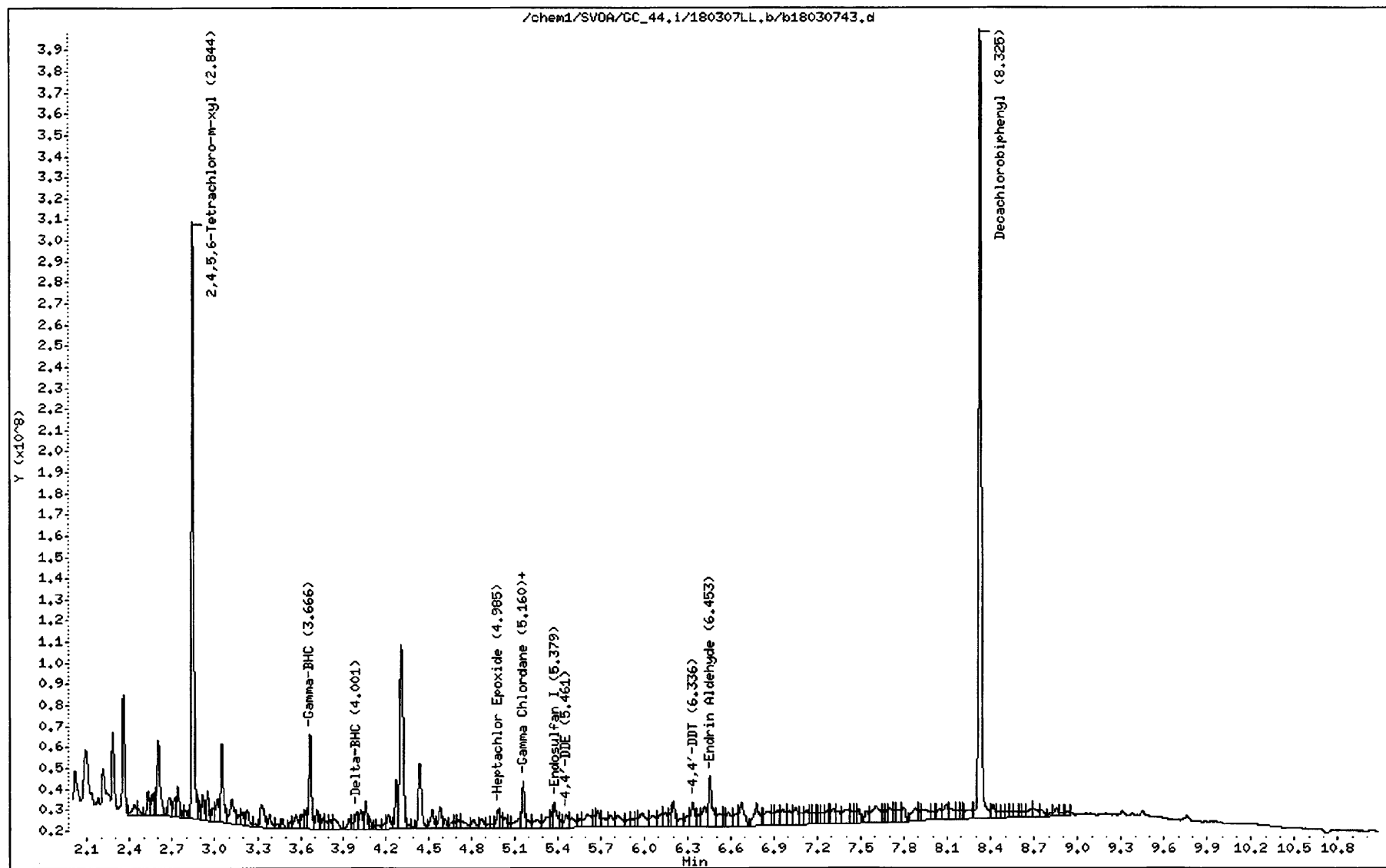
Column phase:

Instrument: GC_44.i

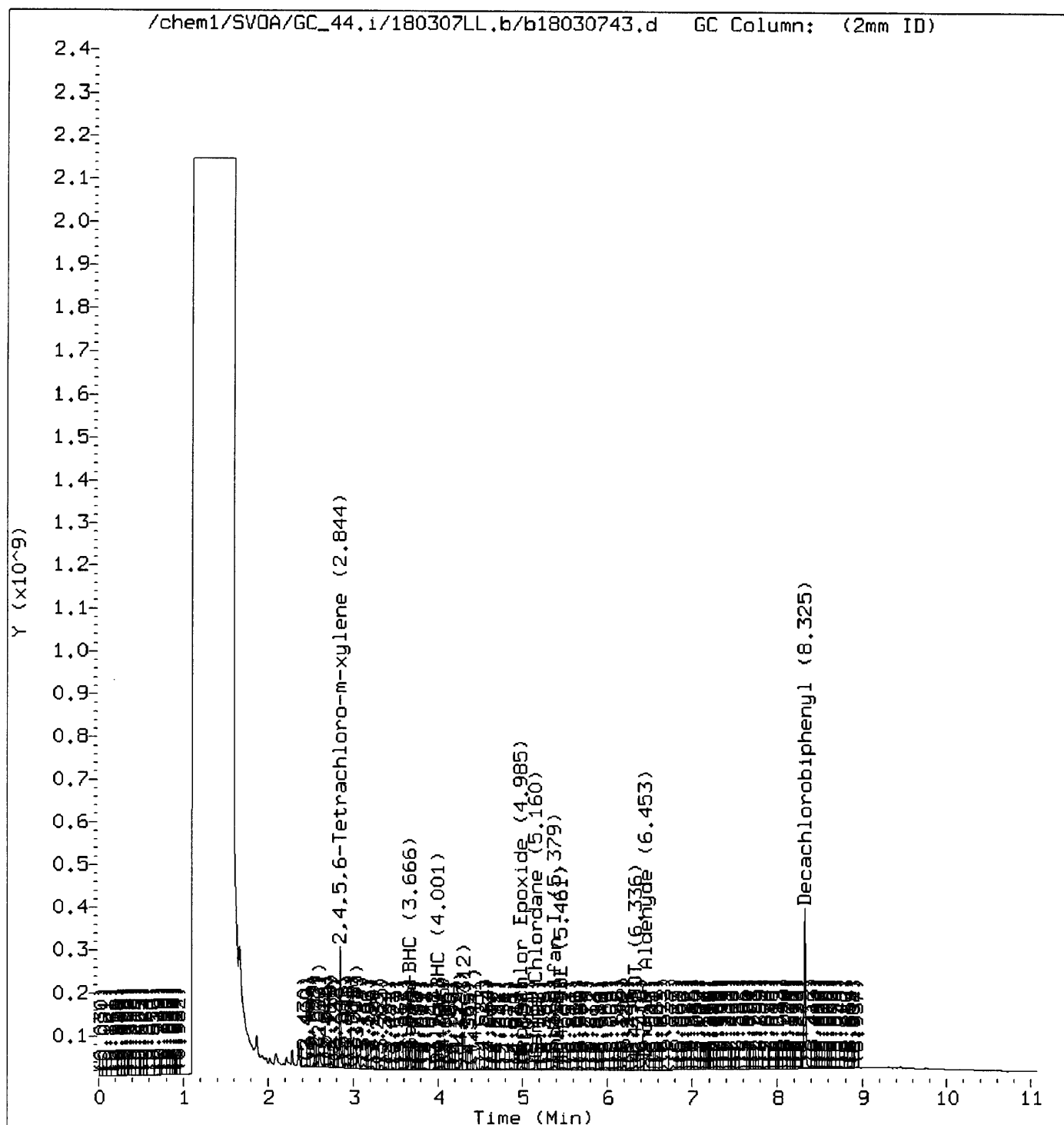
Operator: UHHN

Column diameter: 2.00

Page 1



Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:41.

Target 3.5 esignature user ID: uhn

Audit/management approval: _____

Chromatogram showing detector response (Y-axis, labeled Y (x10⁹)) versus Time (Min) (X-axis, ranging from 0 to 11). The baseline is high and noisy, with a major peak at approximately 1.2 minutes. Several smaller peaks are labeled with their retention times and chemical names:

- 2,4,5,6-Tetrachloro-m-xylene (2.844)
- Polychlorinated biphenyls (3.226)
- BHC₁ (3.556)
- BHC₂ (4.096)
- Polychlorinated biphenyls (4.395)
- Chlor Epoxide (4.985)
- Chloroethane (5.160)
- Polychlorinated biphenyls (5.328)
- Polychlorinated biphenyls (5.655)
- Polychlorinated biphenyls (5.846)
- Polychlorinated biphenyls (6.145)
- Aldehyde (6.336)
- Aldehyde (6.453)
- chlor (6.962)
- Ketone (7.211)
- Decachlorobiphenyl (8.325)

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030743.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:42
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-11
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030743.d

Page 1

Date : 07-MAR-2018 13:42

Client ID:

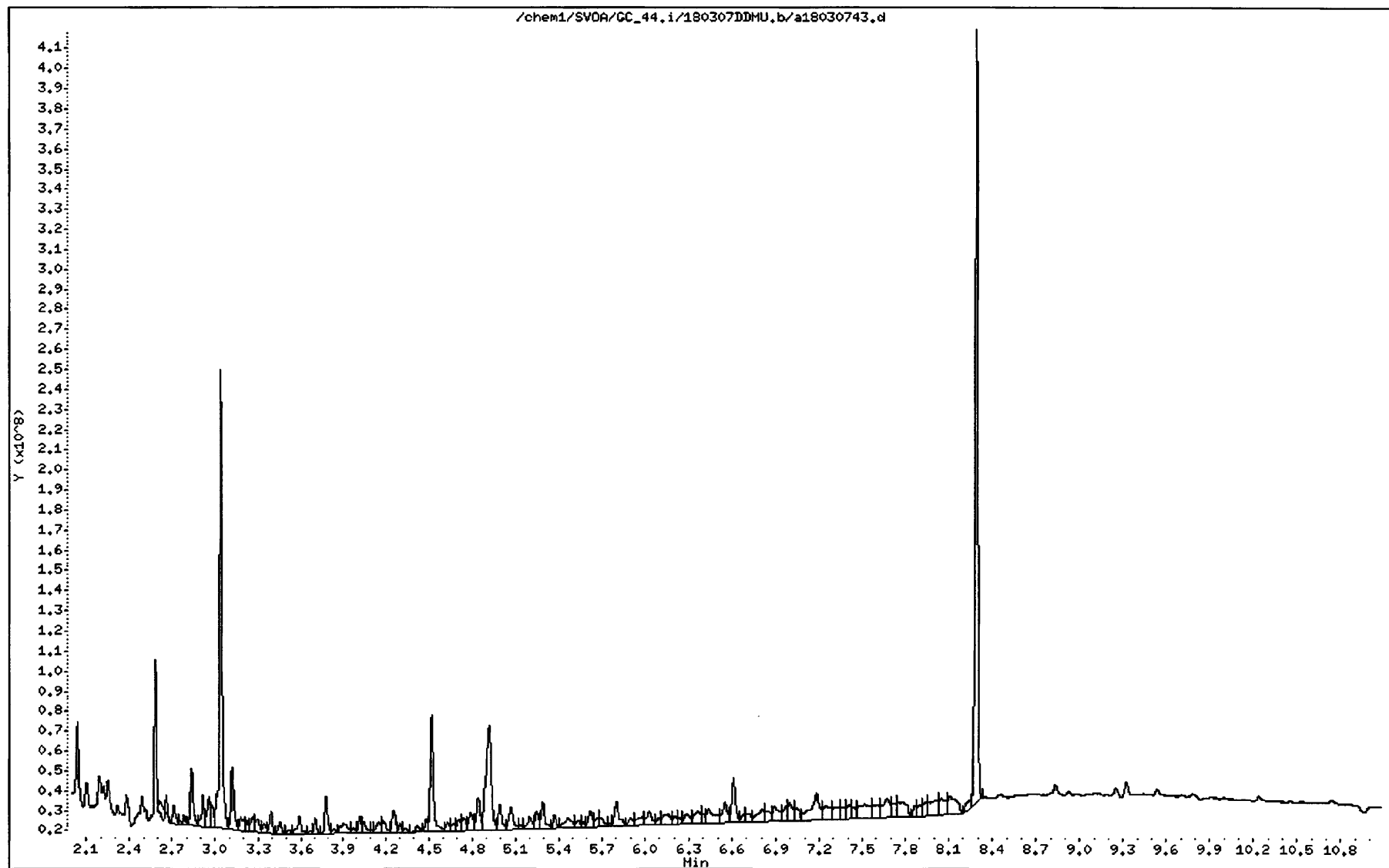
Instrument: GC_44.i

Sample Info: 18-02-1890-11

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030743.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:42
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-11
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 43
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.130	5.122	0.008	328921304	7.55732	7.557

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030743.d

Page 1

Date : 07-MAR-2018 13:42

Client ID:

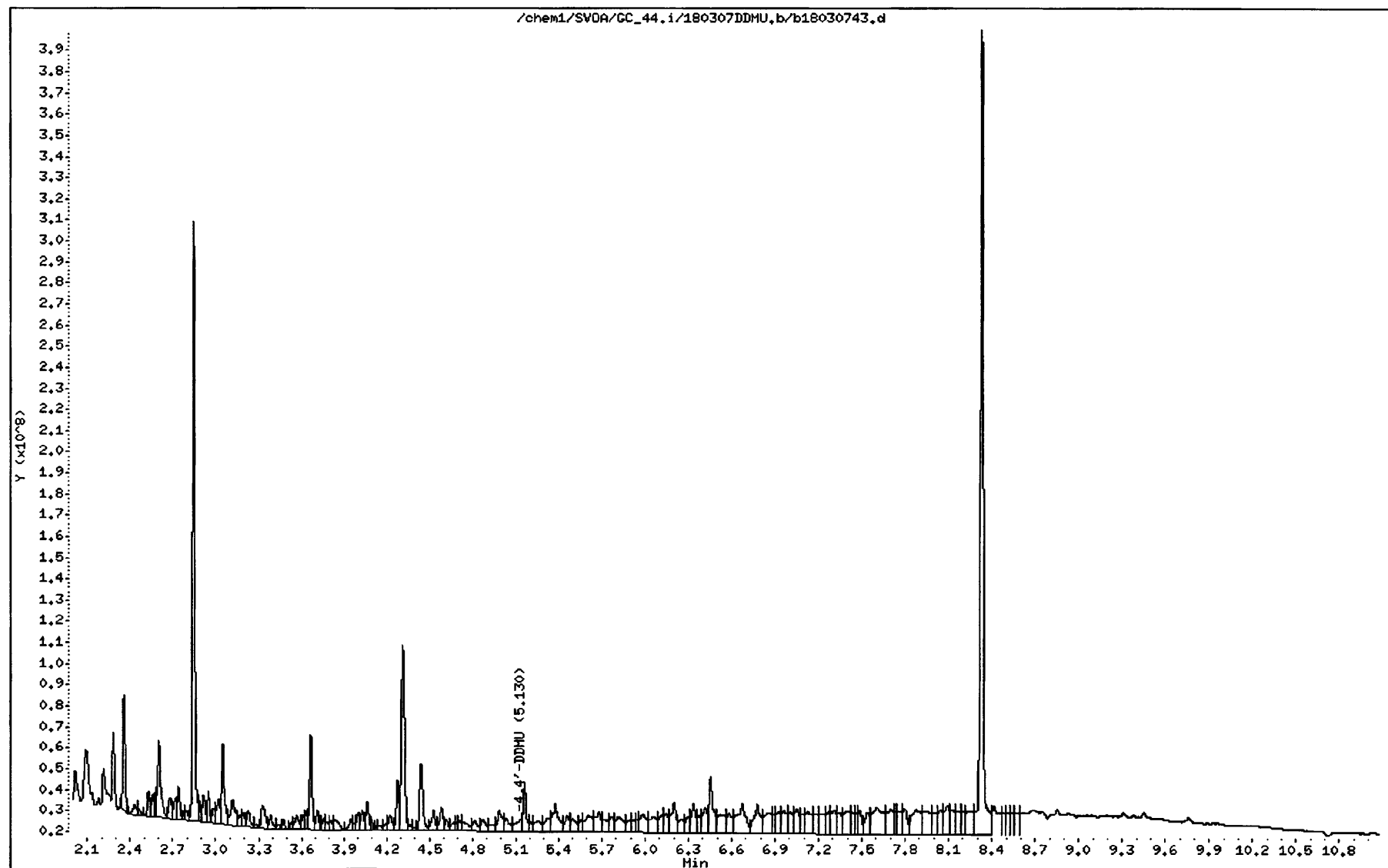
Instrument: GC_44.i

Sample Info: 18-02-1890-11

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 13:57
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074418030744

14 **CLIENT SAMPLE NUMBER:** IA-RW-05-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	4.36	2.91	1.00	1.3	Y	109%	2	9.84
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	1.37	0.914	1.00	1.3	JY	62%	2	1.73
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030744.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS				
		ON-COLUMN			FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.037	3.036	0.001	5439568202	54.5670	54.567
2 Hexachlorobenzene	3.392	3.382	0.010	279464275	1.92531	1.925 (a)
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	4.991	4.976	0.015	662891235	23.6209	23.620 (M) M
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	5.198	5.198	0.000	426217236	4.36490	4.364 (M) —
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 4,4'-DDE	5.537	5.539	-0.002	156027489	1.36613	1.366 (a)
17 Endosulfan I	5.620	5.625	-0.005	232516145	1.94977	1.949 (a)
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT						Compound Not Detected.		
26 Endrin Aldehyde						Compound Not Detected.		
27 Methoxychlor						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Endosulfan Sulfate						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.283	8.284	-0.001	9328893677			89.3699	89.369
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030744.d

Page 1

Date : 07-MAR-2018 13:57

Client ID:

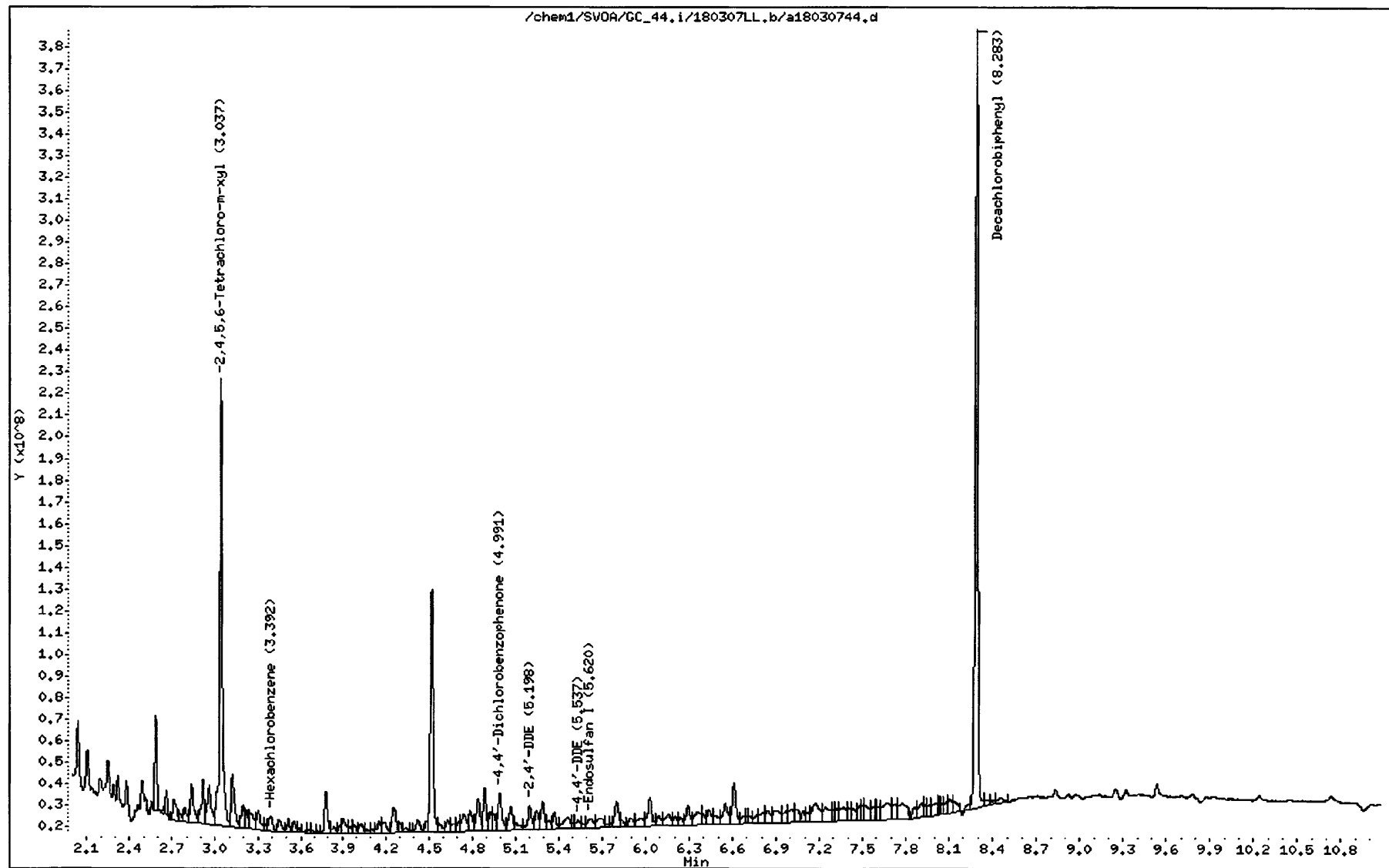
Instrument: GC_44.i

Sample Info: 18-02-1890-14

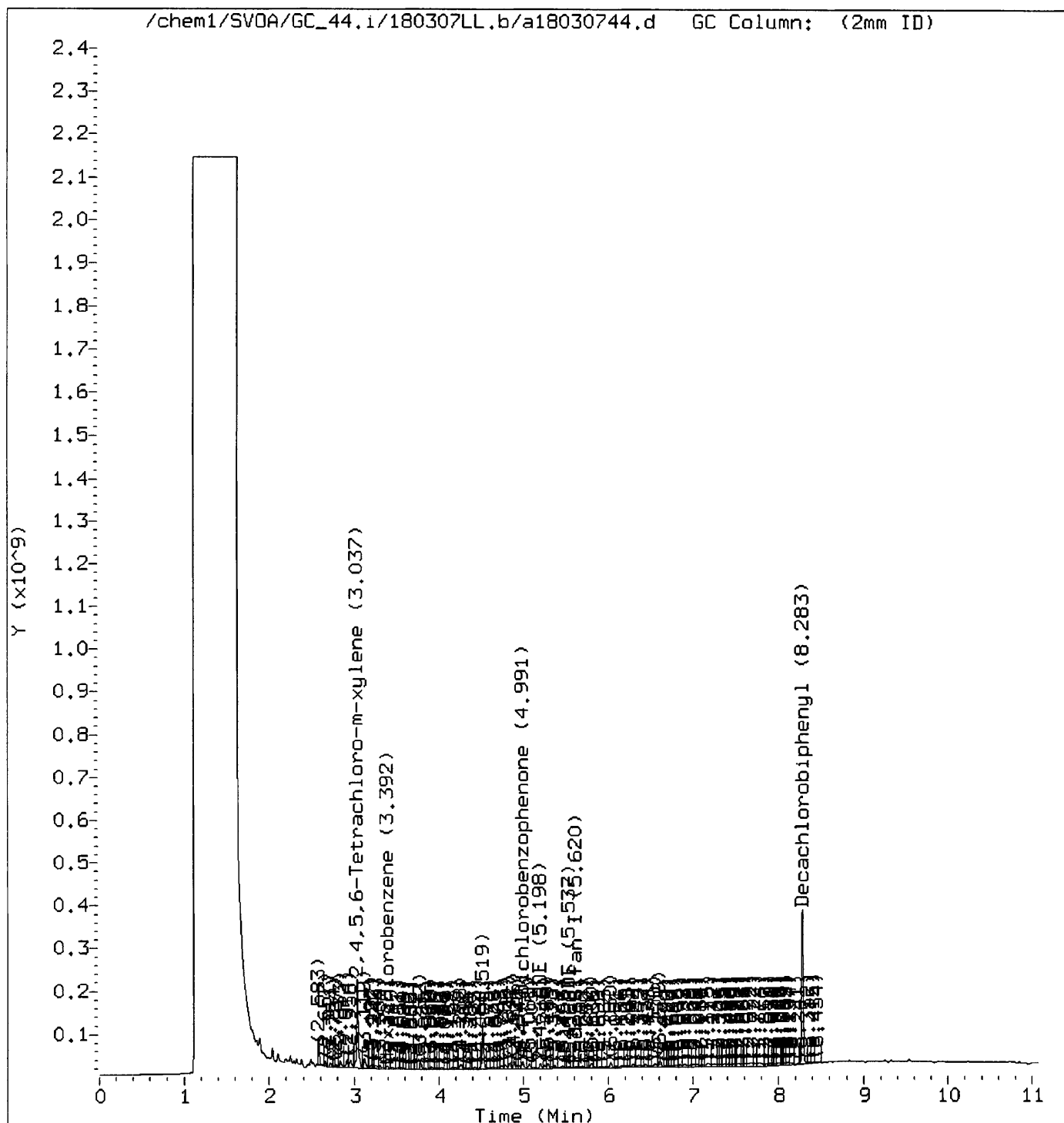
Operator: UHHN

Column phase:

Column diameter: 2.00



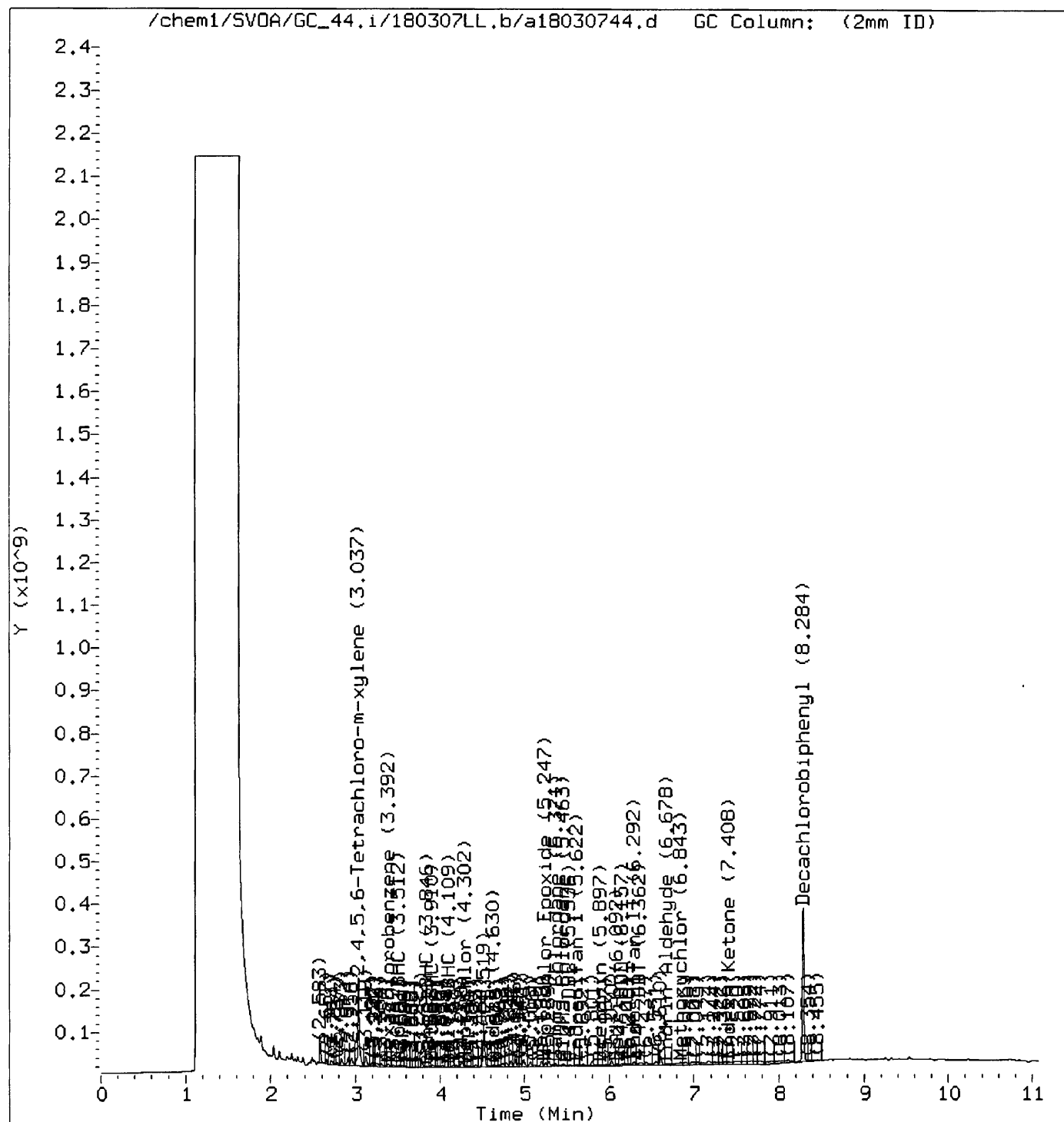
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____ *uh*



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030744.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
					ON-COLUMN	FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)	
=====	==	=====	=====	=====	=====	=====	
T 1 2,4,5,6-Tetrachloro-m-xylene	2.843	2.842	0.001	5483077972	51.5806	51.580	
2 Hexachlorobenzene	3.226	3.226	0.000	298241151	1.92515	1.925 (a)	
3 Alpha-BHC	3.338	3.337	0.001	411286626	2.26521	2.265	
4 Gamma-BHC	3.666	3.656	0.010	1095410069	6.91096	6.910	
5 Beta-BHC				Compound Not Detected.			
6 Delta-BHC				Compound Not Detected.			
7 Heptachlor				Compound Not Detected.			
8 Aldrin				Compound Not Detected.			
9 4,4'-Dichlorobenzophenone				Compound Not Detected.			
10 Oxychlordane				Compound Not Detected.			
11 Heptachlor Epoxide	4.983	4.975	0.008	607619805	4.78648	4.786	
12 2,4'-DDE	5.159	5.155	0.004	1314248311	14.7534	14.753 (M)	
13 Gamma Chlordane	5.159	5.162	-0.003	1314248311	10.0773	10.077	
14 Trans-Nonachlor				Compound Not Detected.			
15 Alpha Chlordane				Compound Not Detected.			
16 Endosulfan I	5.378	5.366	0.012	379344462	3.22917	3.229	
17 4,4'-DDE	5.460	5.463	-0.003	307481834	2.59624	2.596	
18 Dieldrin				Compound Not Detected.			
19 2,4'-DDD				Compound Not Detected.			
20 Endrin				Compound Not Detected.			
21 2,4'-DDT				Compound Not Detected.			

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT	6.335	6.325	0.010	329816170	3.30148	3.301 (M)		
26 Endrin Aldehyde	6.453	6.450	0.003	811646566	9.02561	9.025		
27 Endosulfan Sulfate						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Methoxychlor						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
T 31 Decachlorobiphenyl	8.325	8.325	0.000	8510994962	88.0790	88.079 (A)		
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030744.d

Date : 07-MAR-2018 13:57

Client ID:

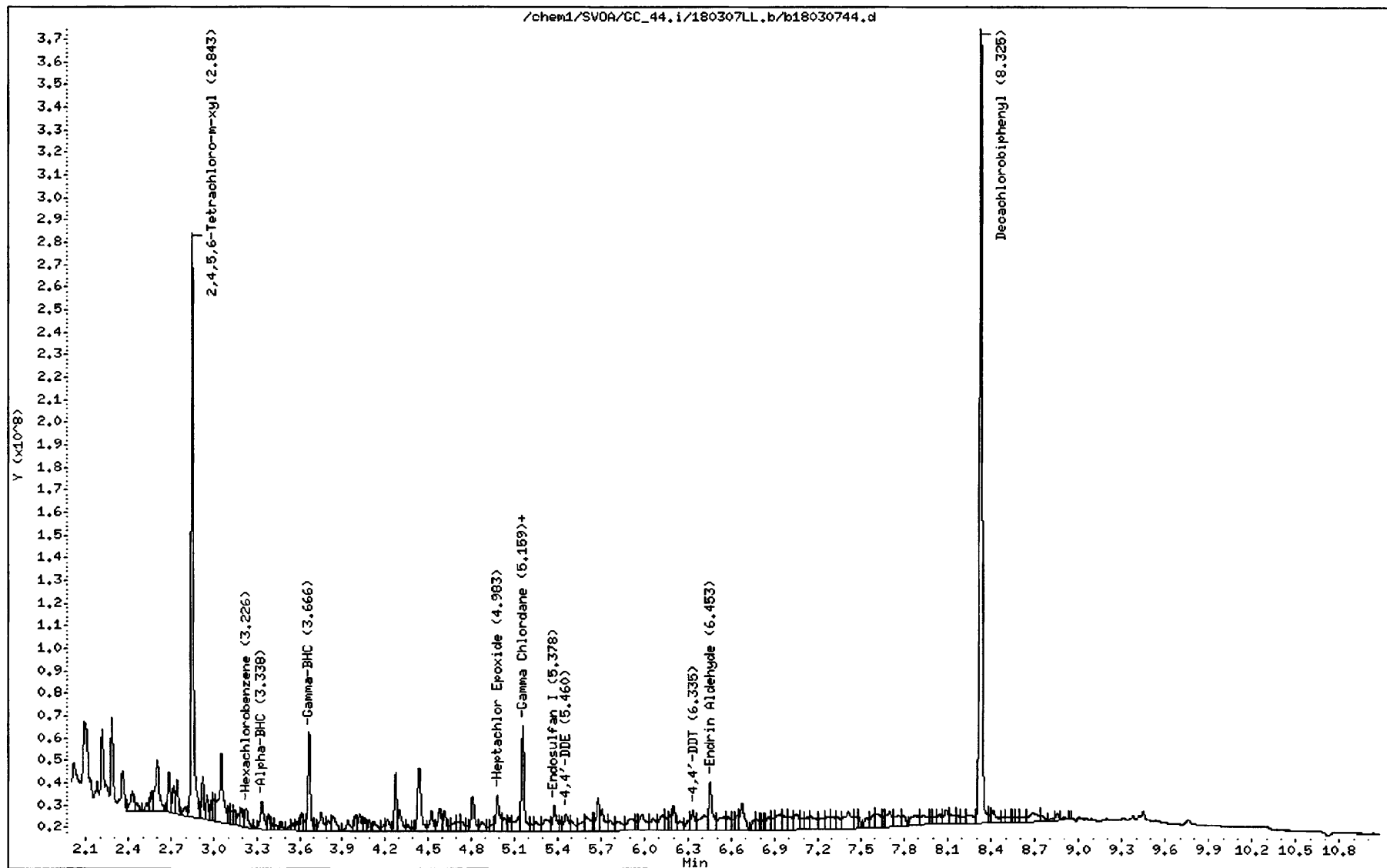
Sample Info: 18-02-1890-14

Instrument: GC_44.i

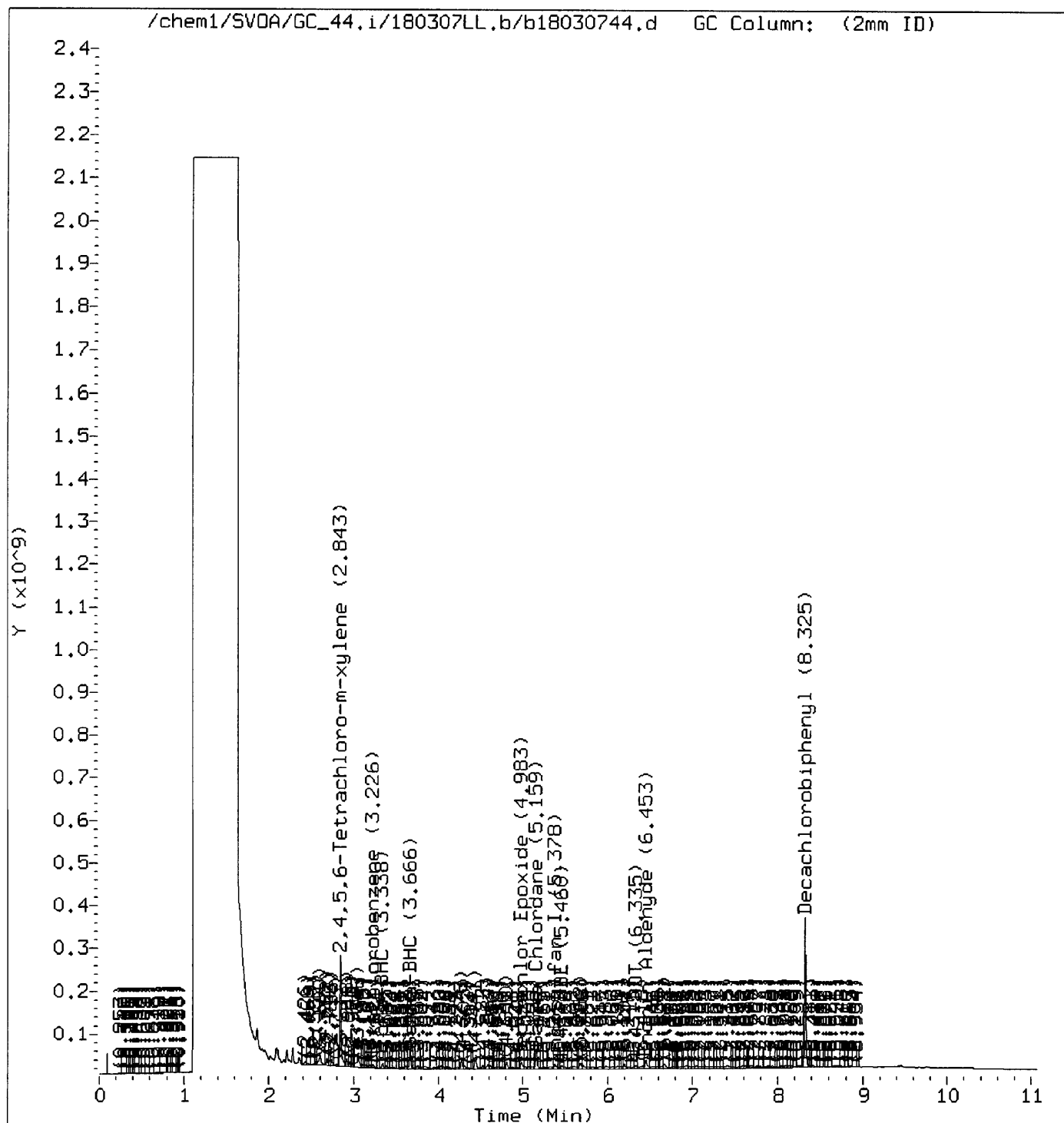
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File

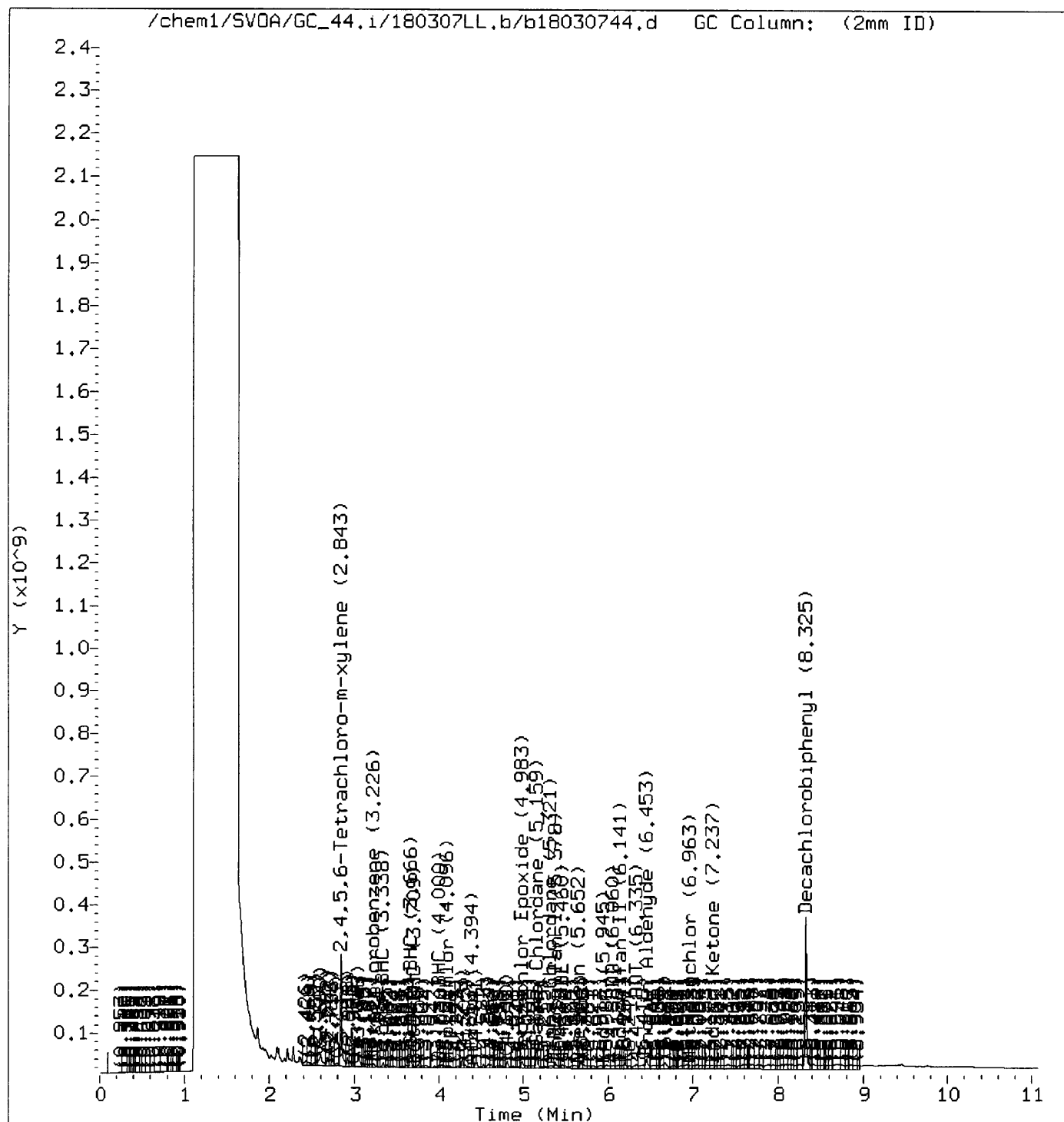


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhn

Audit/management approval: _____

um



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030744.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
						(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====
2 4,4'-DDMU					Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030744.d

Page 1

Date : 07-MAR-2018 13:57

Client ID:

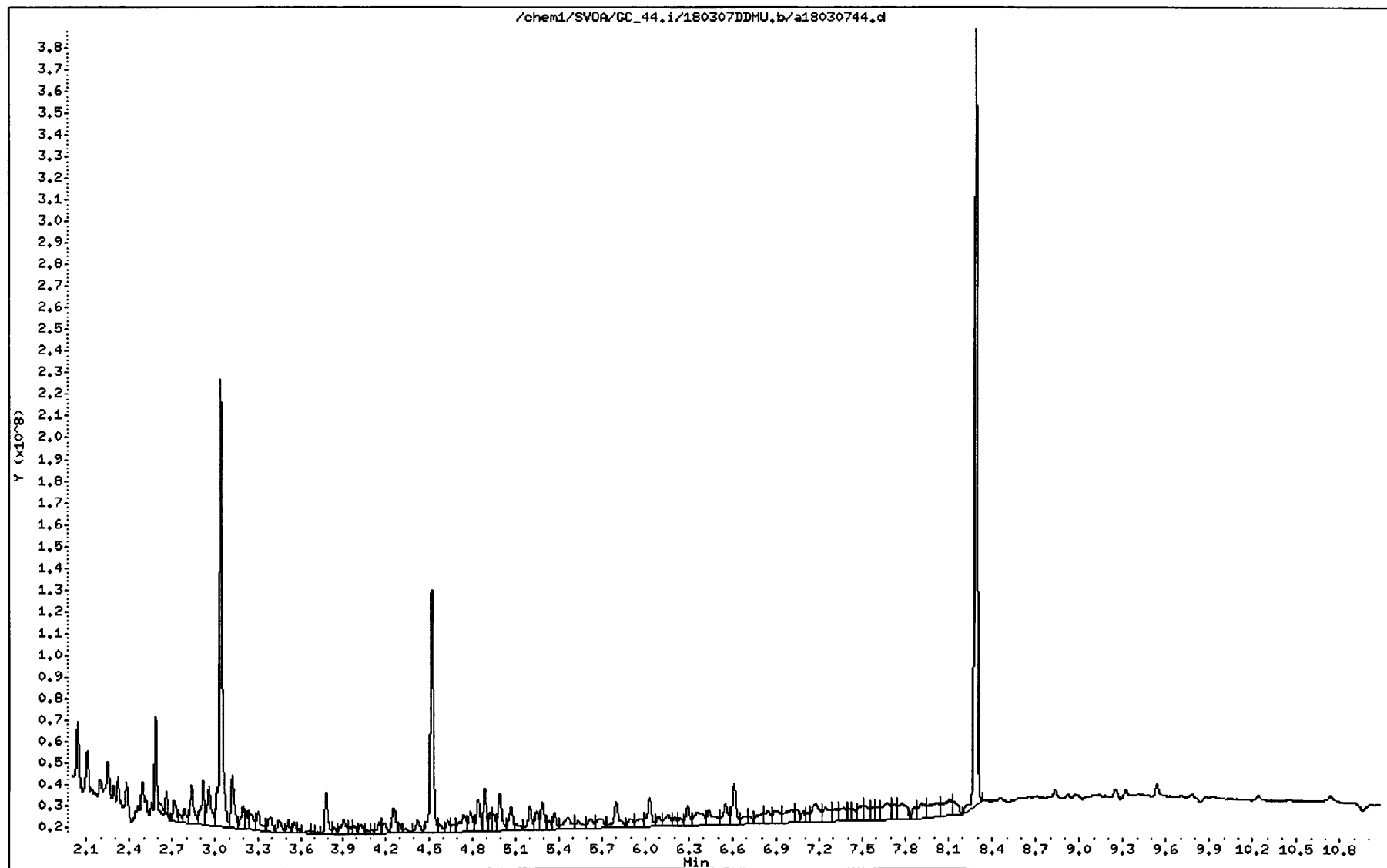
Instrument: GC_44.i

Sample Info: 18-02-1890-14

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030744.d
Lab Smp Id:
Inj Date : 07-MAR-2018 13:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 44
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====		=====	=====	=====
2 4,4'-DDMU	5.159	5.122	0.037	1866030079	42.8741	42.874	

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030744.d

Page 1

Date : 07-MAR-2018 13:57

Client ID:

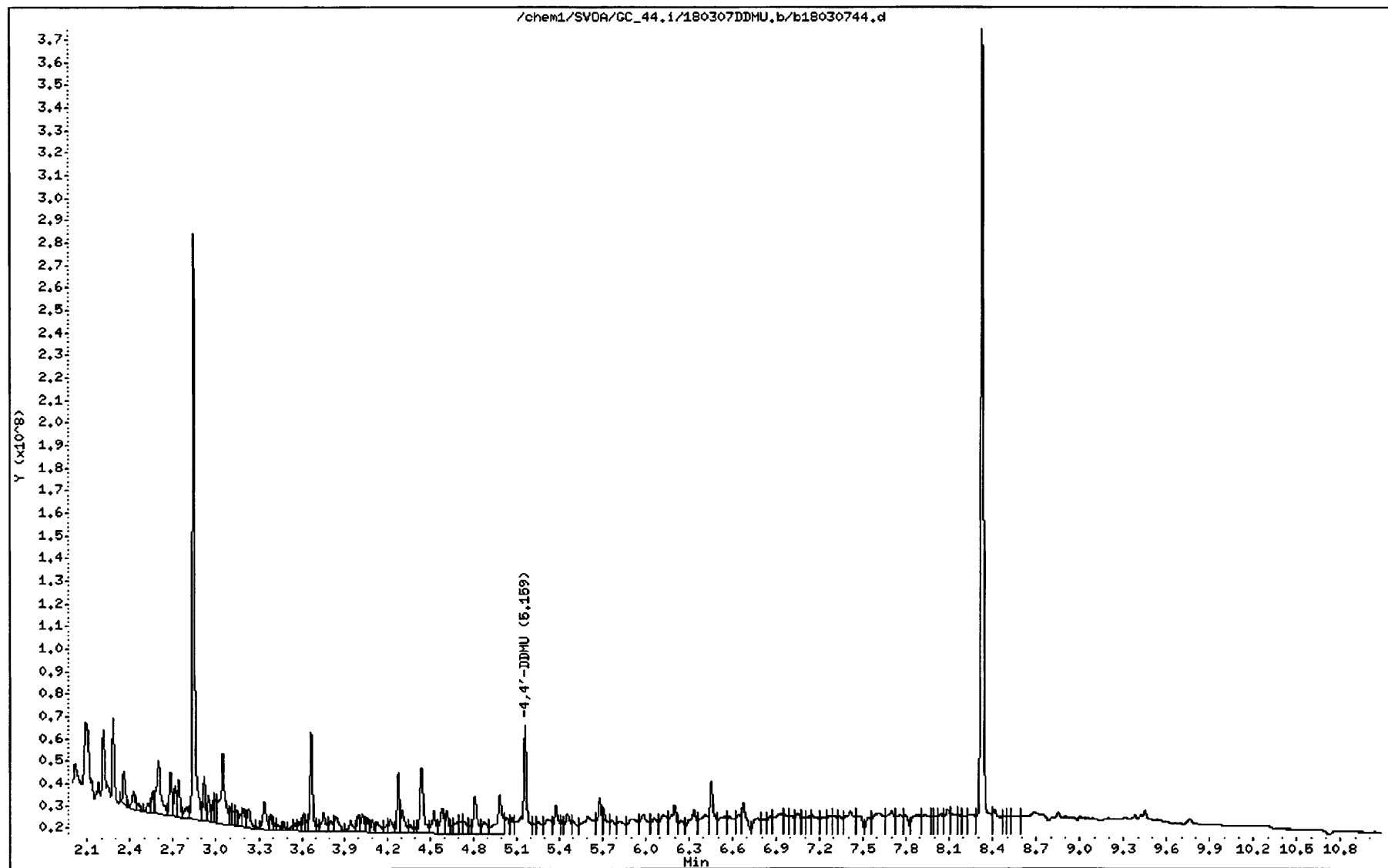
Instrument: GC_44.i

Sample Info: 18-02-1890-14

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 14:11
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074518030745

18 **CLIENT SAMPLE NUMBER:** IA-RW-06-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030745.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-18
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene		3.039	3.036	0.003	5266304268	52.8289	52.828
2 Hexachlorobenzene		3.396	3.382	0.014	227997866	1.57074	1.570 (a)
3 Alpha-BHC		Compound Not Detected.					
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		4.991	4.976	0.015	429901368	15.3187	15.318 (M) <i>re</i>
10 Oxychlordane		Compound Not Detected.					
11 2,4'-DDE		Compound Not Detected.					
12 Heptachlor Epoxide		Compound Not Detected.					
13 Gamma Chlordane		Compound Not Detected.					
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 4,4'-DDE		Compound Not Detected.					
17 Endosulfan I		5.622	5.625	-0.003	189098498	1.58569	1.585 (aH)
18 2,4'-DDD		Compound Not Detected.					
19 Dieldrin		Compound Not Detected.					
20 2,4'-DDT		Compound Not Detected.					
21 Endrin		Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.			
23 4,4'-DDD					Compound Not Detected.			
24 Endosulfan II					Compound Not Detected.			
25 4,4'-DDT					Compound Not Detected.			
26 Endrin Aldehyde					Compound Not Detected.			
27 Methoxychlor					Compound Not Detected.			
28 Mirex					Compound Not Detected.			
29 Endosulfan Sulfate					Compound Not Detected.			
30 Endrin Ketone					Compound Not Detected.			
\$ 31 Decachlorobiphenyl	8.286	8.284	0.002		7183175297	68.8141	68.814	
M 32 Chlordane					Compound Not Detected.			
33 CHLD (1)					Compound Not Detected.			
34 CHLD (2)					Compound Not Detected.			
35 CHLD (3)					Compound Not Detected.			
36 CHLD (4)					Compound Not Detected.			
37 CHLD (5)					Compound Not Detected.			
M 38 Toxaphene					Compound Not Detected.			
39 TOXAPHENE (1)					Compound Not Detected.			
40 TOXAPHENE (2)					Compound Not Detected.			
41 TOXAPHENE (3)					Compound Not Detected.			
42 TOXAPHENE (4)					Compound Not Detected.			
43 TOXAPHENE (5)					Compound Not Detected.			

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030745.d

Page 1

Date : 07-MAR-2018 14:11

Client ID:

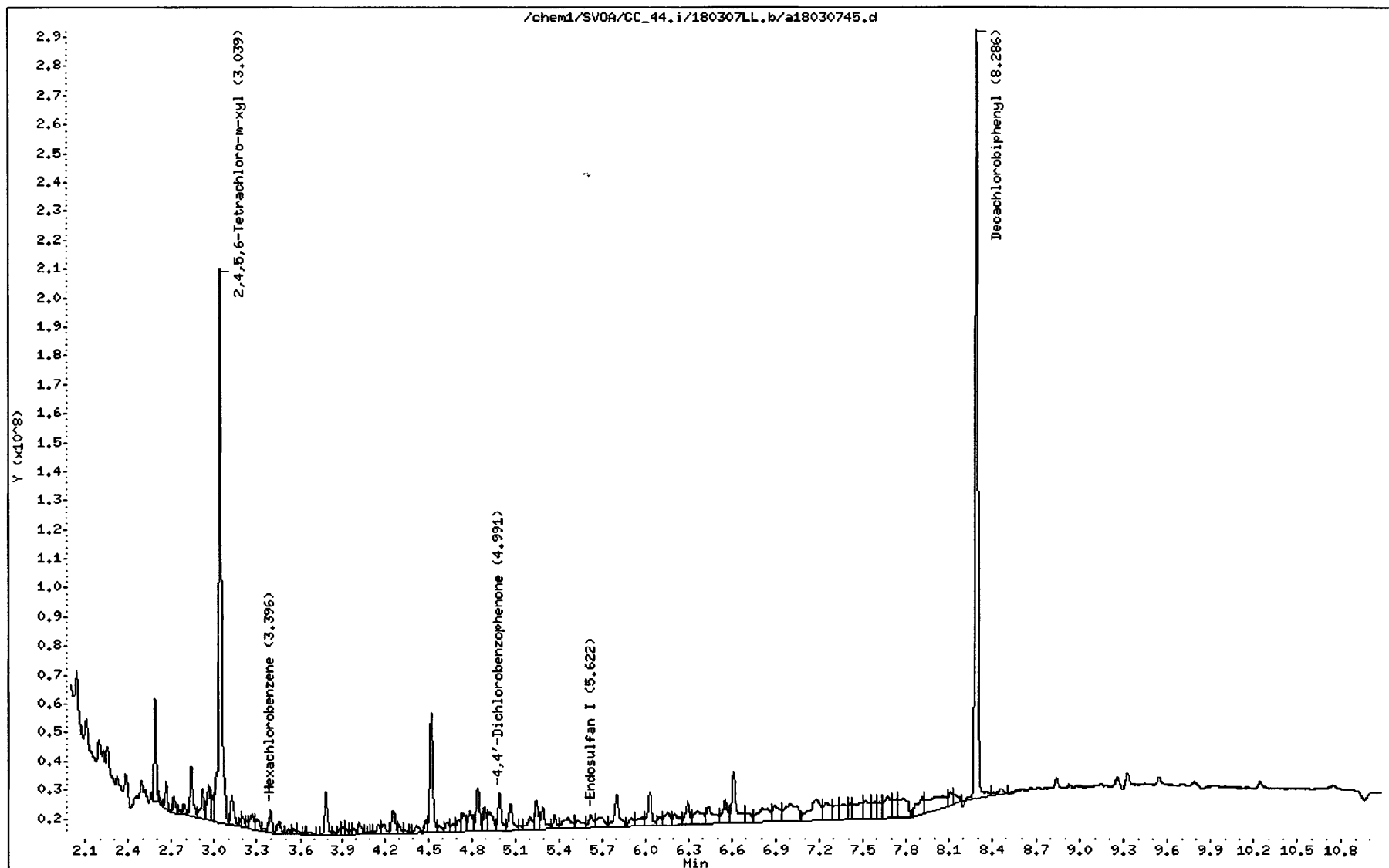
Instrument: GC_44.i

Sample Info: 18-02-1890-18

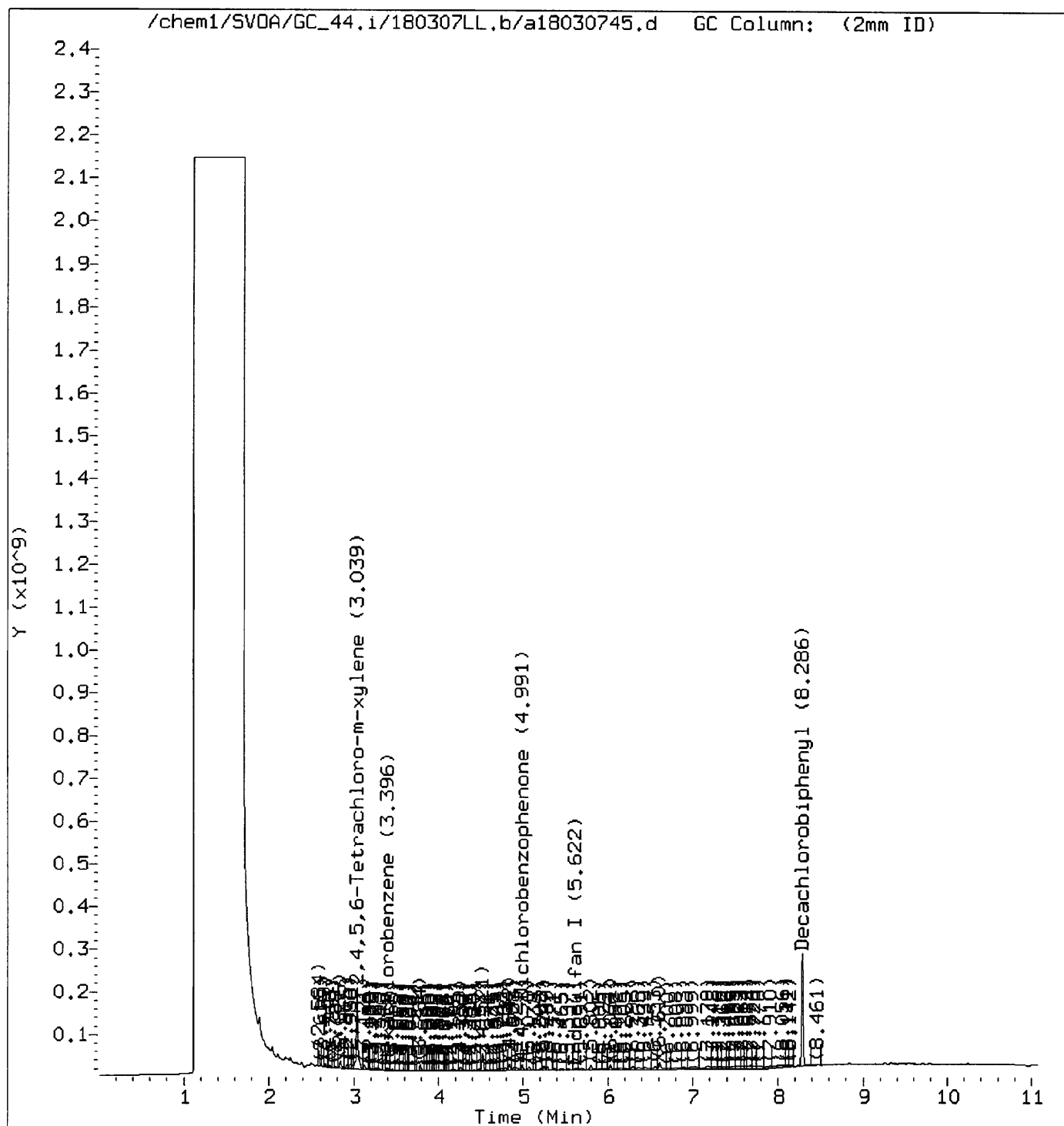
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____ *uh*

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030745.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-18
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS		
					ON-COLUMN	FINAL	
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T	1 2,4,5,6-Tetrachloro-m-xylene	2.844	2.842	0.002	4849325142	45.6188	45.618 (R)
	2 Hexachlorobenzene	3.225	3.226	-0.001	155629151	1.00459	1.004 (a)
	3 Alpha-BHC	3.338	3.337	0.001	192271630	1.05896	1.058 (a)
	4 Gamma-BHC	3.666	3.656	0.010	844085343	5.32535	5.325
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordan	Compound Not Detected.					
	11 Heptachlor Epoxide	4.985	4.975	0.010	210873396	1.66114	1.661 (aMH)
	12 2,4'-DDE	5.160	5.155	0.005	445017699	4.99566	4.995 (M)
	13 Gamma Chlordane	5.160	5.162	-0.002	445017699	3.41226	3.412 (H)
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.379	5.366	0.013	345717597	2.94292	2.942
	17 4,4'-DDE	5.460	5.463	-0.003	188582566	1.59231	1.592 (a)
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT	6.336	6.325	0.011	318439971	3.18760	3.187		
26 Endrin Aldehyde	6.454	6.450	0.004	714356668	7.94374	7.943 (H)		
27 Endosulfan Sulfate						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Methoxychlor						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
T 31 Decachlorobiphenyl	8.327	8.325	0.002	6537359631	67.6542	67.654 (R)		
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030745.d

Date : 07-HAR-2018 14:11

Client ID:

Sample Info: 18-02-1890-18

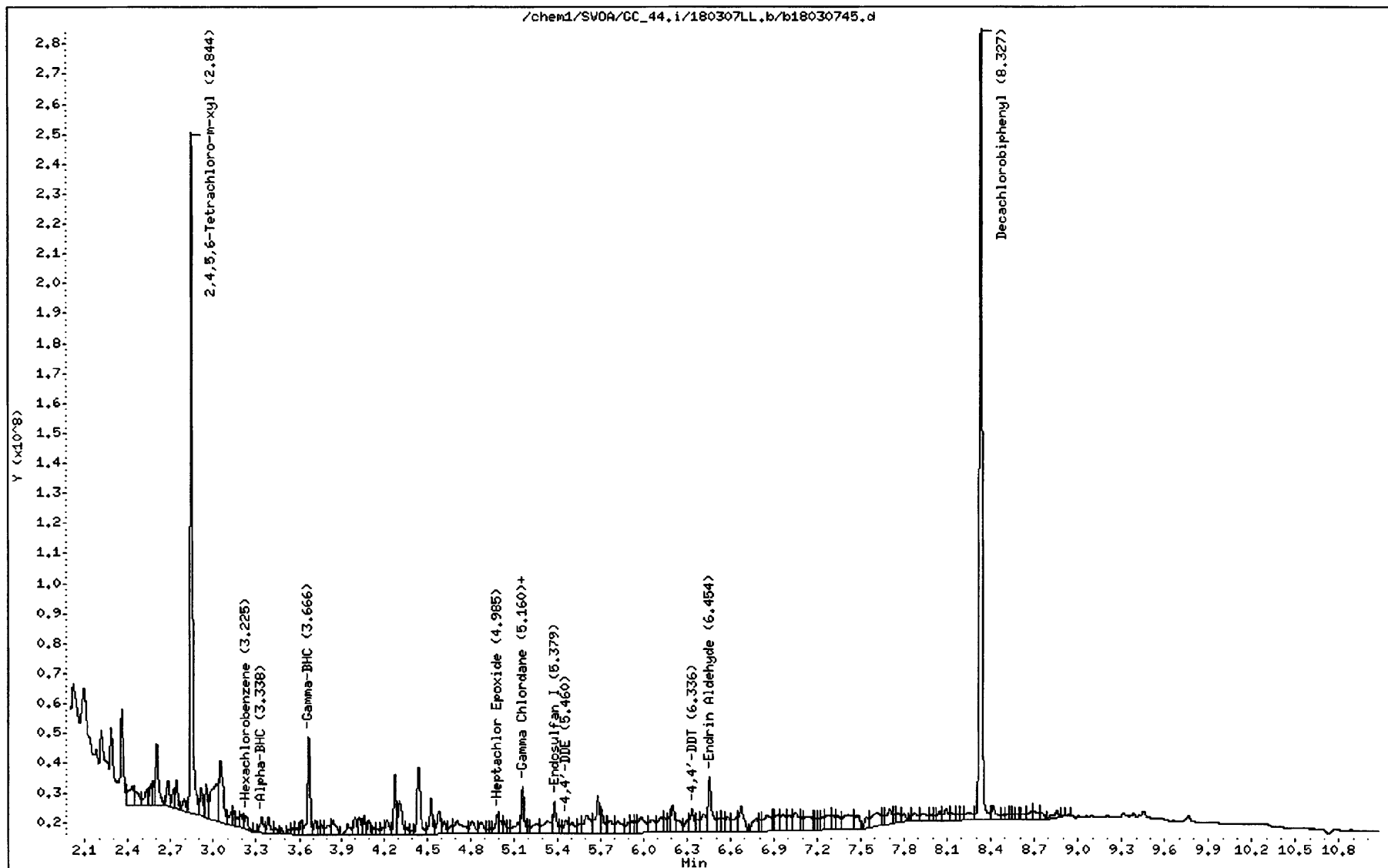
Column phase:

Instrument: GC_44.i

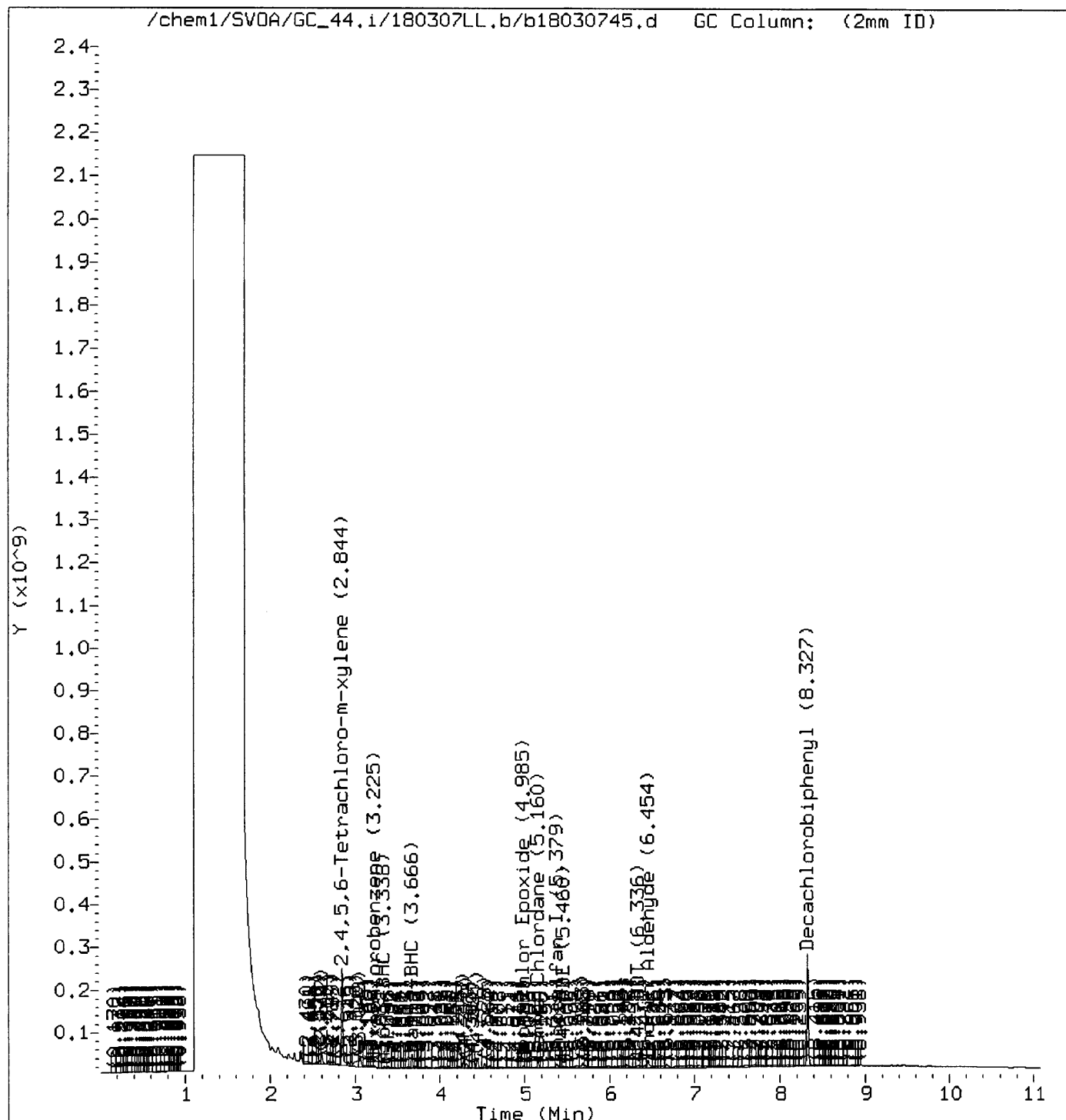
Operator: UHHN

Column diameter: 2.00

Page 1



Manually Integrated Data File

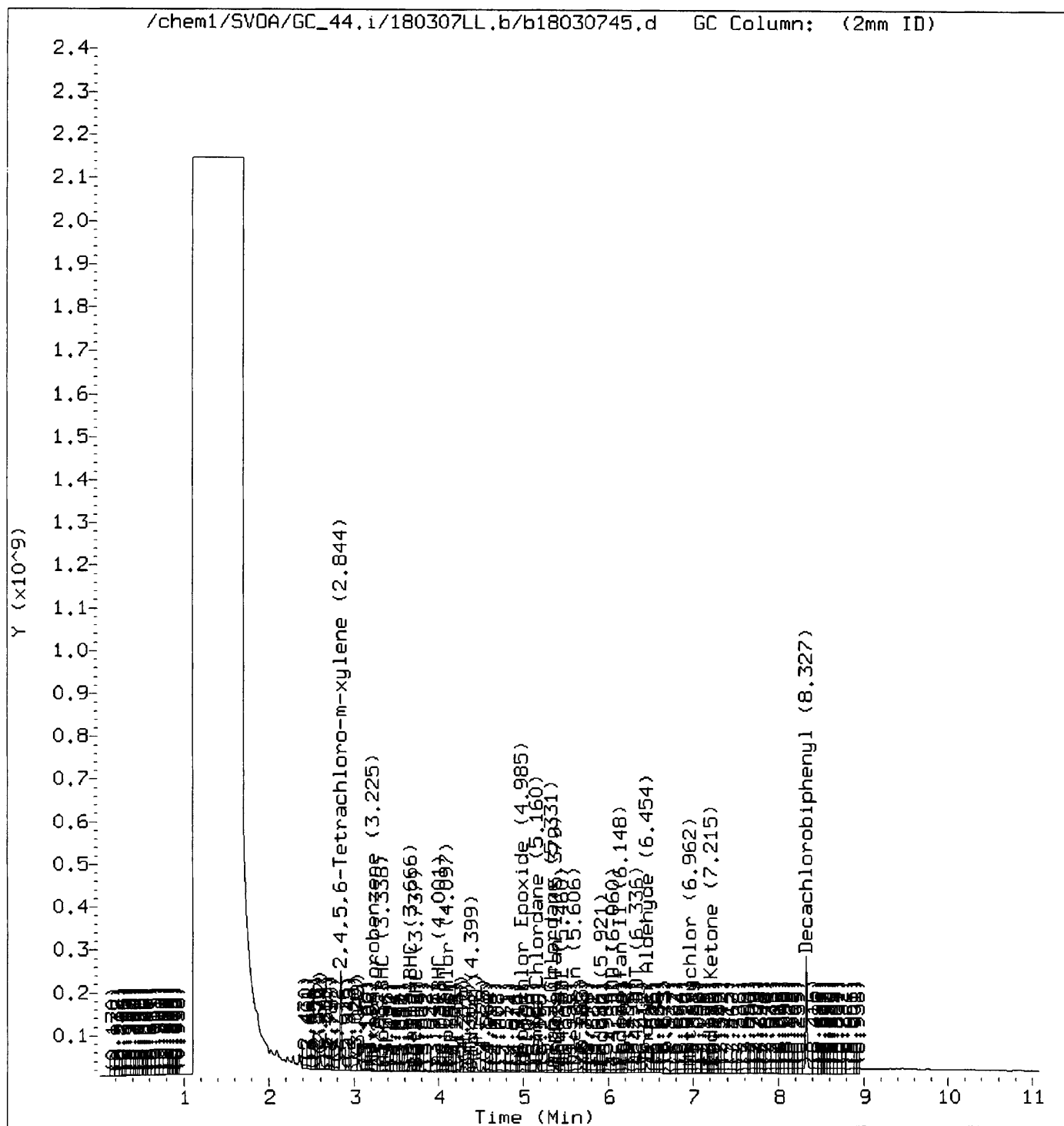


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhn

Audit/management approval: _____

um



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030745.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-18
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/a18030745.d

Page 1

Date : 07-MAR-2018 14:11

Client ID:

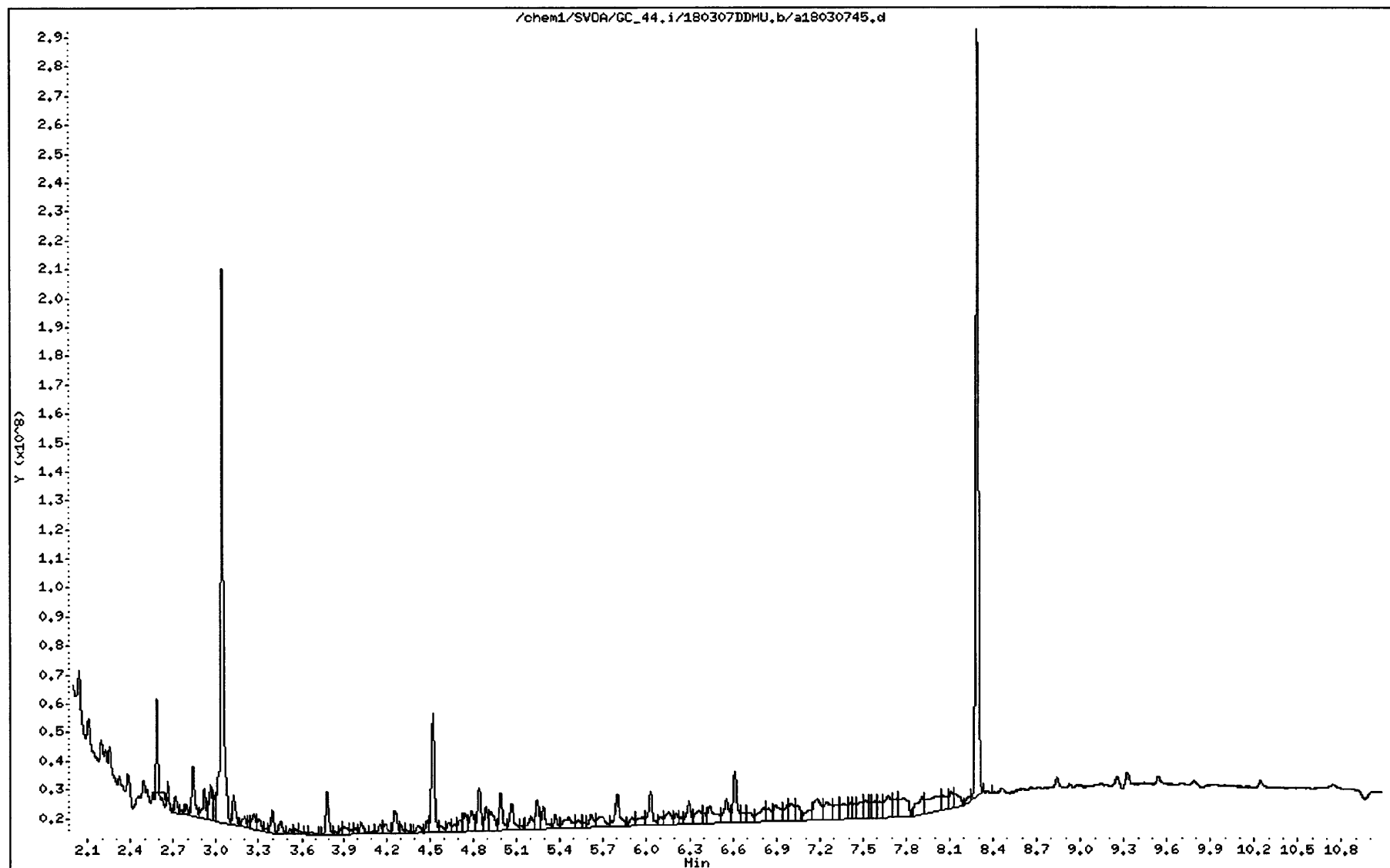
Instrument: GC_44.i

Sample Info: 18-02-1890-18

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030745.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-18
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 45
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.129	5.122	0.007	415751437	9.55234	9.552

Data File: /chem1/SVDA/GC_44.i/180307DDHU,b/b18030745.d

Page 1

Date : 07-MAR-2018 14:11

Client ID:

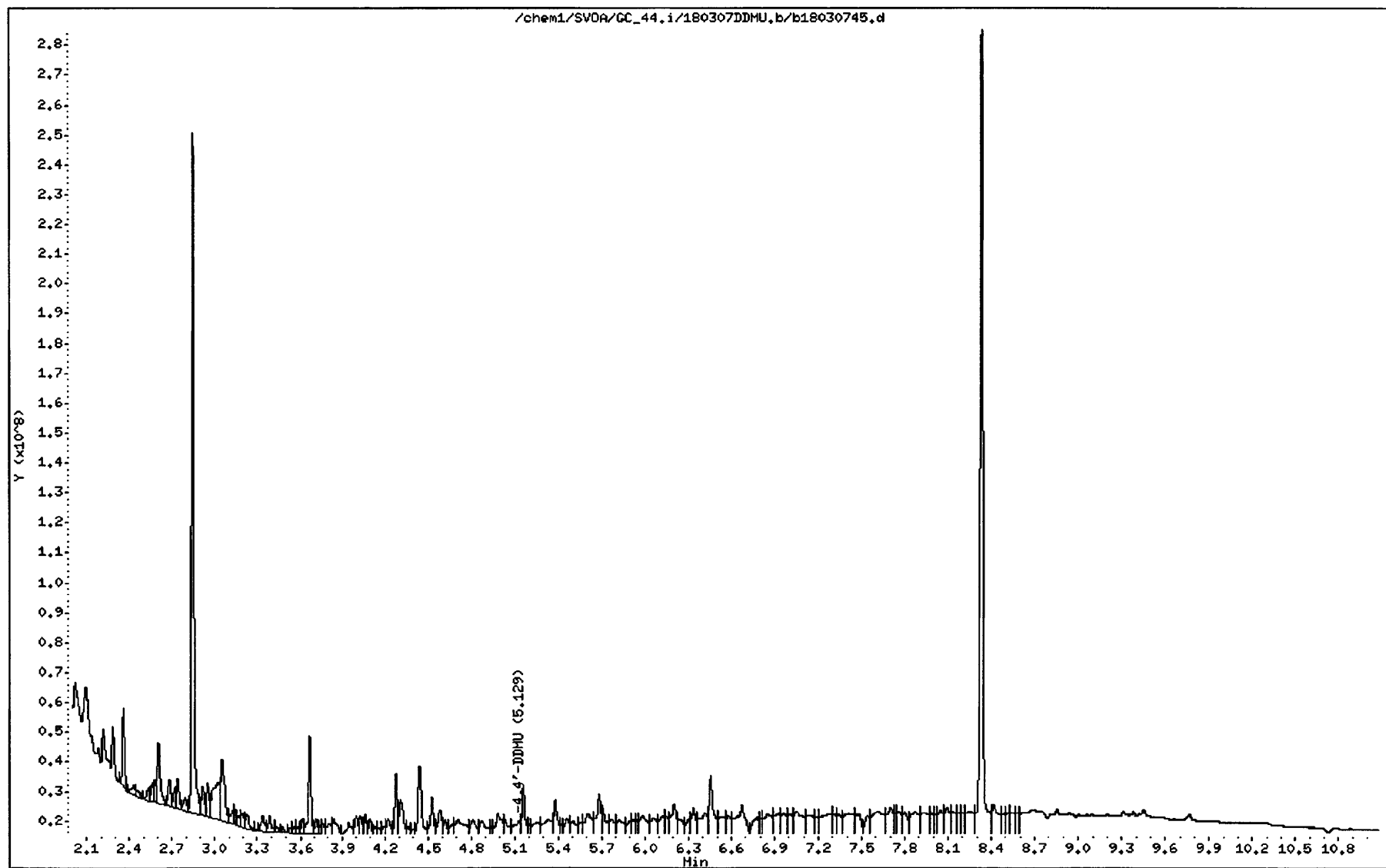
Instrument: GC_44.i

Sample Info: 18-02-1890-18

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 14:25
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074618030746

21 **CLIENT SAMPLE NUMBER:** FH-RW-07-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	2.70	1.80	1.00	1.3	Y	166%	2	19.7
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	2.61	1.74	1.00	1.3		3%	2	1.80
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030746.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:25
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-21
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS				
		ON-COLUMN			FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.037	3.036	0.001	5624871067	56.4259	56.425
2 Hexachlorobenzene	Compound Not Detected.					
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	4.990	4.976	0.014	498947092	17.7791	17.779(M) <i>nc</i>
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	5.199	5.198	0.001	263379699	2.69728	2.697 (M) <i>-</i>
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 4,4'-DDE	5.537	5.539	-0.002	297913690	2.60844	2.608
17 Endosulfan I	5.619	5.625	-0.006	203113657	1.70322	1.703 (a)
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.			
23 4,4'-DDD					Compound Not Detected.			
24 Endosulfan II					Compound Not Detected.			
25 4,4'-DDT					Compound Not Detected.			
26 Endrin Aldehyde					Compound Not Detected.			
27 Methoxychlor					Compound Not Detected.			
28 Mirex					Compound Not Detected.			
29 Endosulfan Sulfate					Compound Not Detected.			
30 Endrin Ketone					Compound Not Detected.			
\$ 31 Decachlorobiphenyl	8.284	8.284	0.000	10157134426		97.3043	97.304	
M 32 Chlordane					Compound Not Detected.			
33 CHLD (1)					Compound Not Detected.			
34 CHLD (2)					Compound Not Detected.			
35 CHLD (3)					Compound Not Detected.			
36 CHLD (4)					Compound Not Detected.			
37 CHLD (5)					Compound Not Detected.			
M 38 Toxaphene					Compound Not Detected.			
39 TOXAPHENE (1)					Compound Not Detected.			
40 TOXAPHENE (2)					Compound Not Detected.			
41 TOXAPHENE (3)					Compound Not Detected.			
42 TOXAPHENE (4)					Compound Not Detected.			
43 TOXAPHENE (5)					Compound Not Detected.			

QC Flag Legend

- a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030746.d

Date : 07-MAR-2018 14:25

Client ID:

Sample Info: 18-02-1890-21

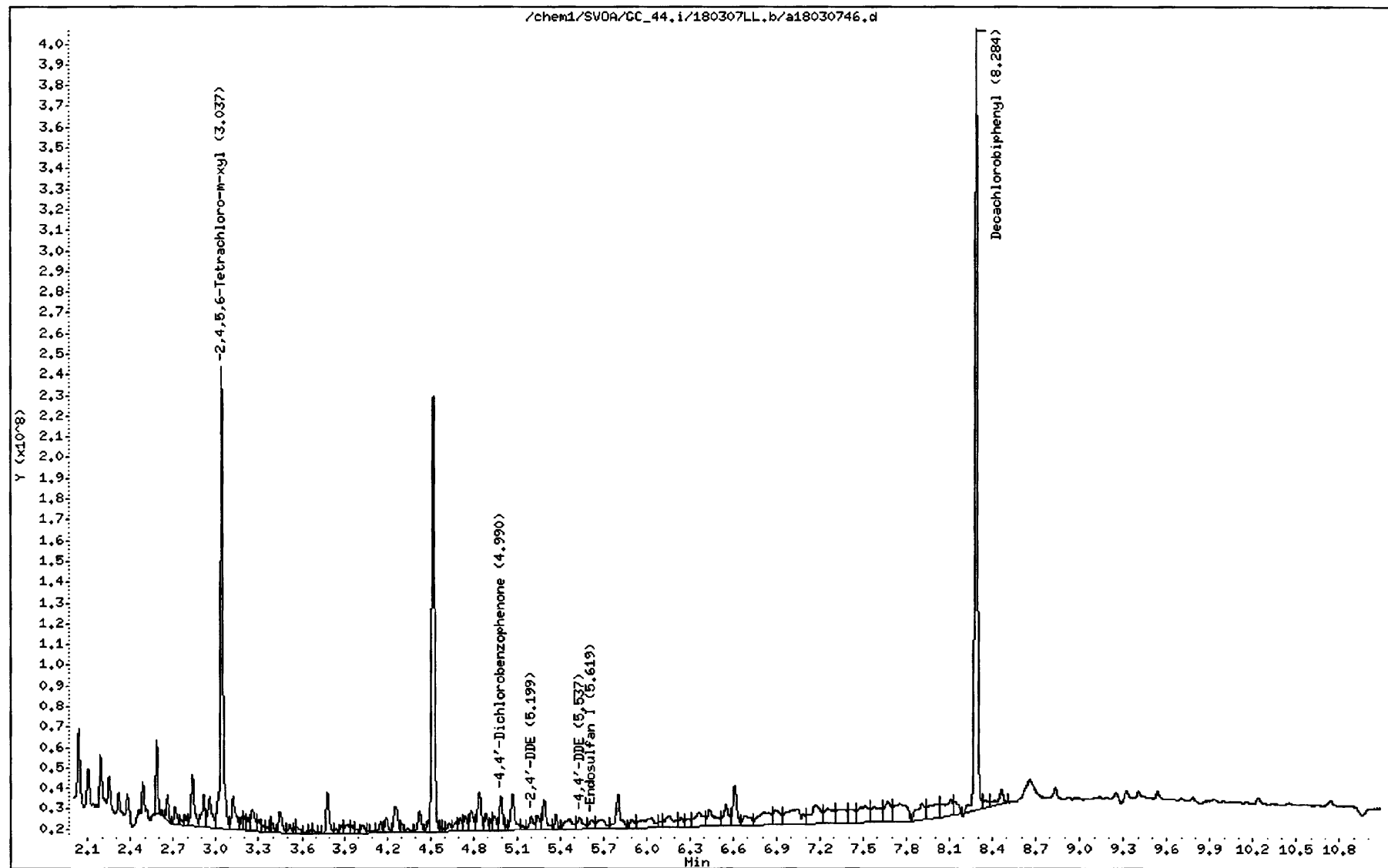
Page 1

Instrument: GC_44.i

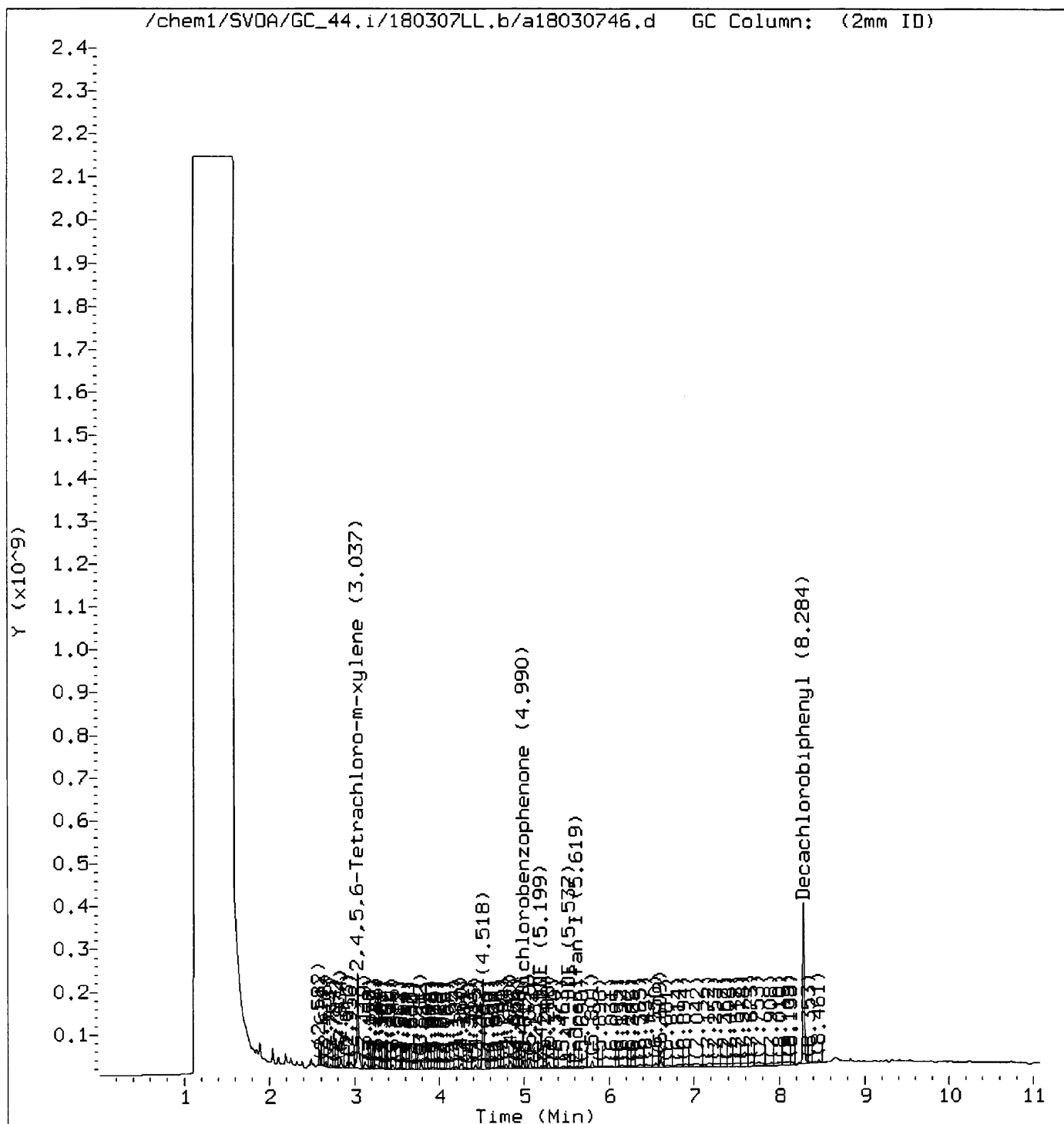
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File

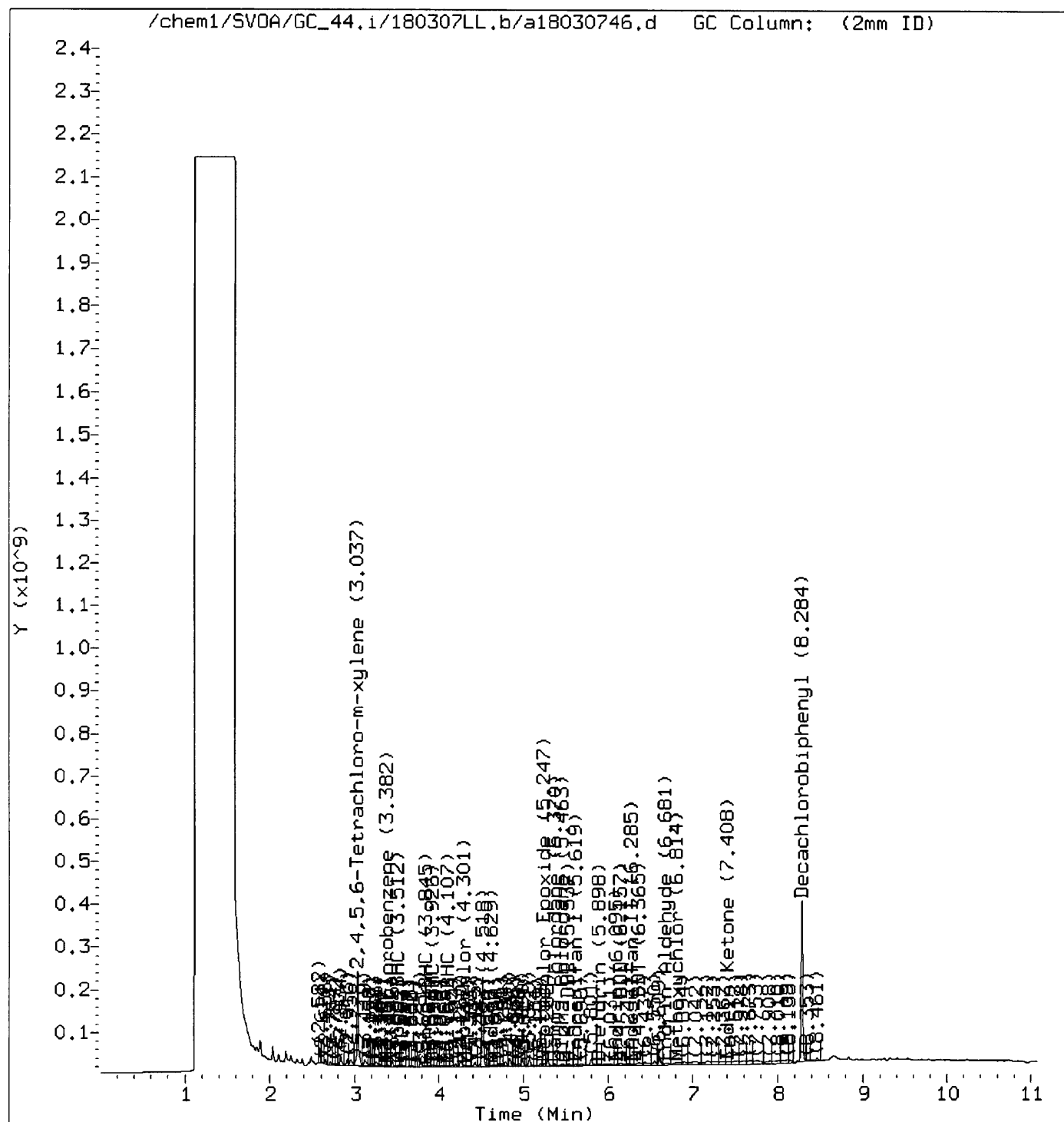


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhn

Audit/management approval: _____

Original Data File



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030746.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:25
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-21
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T	1 2,4,5,6-Tetrachloro-m-xylene	2.842	2.842	0.000	5605157701	52.7290	52.729
	2 Hexachlorobenzene	3.222	3.226	-0.004	209643983	1.35326	1.353 (a)
	3 Alpha-BHC	3.336	3.337	-0.001	304702547	1.67819	1.678 (a)
	4 Gamma-BHC	3.665	3.656	0.009	1195222391	7.54068	7.540
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordane	Compound Not Detected.					
	11 Heptachlor Epoxide	4.984	4.975	0.009	440777449	3.47219	3.472
	12 2,4'-DDE	5.158	5.155	0.003	2625962720	29.4784	29.478 (M)
	13 Gamma Chlordane	5.158	5.162	-0.004	2625962720	20.1351	20.135
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.377	5.366	0.011	463248276	3.94341	3.943
	17 4,4'-DDE	5.460	5.463	-0.003	320013692	2.70206	2.702
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT	6.334	6.325	0.009	363729455	3.64095	3.640		
26 Endrin Aldehyde	6.453	6.450	0.003	848213772	9.43224	9.432		
27 Endosulfan Sulfate						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Methoxychlor						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
T 31 Decachlorobiphenyl	8.324	8.325	-0.001	9227601277	95.4951	95.495 (A)		
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030746.d

Date : 07-MAR-2018 14:25

Client ID:

Sample Info: 18-02-1890-21

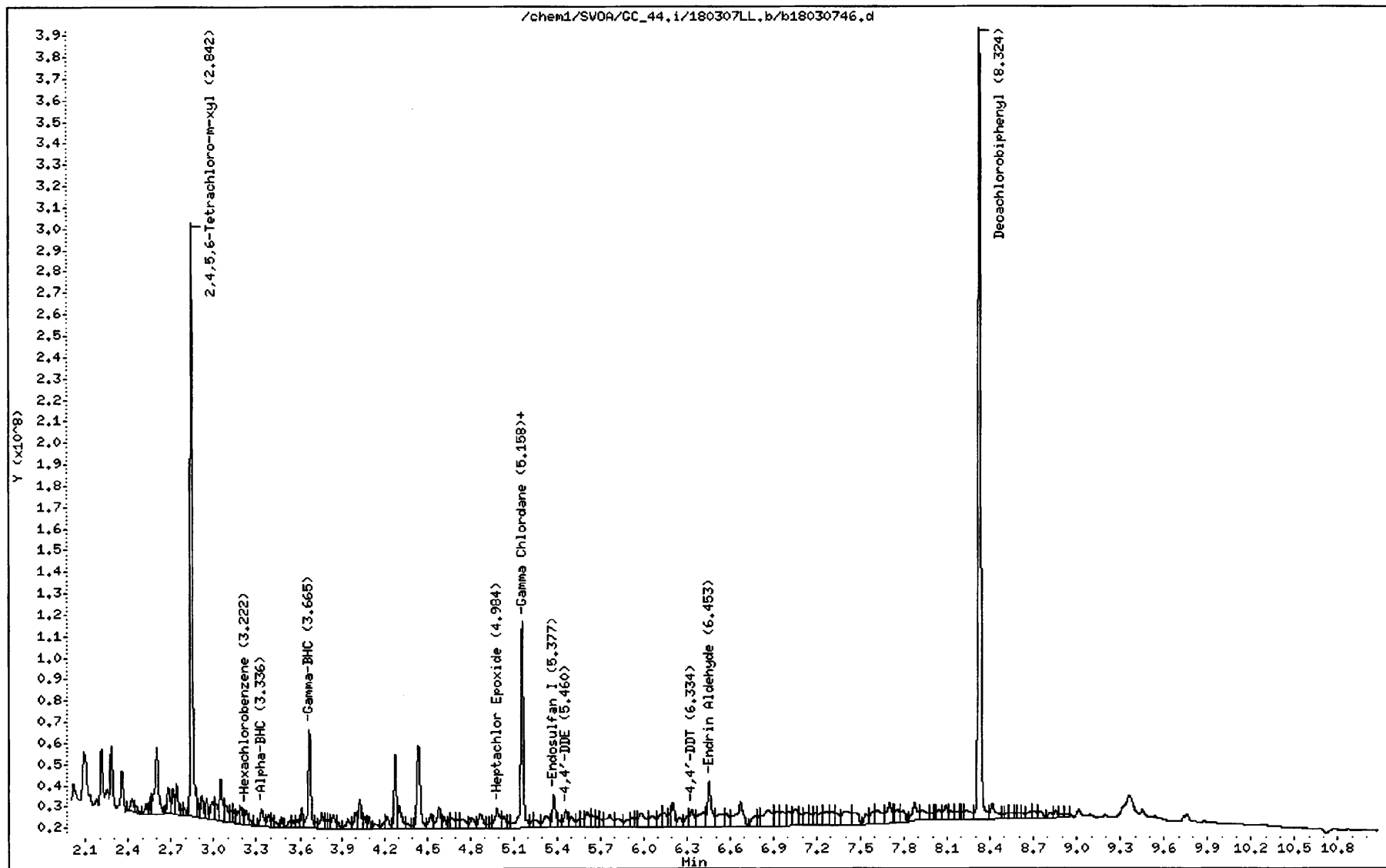
Page 1

Instrument: GC_44.i

Operator: UHHN

Column diameter: 2.00

Column phase:

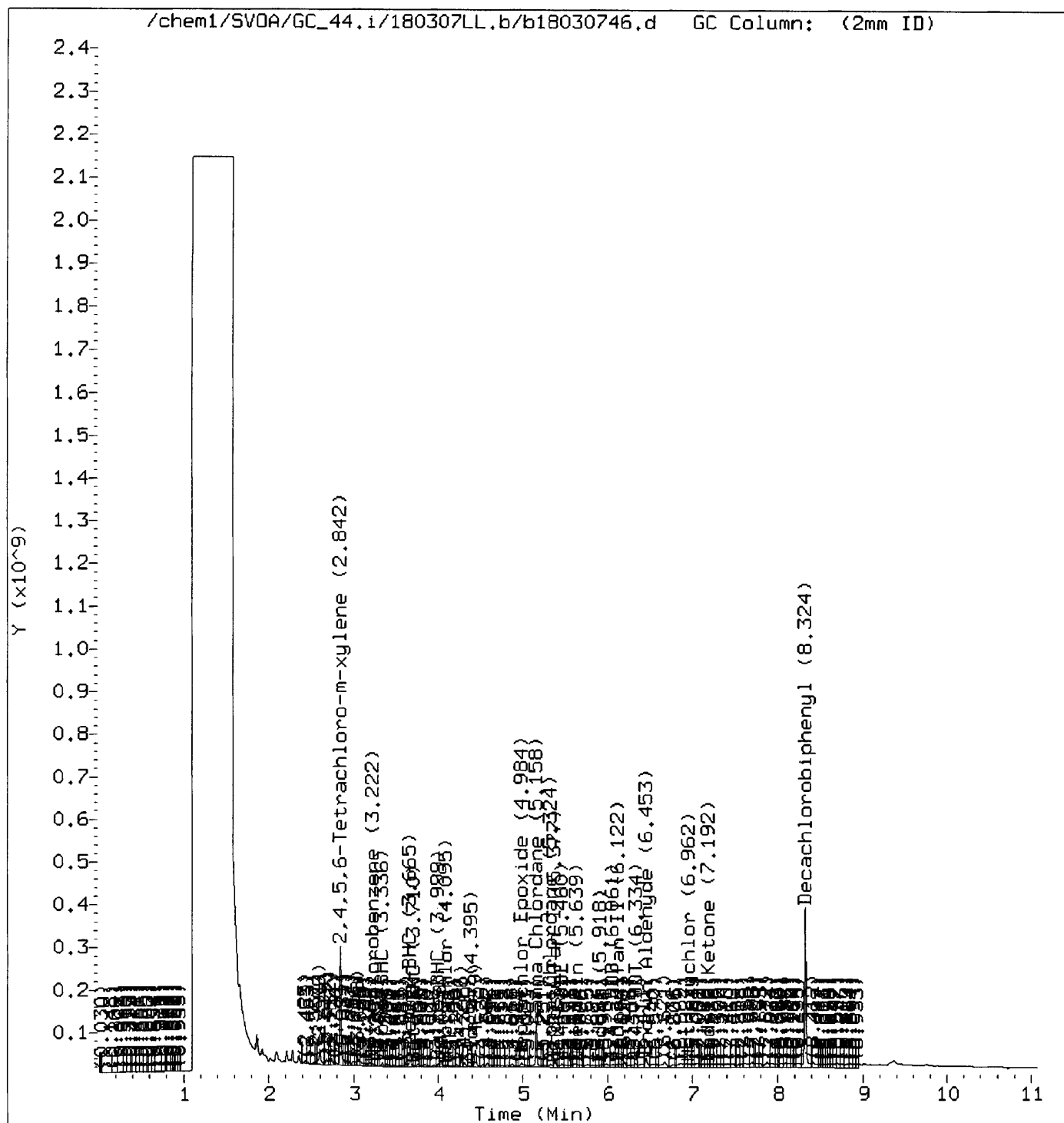


Chromatogram showing detector response (Y-axis, labeled Y (x10⁻⁹)) versus Time (Min). The Y-axis ranges from 0.1 to 2.4. The X-axis ranges from 1 to 11 minutes. The baseline is relatively flat around 0.15 x 10⁻⁹, with a major peak at approximately 1.5 minutes reaching a height of about 2.15 x 10⁻⁹. Several smaller peaks are labeled with their retention times and corresponding compounds:

Retention Time (Min)	Compound
2.842	2,4,5,6-Tetrachloro-m-xylene
3.222	Aroclor 1248
3.365	BHC
4.984	Polon Epoxide
5.158	Chlorane
5.465	Aldehyde
6.453	Aldehyde
8.324	Decachlorobiphenyl

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhhn

Wm



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030746.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:25
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-21
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE		ON-COLUMN	FINAL
						(ppb)	(ug/Kg)
=====	==	=====	=====	=====		=====	=====
2 4,4'-DDMU				Compound Not Detected.			

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/a18030746.d

Page 1

Date : 07-MAR-2018 14:25

Client ID:

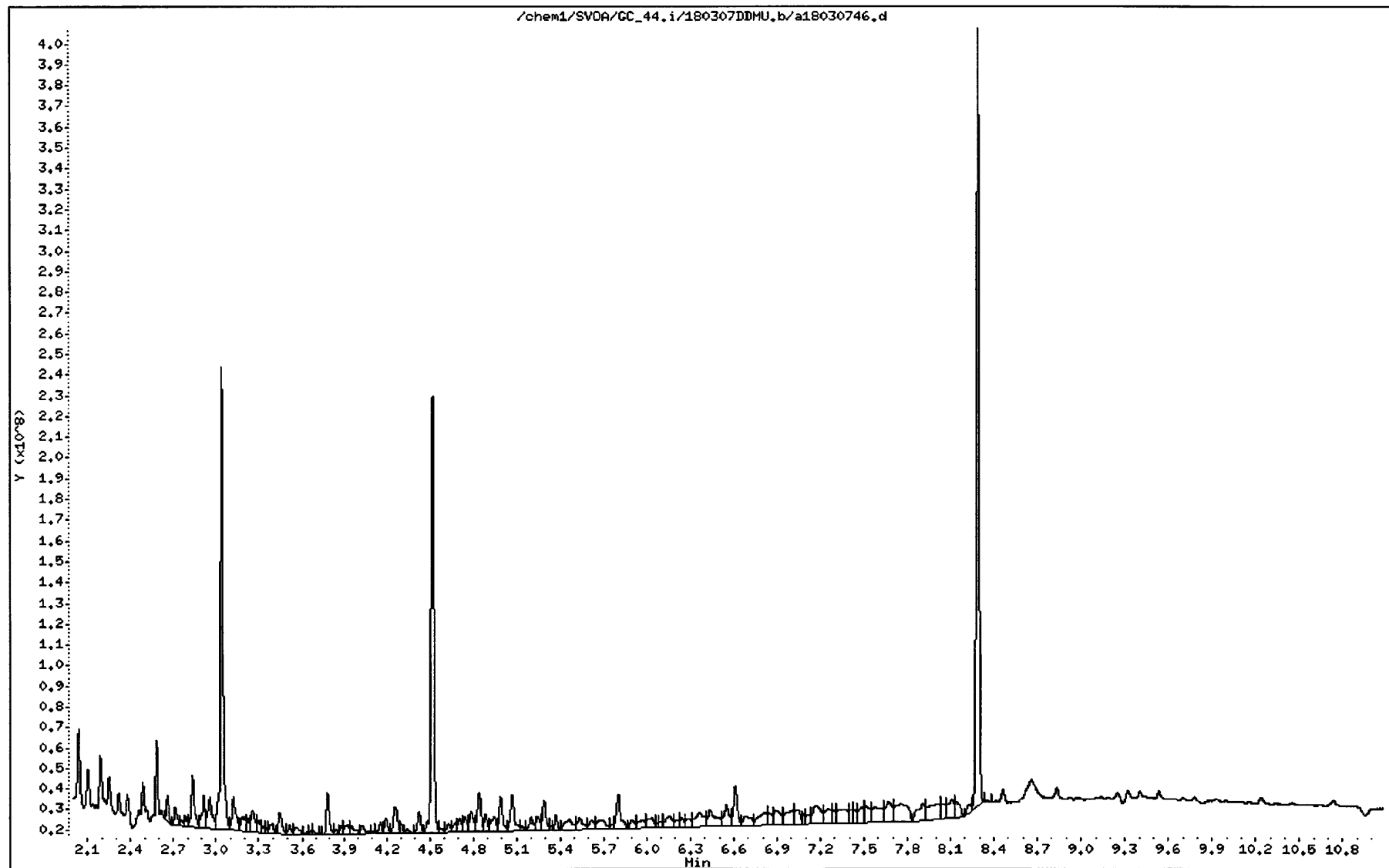
Instrument: GC_44.i

Sample Info: 18-02-1890-21

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030746.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:25
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-21
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 46
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN	FINAL
					(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.158	5.122	0.036	2624479324	60.3003	60.300

Data File: /chem1/SVDA/GC_44.i/180307DDHU.b/b18030746.d

Page 1

Date : 07-MAR-2018 14:25

Client ID:

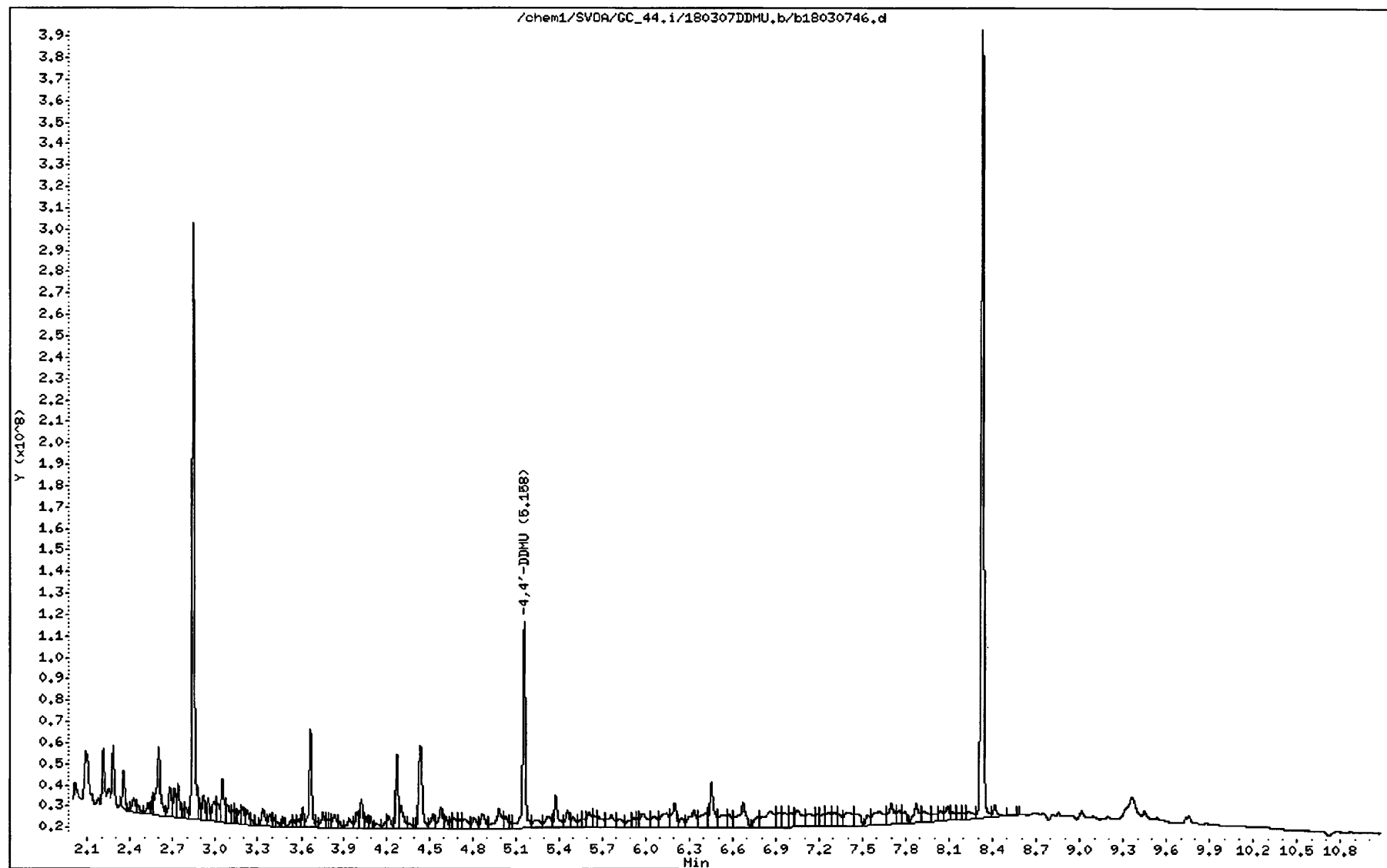
Instrument: GC_44.i

Sample Info: 18-02-1890-21

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 14:39
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074718030747

24 **CLIENT SAMPLE NUMBER:** OA-RW-08-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	6.36	4.24	1.00	1.3		13%	2	4.81
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030747.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:39
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-24
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds		CONCENTRATIONS					
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene		3.036	3.036	0.000	5390241465	54.0722	54.072
2 Hexachlorobenzene		Compound Not Detected.					
3 Alpha-BHC		Compound Not Detected.					
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		4.992	4.976	0.016	844584923	30.0952	30.095 (M) <i>u</i>
10 Oxychlorane		Compound Not Detected.					
11 2,4'-DDE		5.197	5.198	-0.001	620851940	6.35815	6.358 (M)
12 Heptachlor Epoxide		Compound Not Detected.					
13 Gamma Chlordane		Compound Not Detected.					
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 4,4'-DDE		Compound Not Detected.					
17 Endosulfan I		Compound Not Detected.					
18 2,4'-DDD		Compound Not Detected.					
19 Dieldrin		Compound Not Detected.					
20 2,4'-DDT		Compound Not Detected.					
21 Endrin		Compound Not Detected.					

							CONCENTRATIONS		
		RT	EXP	RT	DLT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
Compounds									
=====		==	=====	=====	=====	=====	=====	=====	=====
	22 Cis-Nonachlor		Compound	Not	Detected.				
	23 4,4'-DDD		Compound	Not	Detected.				
	24 Endosulfan II		Compound	Not	Detected.				
	25 4,4'-DDT		Compound	Not	Detected.				
	26 Endrin Aldehyde		Compound	Not	Detected.				
	27 Methoxychlor		Compound	Not	Detected.				
	28 Mirex		Compound	Not	Detected.				
	29 Endosulfan Sulfate		Compound	Not	Detected.				
	30 Endrin Ketone		Compound	Not	Detected.				
\$	31 Decachlorobiphenyl	8.284	8.284	0.000	9589814464		91.8695	91.869	
M	32 Chlordane		Compound	Not	Detected.				
	33 CHLD (1)		Compound	Not	Detected.				
	34 CHLD (2)		Compound	Not	Detected.				
	35 CHLD (3)		Compound	Not	Detected.				
	36 CHLD (4)		Compound	Not	Detected.				
	37 CHLD (5)		Compound	Not	Detected.				
M	38 Toxaphene		Compound	Not	Detected.				
	39 TOXAPHENE (1)		Compound	Not	Detected.				
	40 TOXAPHENE (2)		Compound	Not	Detected.				
	41 TOXAPHENE (3)		Compound	Not	Detected.				
	42 TOXAPHENE (4)		Compound	Not	Detected.				
	43 TOXAPHENE (5)		Compound	Not	Detected.				

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030747.d

Page 1

Date : 07-MAR-2018 14:39

Client ID:

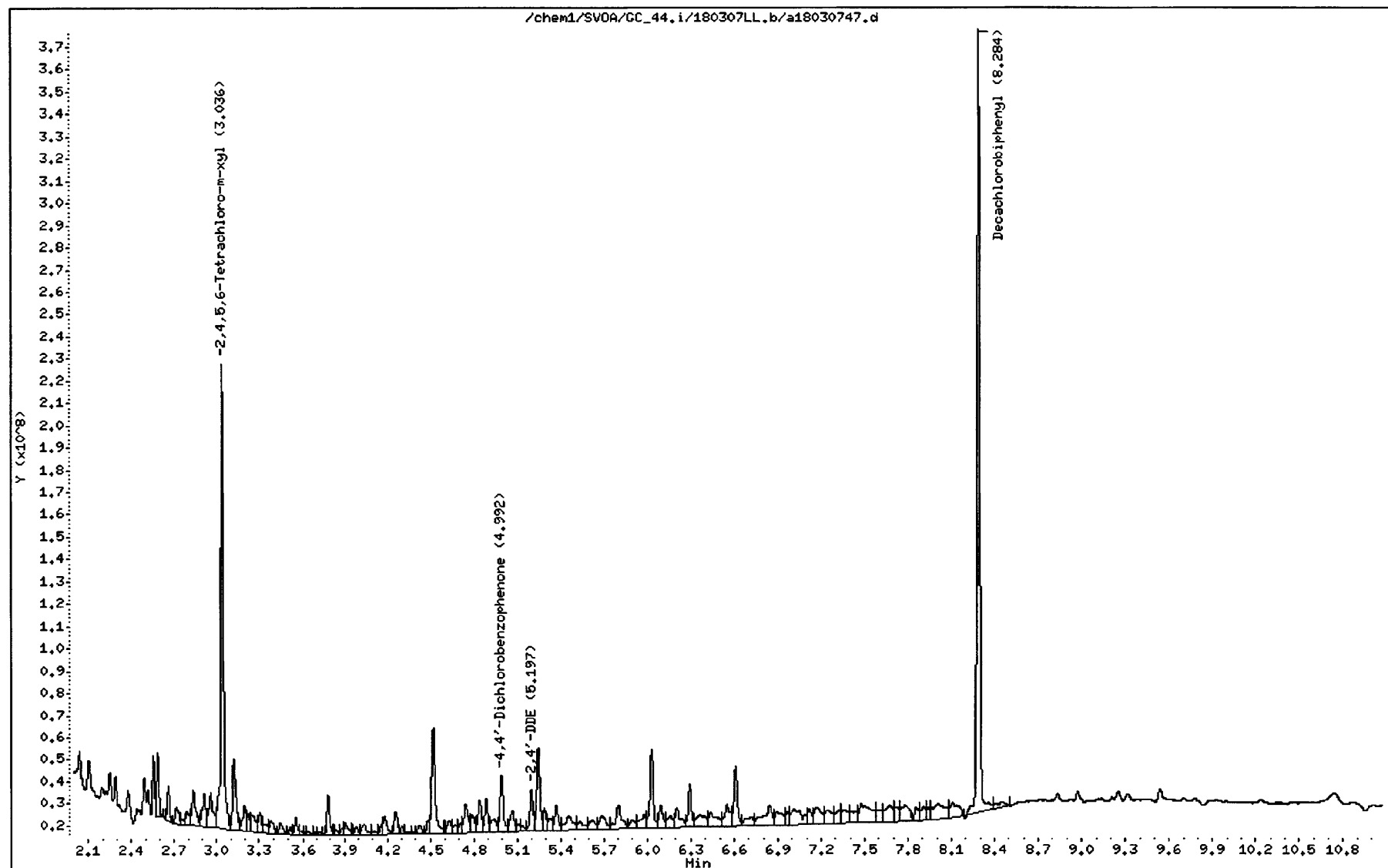
Instrument: GC_44.i

Sample Info: 18-02-1890-24

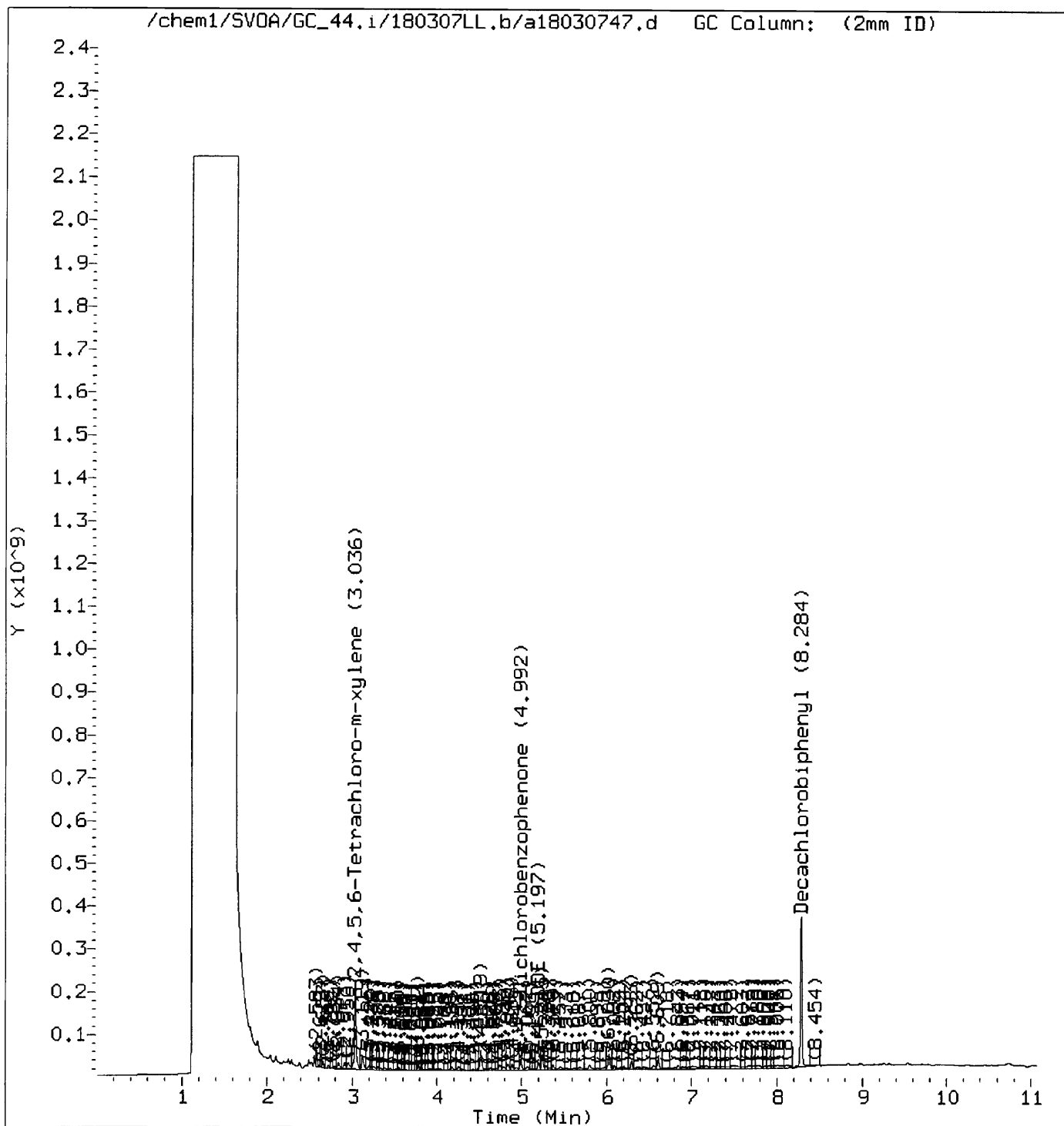
Operator: UHHN

Column phase:

Column diameter: 2.00



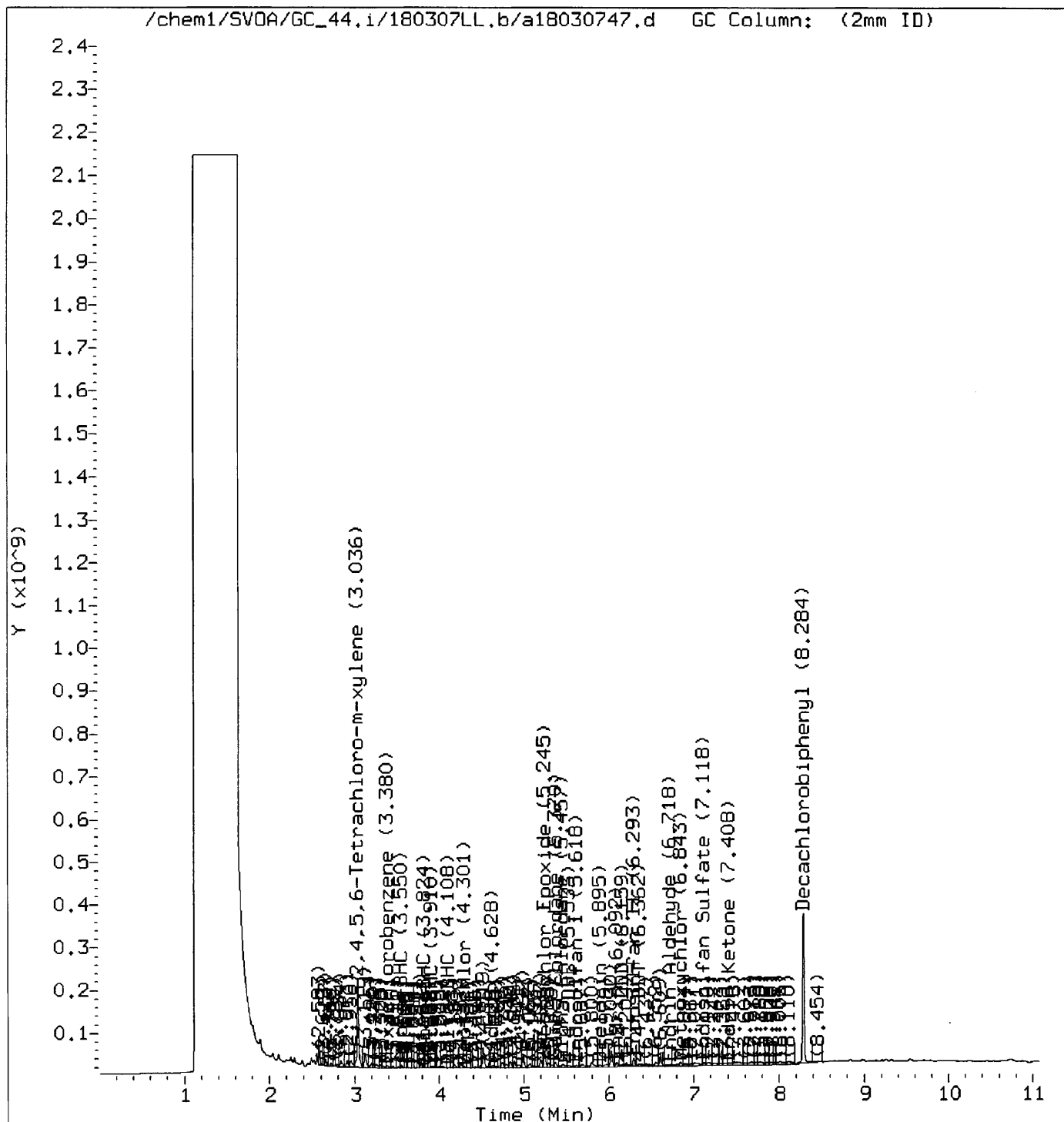
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhn

Audit/management approval: um



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030747.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:39
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-24
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
					ON-COLUMN	FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)	
=====	==	=====	=====	=====	=====	=====	
T 1 2,4,5,6-Tetrachloro-m-xylene	2.843	2.842	0.001	5607419064	52.7503	52.750	
2 Hexachlorobenzene	3.224	3.226	-0.002	243940651	1.57464	1.574 (a)	
3 Alpha-BHC	3.339	3.337	0.002	325405238	1.79221	1.792 (a)	
4 Gamma-BHC	3.665	3.656	0.009	934708677	5.89710	5.897	
5 Beta-BHC				Compound Not Detected.			
6 Delta-BHC				Compound Not Detected.			
7 Heptachlor				Compound Not Detected.			
8 Aldrin				Compound Not Detected.			
9 4,4'-Dichlorobenzophenone				Compound Not Detected.			
10 Oxychlordane				Compound Not Detected.			
11 Heptachlor Epoxide	4.983	4.975	0.008	694701326	5.47246	5.472	
12 2,4'-DDE	5.159	5.155	0.004	642776693	7.21565	7.215 (M)	
13 Gamma Chlordane	5.159	5.162	-0.003	642776693	4.92862	4.928	
14 Trans-Nonachlor				Compound Not Detected.			
15 Alpha Chlordane				Compound Not Detected.			
16 Endosulfan I	5.378	5.366	0.012	333865774	2.84204	2.842	
17 4,4'-DDE	5.461	5.463	-0.002	365195040	3.08355	3.083	
18 Dieldrin				Compound Not Detected.			
19 2,4'-DDD				Compound Not Detected.			
20 Endrin				Compound Not Detected.			
21 2,4'-DDT				Compound Not Detected.			

							CONCENTRATIONS	
							ON-COLUMN	FINAL
Compounds	RT	EXP	RT	DLT	RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor		Compound	Not	Detected.				
23 4,4'-DDD		Compound	Not	Detected.				
24 Endosulfan II		Compound	Not	Detected.				
25 4,4'-DDT	6.334	6.325	0.009	336700192		3.37039		3.370
26 Endrin Aldehyde	6.453	6.450	0.003	914039833		10.1642		10.164
27 Endosulfan Sulfate		Compound	Not	Detected.				
28 Mirex		Compound	Not	Detected.				
29 Methoxychlor		Compound	Not	Detected.				
30 Endrin Ketone		Compound	Not	Detected.				
T 31 Decachlorobiphenyl	8.325	8.325	0.000	8470783398		87.6629		87.662 (A)
M 32 Chlordane		Compound	Not	Detected.				
33 CHLD (1)		Compound	Not	Detected.				
34 CHLD (2)		Compound	Not	Detected.				
35 CHLD (3)		Compound	Not	Detected.				
36 CHLD (4)		Compound	Not	Detected.				
37 CHLD (5)		Compound	Not	Detected.				
M 38 Toxaphene		Compound	Not	Detected.				
39 TOXAPHENE (1)		Compound	Not	Detected.				
40 TOXAPHENE (2)		Compound	Not	Detected.				
41 TOXAPHENE (3)		Compound	Not	Detected.				
42 TOXAPHENE (4)		Compound	Not	Detected.				
43 TOXAPHENE (5)		Compound	Not	Detected.				

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030747.d

Date : 07-MAR-2018 14:39

Client ID:

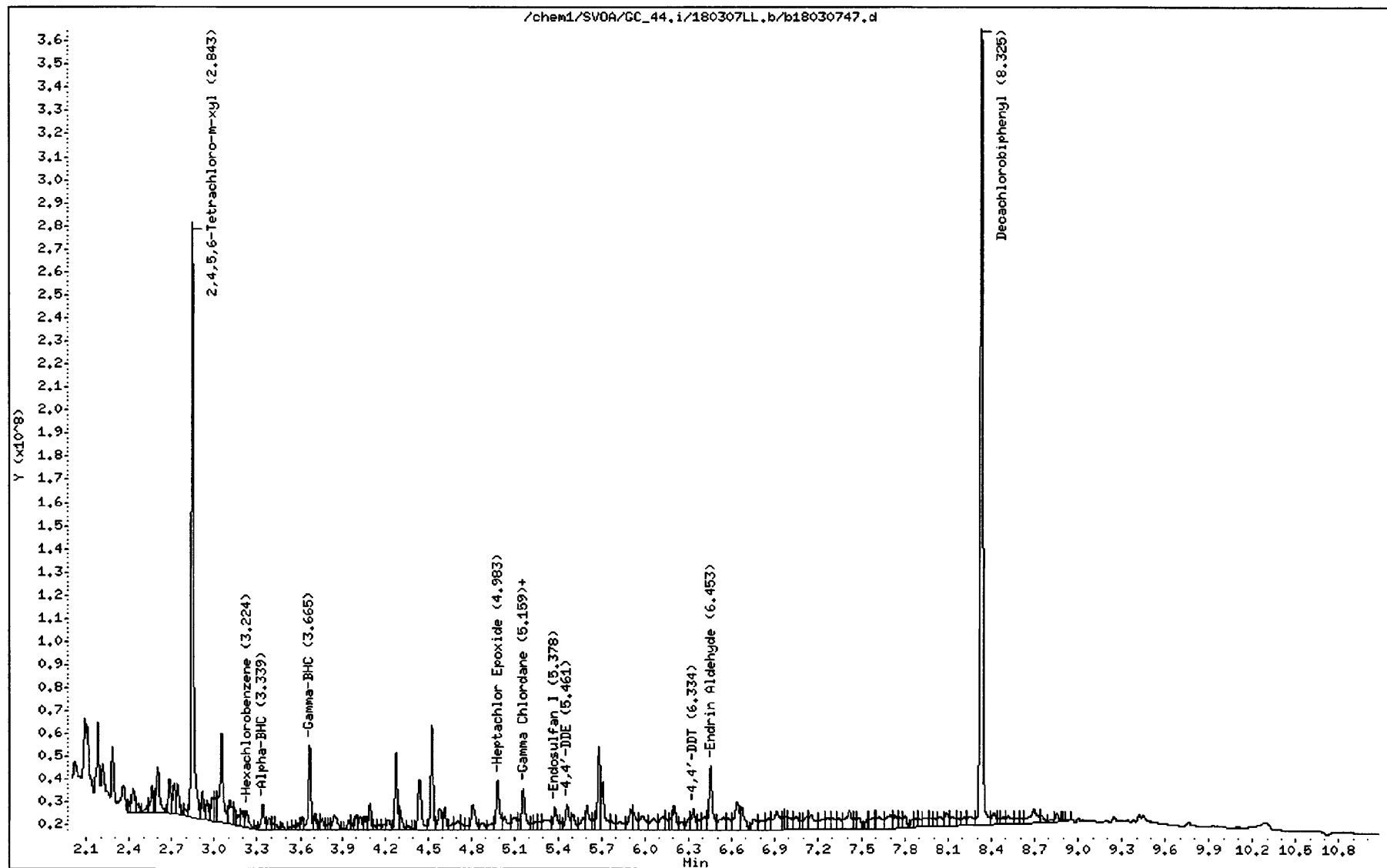
Sample Info: 18-02-1890-24

Instrument: GC_44.i

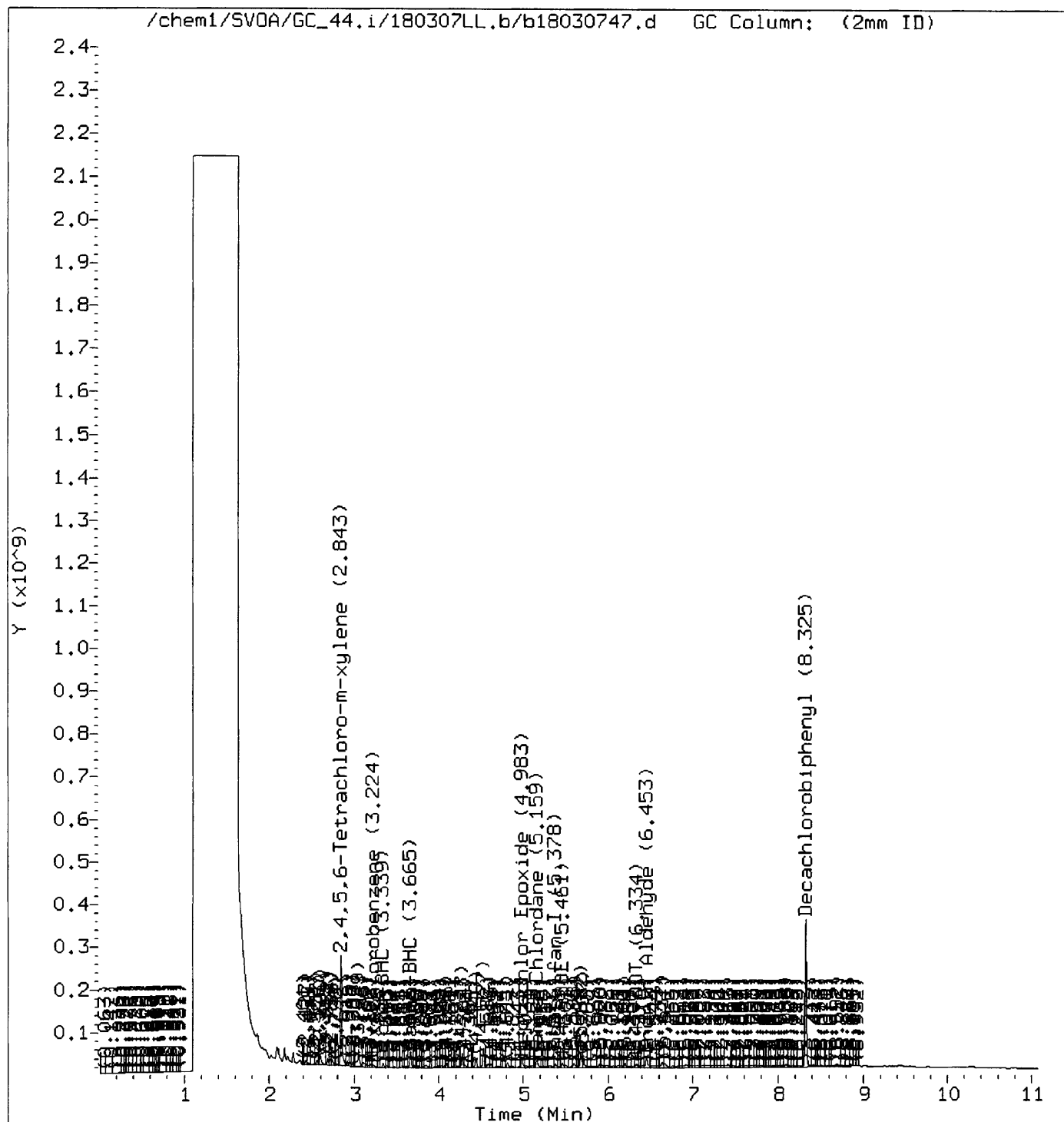
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File

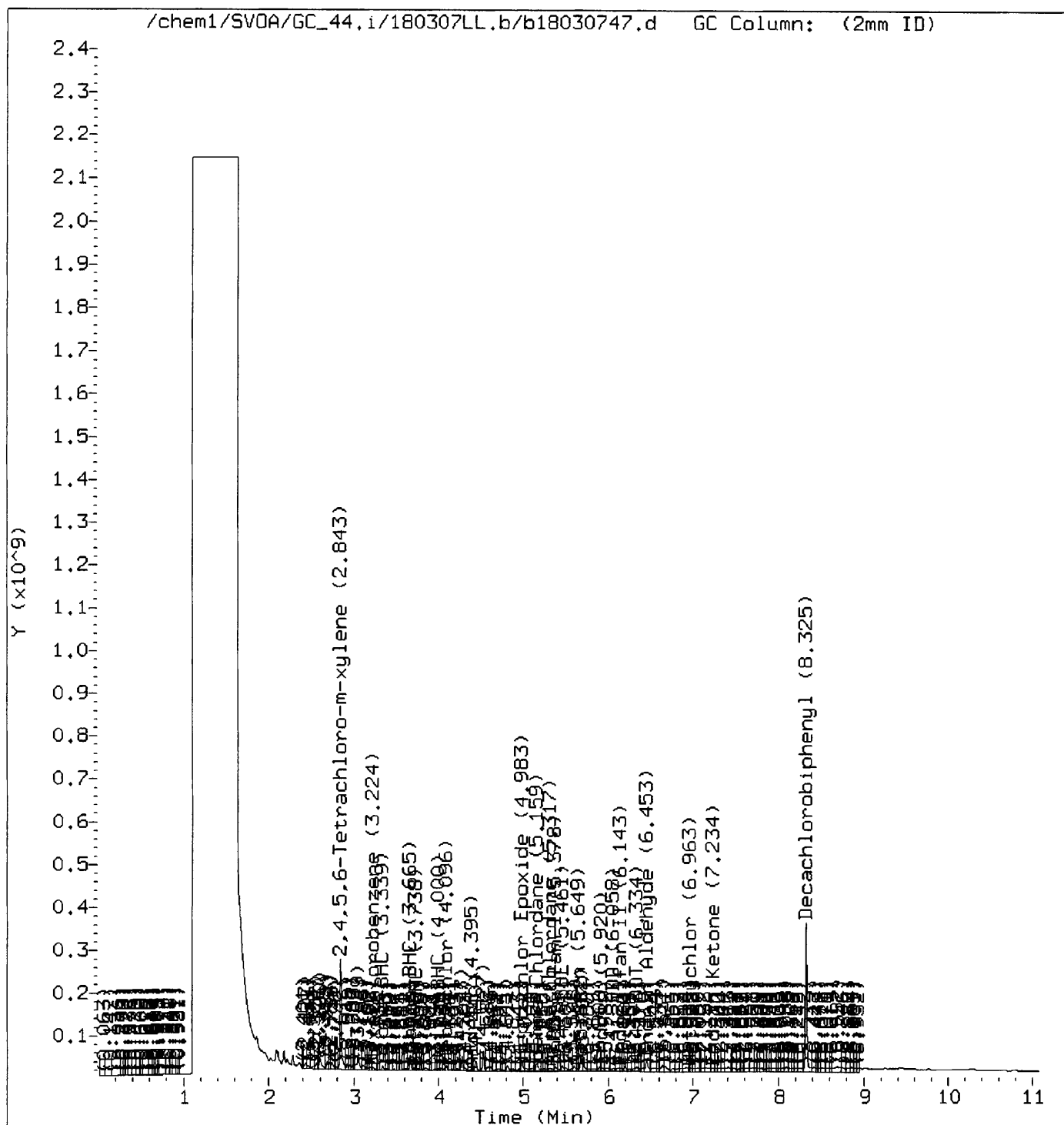


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
 Analyst responsible for change: on 03/09/2018 at 10:41.
 Target 3.5 esignature user ID: uhn

Audit/management approval: _____

u



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030747.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:39
Operator : UHHN
Smp Info : 18-02-1890-24
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4

Inst ID: GC_44.i
Quant Type: ESTD
Cal File: a18030530.d
Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030747.d

Page 1

Date : 07-MAR-2018 14:39

Client ID:

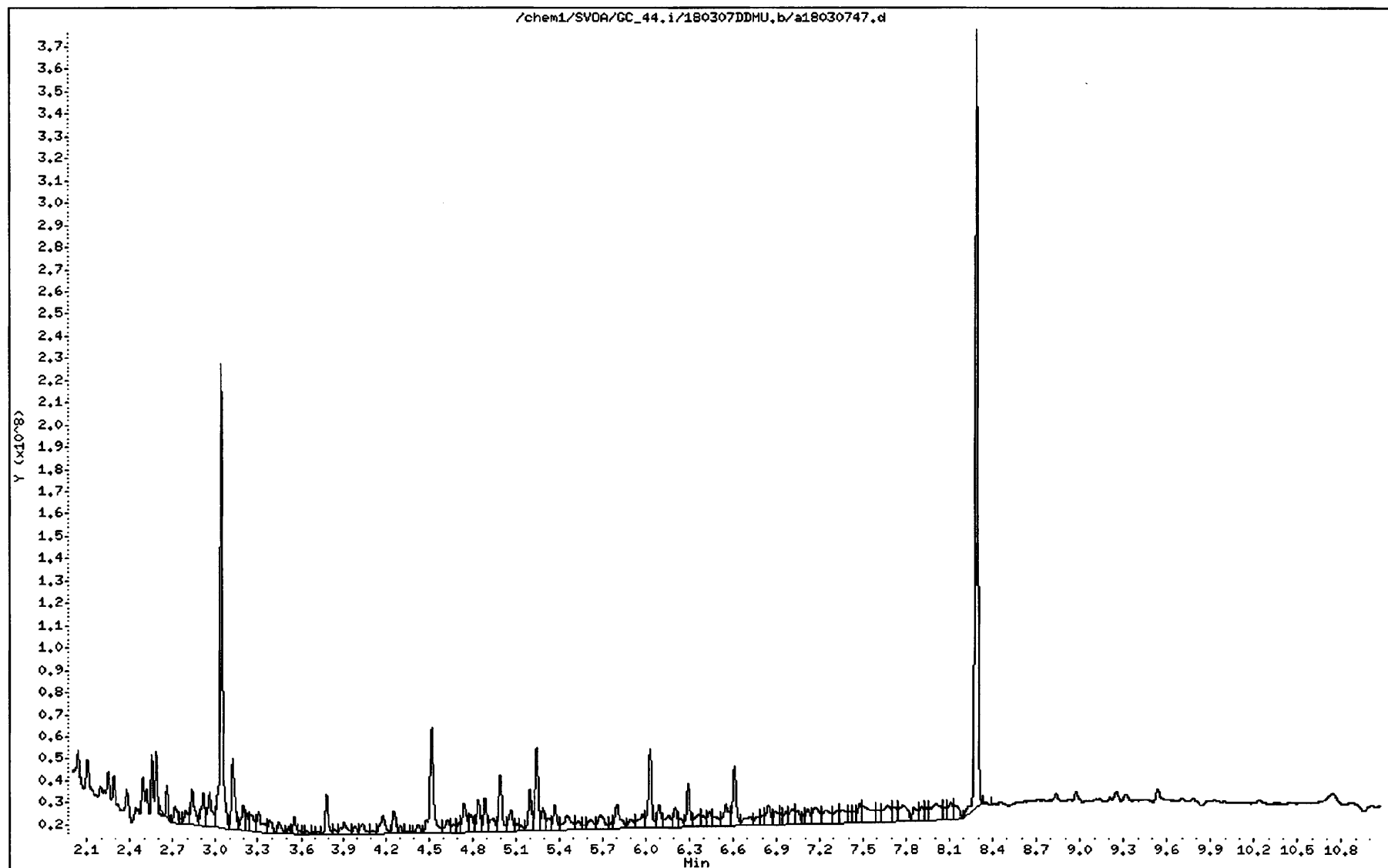
Instrument: GC_44.i

Sample Info: 18-02-1890-24

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030747.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:39
Operator : UHHN
Smp Info : 18-02-1890-24
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 47
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4

Inst ID: GC_44.i

Quant Type: ESTD

Cal File: b18030530.d

Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN	FINAL
					(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.129	5.122	0.007	128706985	2.95718	2.957

Data File: /chem1/SVDA/GC_44.i/180307DDHU.b/b18030747.d

Page 1

Date : 07-MAR-2018 14:39

Client ID:

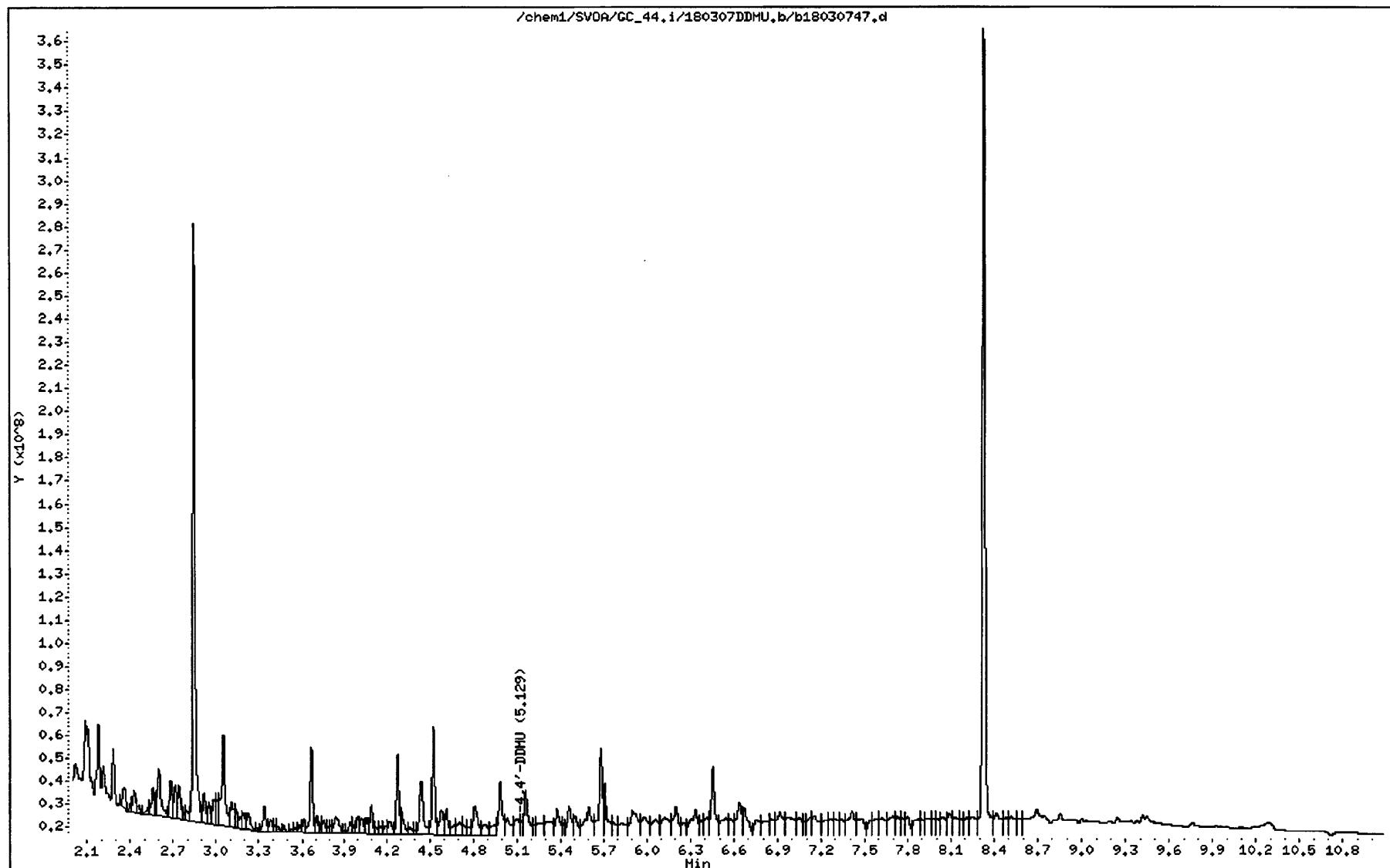
Instrument: GC_44.i

Sample Info: 18-02-1890-24

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 14:54
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074818030748

27 **CLIENT SAMPLE NUMBER:** OA-RW-09-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

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


COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	2.62	1.75	1.00	1.3	Y	79%	2	4.01
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

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Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030748.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:54
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-27
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
				ON-COLUMN		FINAL	
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene		3.038	3.036	0.002	6037519684	60.5654	60.565
2 Hexachlorobenzene		Compound Not Detected.					
3 Alpha-BHC		Compound Not Detected.					
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		4.990	4.976	0.014	455084044	16.2161	16.216 (M) 
10 Oxychlorane		Compound Not Detected.					
11 2,4'-DDE		5.200	5.198	0.002	255834067	2.62000	2.620 (M)
12 Heptachlor Epoxide		Compound Not Detected.					
13 Gamma Chlordane		Compound Not Detected.					
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 4,4'-DDE		Compound Not Detected.					
17 Endosulfan I		Compound Not Detected.					
18 2,4'-DDD		Compound Not Detected.					
19 Dieldrin		Compound Not Detected.					
20 2,4'-DDT		Compound Not Detected.					
21 Endrin		Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT						Compound Not Detected.		
26 Endrin Aldehyde						Compound Not Detected.		
27 Methoxychlor						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Endosulfan Sulfate						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.283	8.284	-0.001	8303549647			79.5472	79.547
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030748.d

Page 1

Date : 07-MAR-2018 14:54

Client ID:

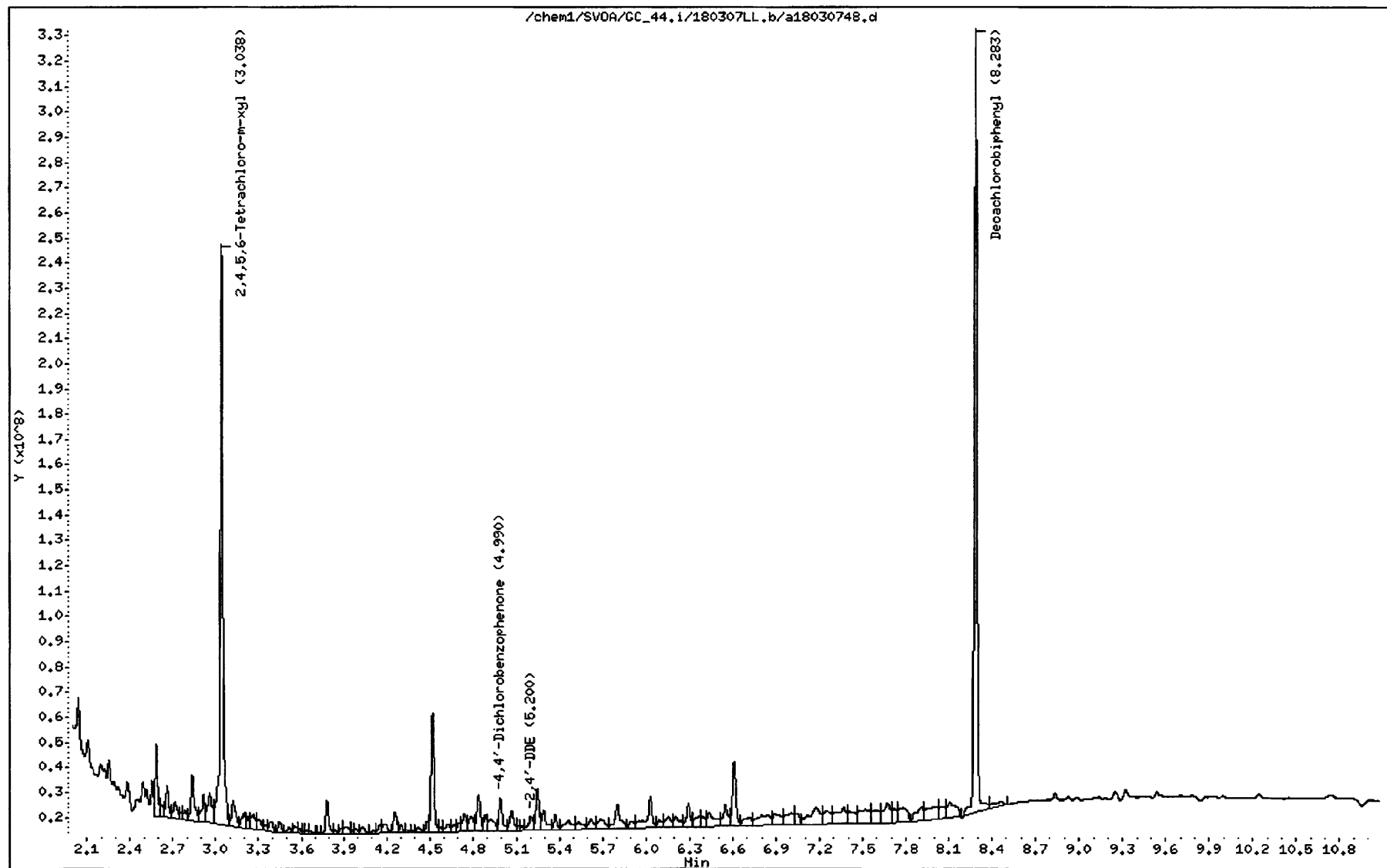
Instrument: GC_44.i

Sample Info: 18-02-1890-27

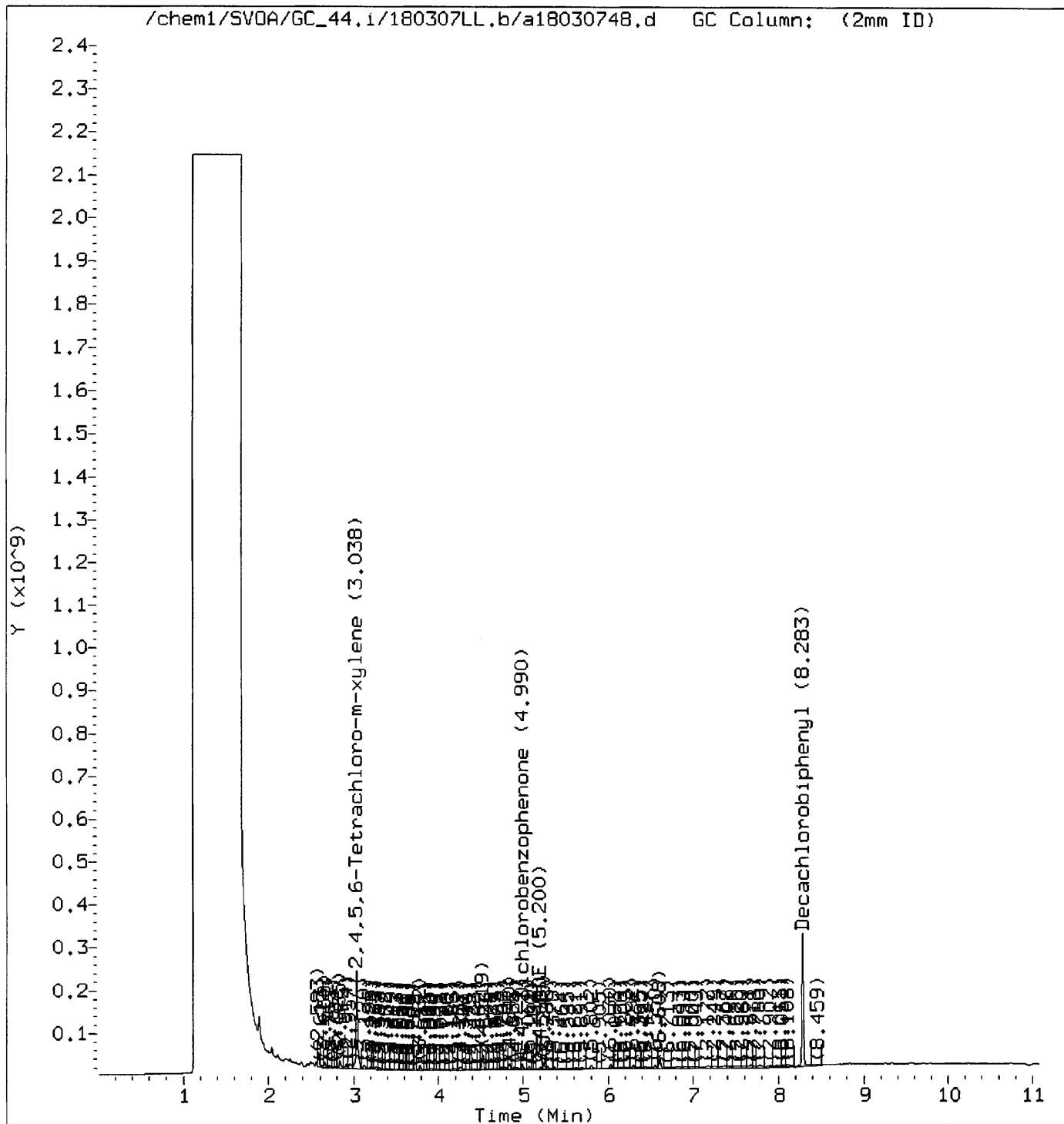
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File

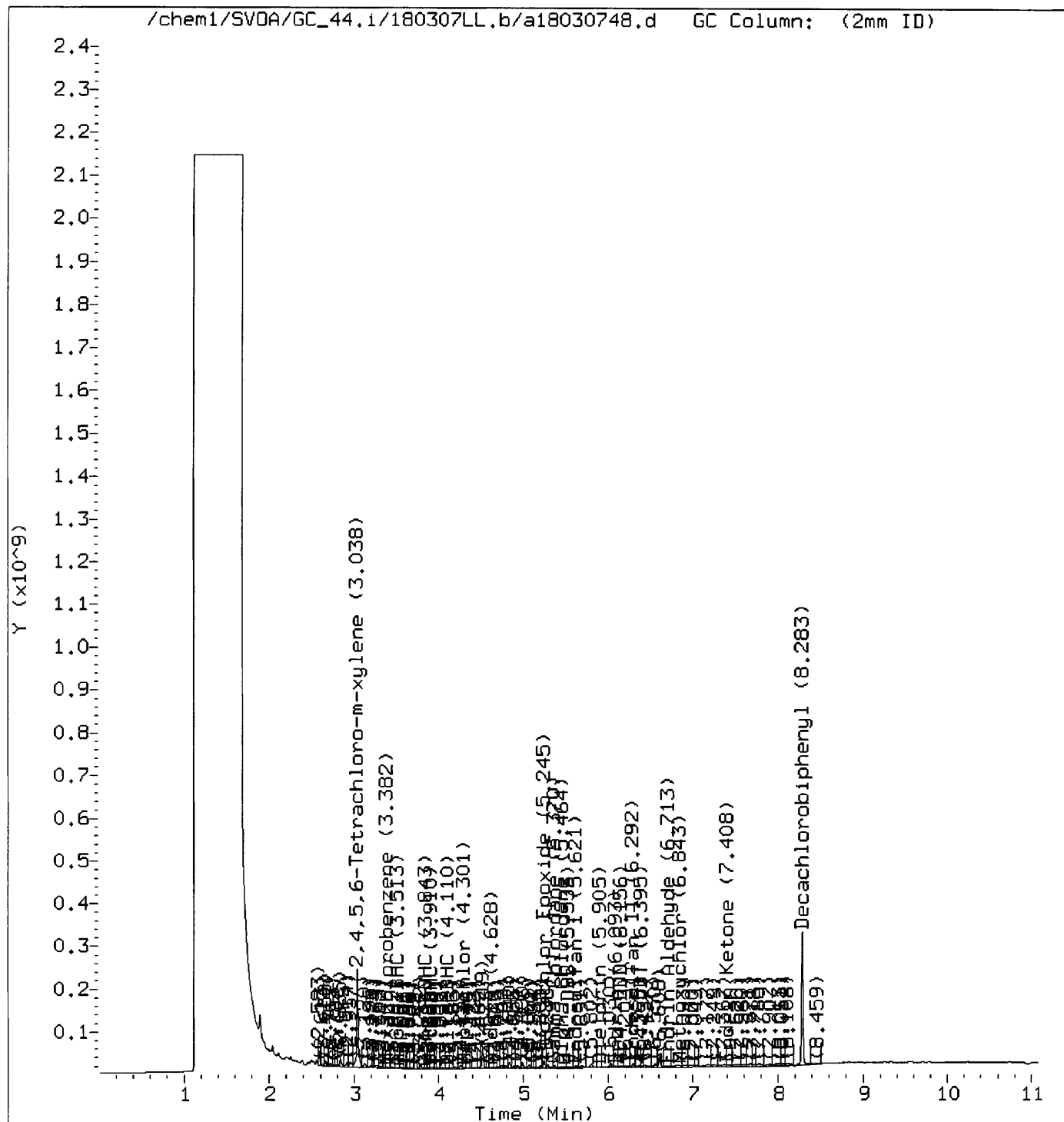


Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhn

Audit/management approval: _____

Ln



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030748.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:54
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-27
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
					ON-COLUMN	FINAL	
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T	1 2,4,5,6-Tetrachloro-m-xylene	2.844	2.842	0.002	5715608170	53.7681	53.768
	2 Hexachlorobenzene	3.223	3.226	-0.003	139446331	0.90013	0.900 (a)
	3 Alpha-BHC	3.338	3.337	0.001	159965072	0.88103	0.881 (a)
	4 Gamma-BHC	3.666	3.656	0.010	728813629	4.59810	4.598
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordanes	Compound Not Detected.					
	11 Heptachlor Epoxide	4.984	4.975	0.009	304369229	2.39764	2.397 (H)
	12 2,4'-DDE	5.159	5.155	0.004	535682503	6.01344	6.013 (M)
	13 Gamma Chlordane	5.159	5.162	-0.003	535682503	4.10745	4.107
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.378	5.366	0.012	303120497	2.58032	2.580
	17 4,4'-DDE	5.460	5.463	-0.003	204629278	1.72780	1.727 (a)
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

						CONCENTRATIONS	
Compounds		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====		==	=====	=====	=====	=====	=====
	22 Cis-Nonachlor		Compound	Not Detected.			
	23 4,4'-DDD		Compound	Not Detected.			
	24 Endosulfan II		Compound	Not Detected.			
	25 4,4'-DDT	6.333	6.325	0.008	255069068	2.55326	2.553 (M)
	26 Endrin Aldehyde	6.453	6.450	0.003	852200531	9.47658	9.476
	27 Endosulfan Sulfate		Compound	Not Detected.			
	28 Mirex		Compound	Not Detected.			
	29 Methoxychlor		Compound	Not Detected.			
	30 Endrin Ketone		Compound	Not Detected.			
T	31 Decachlorobiphenyl	8.325	8.325	0.000	7383168974	76.4073	76.407
M	32 Chlordane		Compound	Not Detected.			
	33 CHLD (1)		Compound	Not Detected.			
	34 CHLD (2)		Compound	Not Detected.			
	35 CHLD (3)		Compound	Not Detected.			
	36 CHLD (4)		Compound	Not Detected.			
	37 CHLD (5)		Compound	Not Detected.			
M	38 Toxaphene		Compound	Not Detected.			
	39 TOXAPHENE (1)		Compound	Not Detected.			
	40 TOXAPHENE (2)		Compound	Not Detected.			
	41 TOXAPHENE (3)		Compound	Not Detected.			
	42 TOXAPHENE (4)		Compound	Not Detected.			
	43 TOXAPHENE (5)		Compound	Not Detected.			

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/b18030748.d

Page 1

Date : 07-MAR-2018 14:54

Client ID:

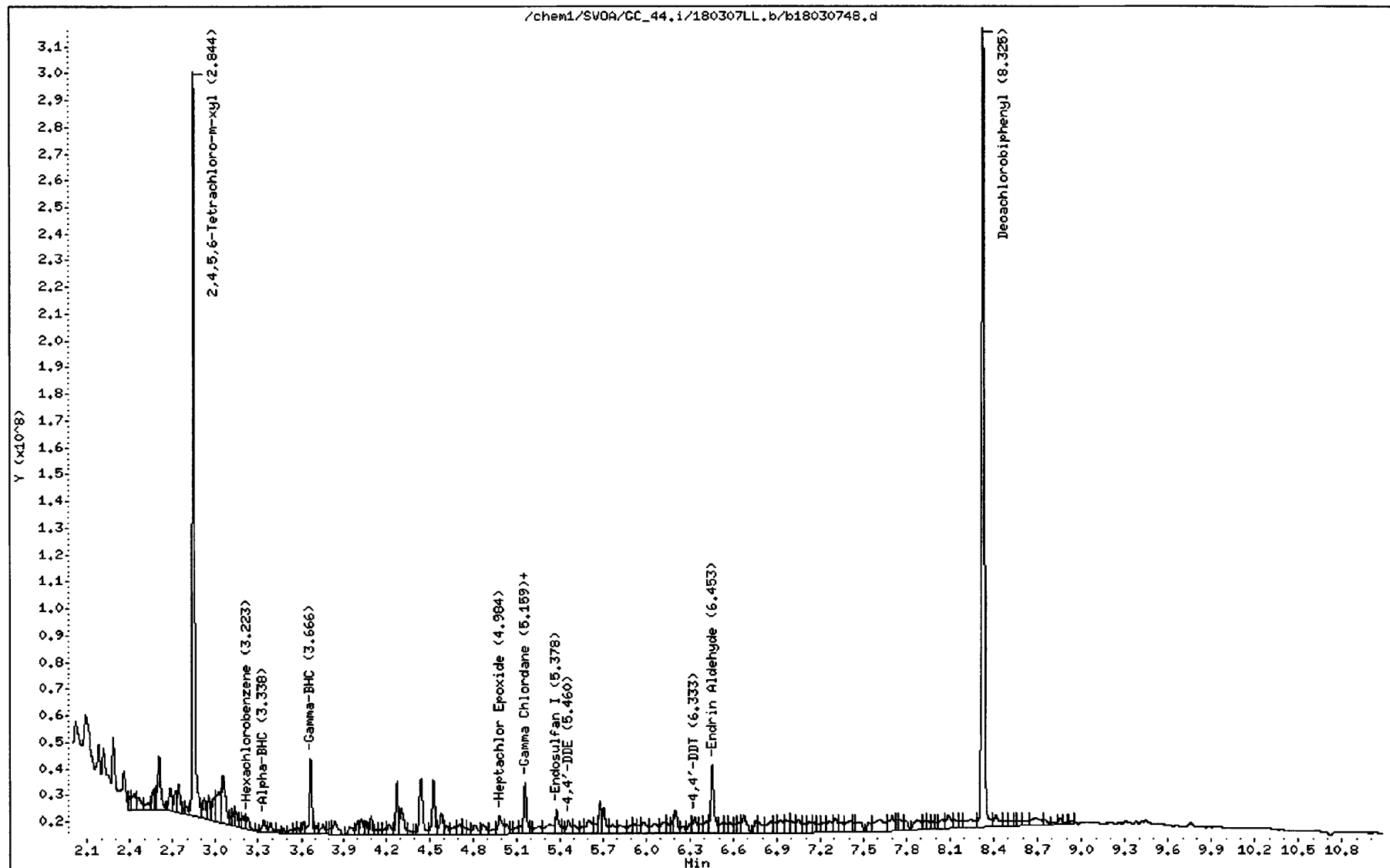
Instrument: GC_44.i

Sample Info: 18-02-1890-27

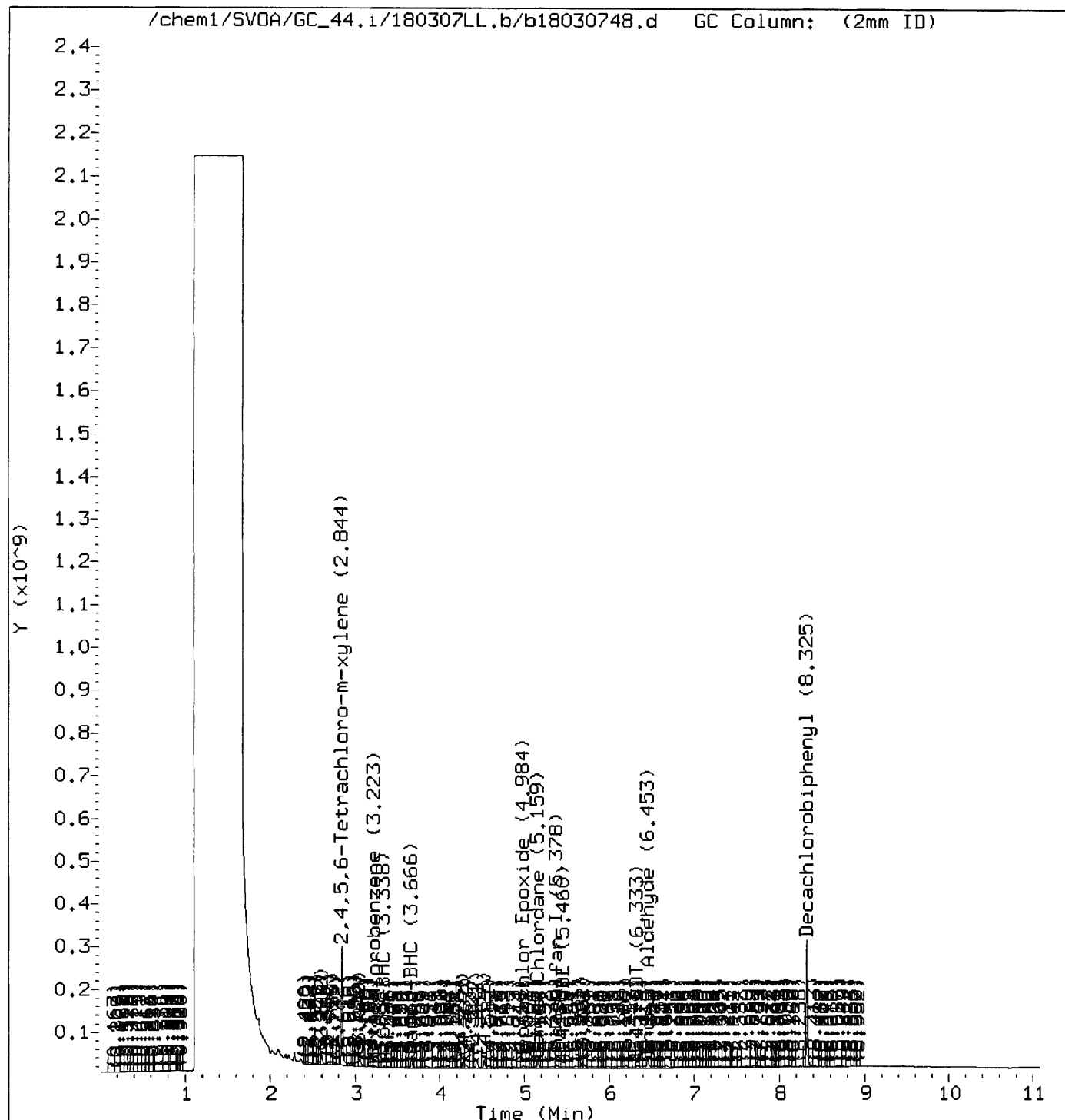
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File

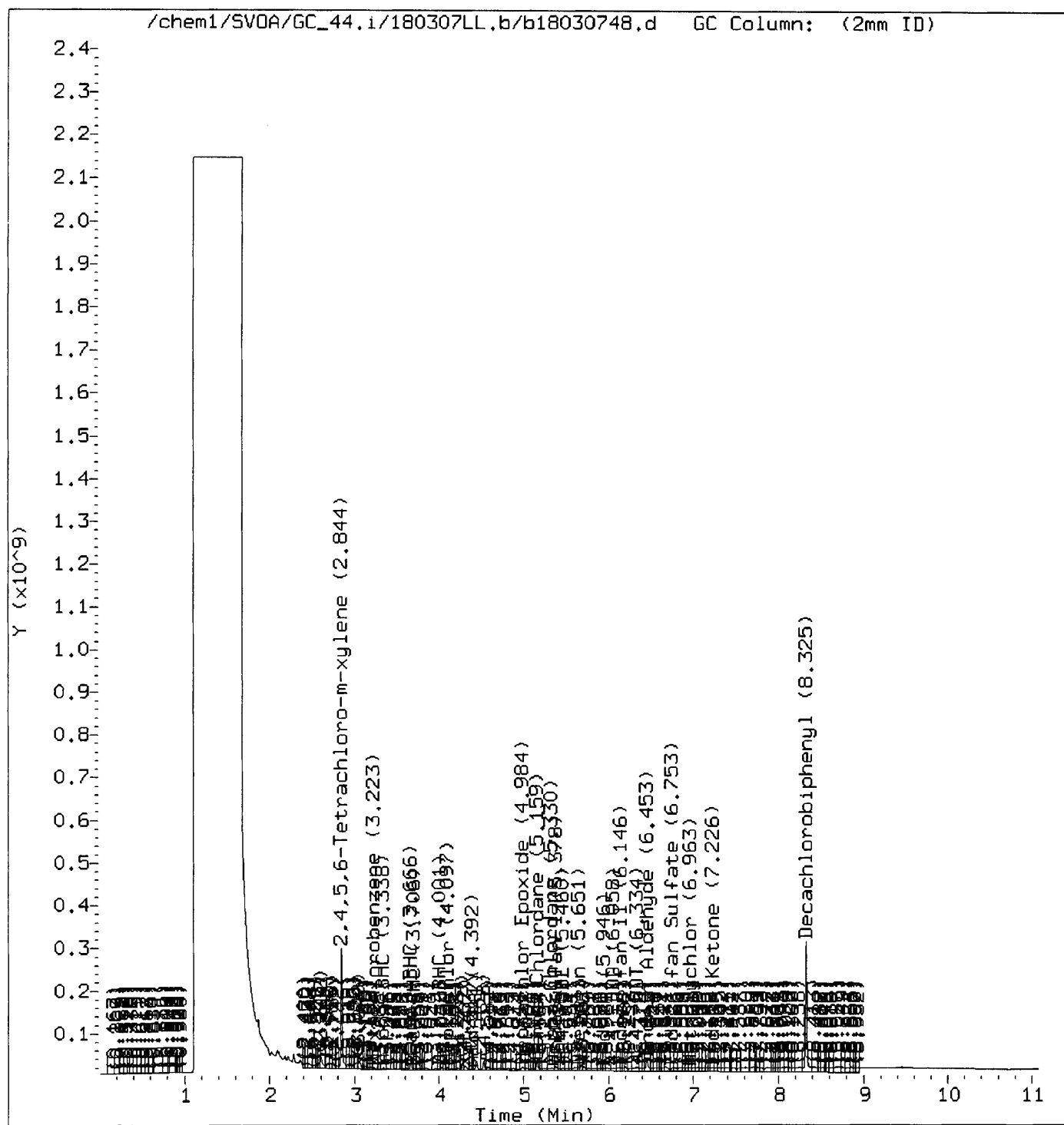


Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhn

Audit/management approval: _____

Ch



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030748.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:54
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-27
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2,4,4'-DDMU				Compound Not Detected.		

Data File: /chem1/SVOA/GC_44.i/180307DDMU,b/a18030748.d

Page 1

Date : 07-MAR-2018 14:54

Client ID:

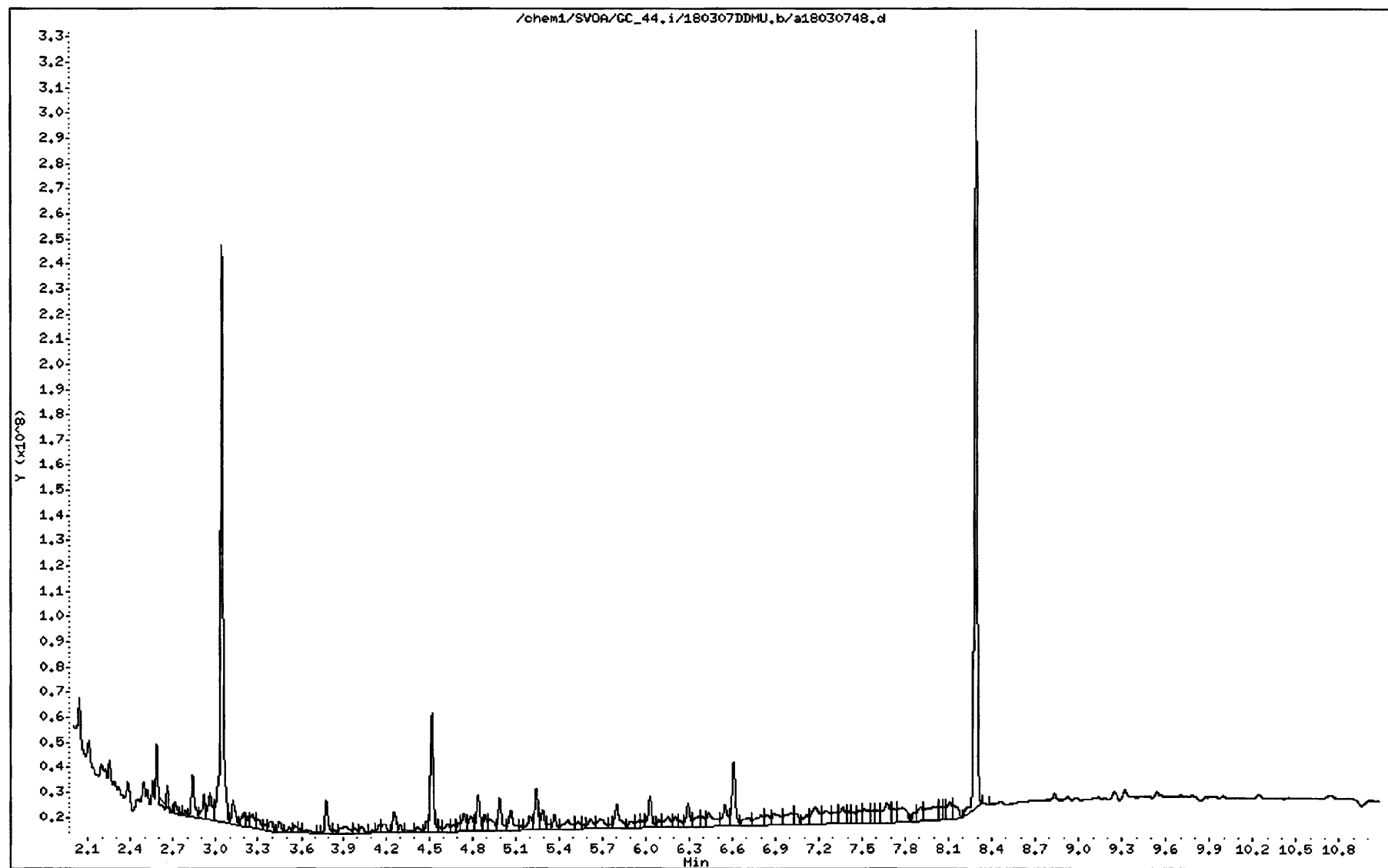
Instrument: GC_44.i

Sample Info: 18-02-1890-27

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030748.d
Lab Smp Id:
Inj Date : 07-MAR-2018 14:54
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-27
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 48
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====		=====	=====	=====
2 4,4'-DDMU	5.159	5.122	0.037	1270249774	29.1854	29.185	

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030748.d

Page 1

Date : 07-MAR-2018 14:54

Client ID:

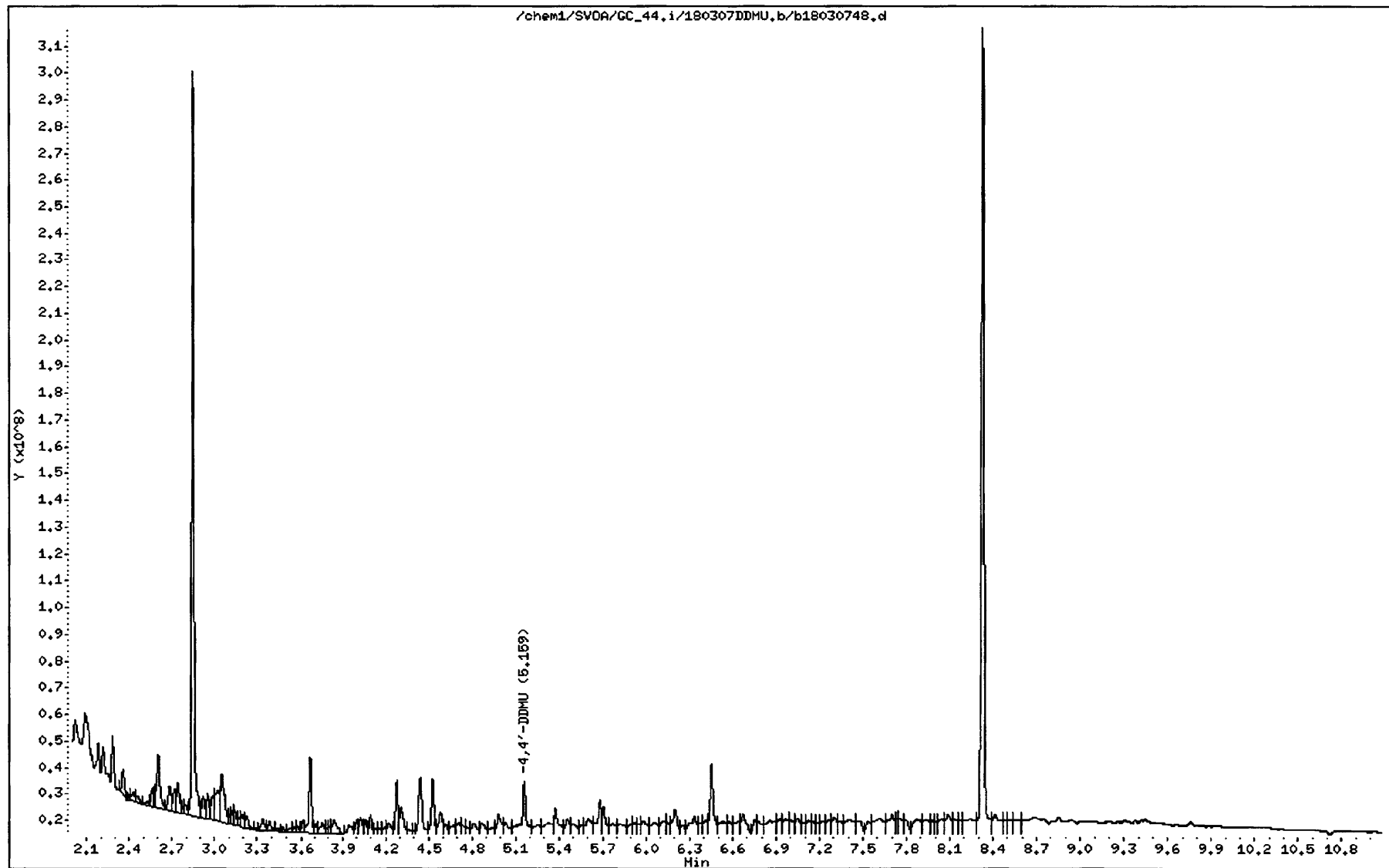
Instrument: GC_44.i

Sample Info: 18-02-1890-27

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 15:08
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074918030749

31 **CLIENT SAMPLE NUMBER:** CM-RW-10-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	2.97	1.98	1.00	1.3	Y	88%	2	5.09
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	7.28	ND	1.00	2.0	#Y		2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030749.d
Lab Smp Id:
Inj Date : 07-MAR-2018 15:08
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-31
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 49
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
-----	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.038	3.036	0.002	7541252776	75.6500	75.650
2 Hexachlorobenzene	Compound Not Detected.					
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	4.990	4.976	0.014	481472018	17.1564	17.156(M)
10 Oxychlordan	Compound Not Detected.					
11 2,4'-DDE	5.200	5.198	0.002	290291322	2.97288	2.972(M)
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 4,4'-DDE	Compound Not Detected.					
17 Endosulfan I	Compound Not Detected.					
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.			
23 4,4'-DDD					Compound Not Detected.			
24 Endosulfan II					Compound Not Detected.			
25 4,4'-DDT					Compound Not Detected.			
26 Endrin Aldehyde					Compound Not Detected.			
27 Methoxychlor					Compound Not Detected.			
28 Mirex					Compound Not Detected.			
29 Endosulfan Sulfate					Compound Not Detected.			
30 Endrin Ketone					Compound Not Detected.			
\$ 31 Decachlorobiphenyl	8.284	8.284	0.000	10520706253	100.787	100.787		
M 32 Chlordane					Compound Not Detected.			
33 CHLD (1)					Compound Not Detected.			
34 CHLD (2)					Compound Not Detected.			
35 CHLD (3)					Compound Not Detected.			
36 CHLD (4)					Compound Not Detected.			
37 CHLD (5)					Compound Not Detected.			
M 38 Toxaphene					Compound Not Detected.			
39 TOXAPHENE (1)					Compound Not Detected.			
40 TOXAPHENE (2)					Compound Not Detected.			
41 TOXAPHENE (3)					Compound Not Detected.			
42 TOXAPHENE (4)					Compound Not Detected.			
43 TOXAPHENE (5)					Compound Not Detected.			

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030749.d

Page 1

Date : 07-MAR-2018 15:08

Client ID:

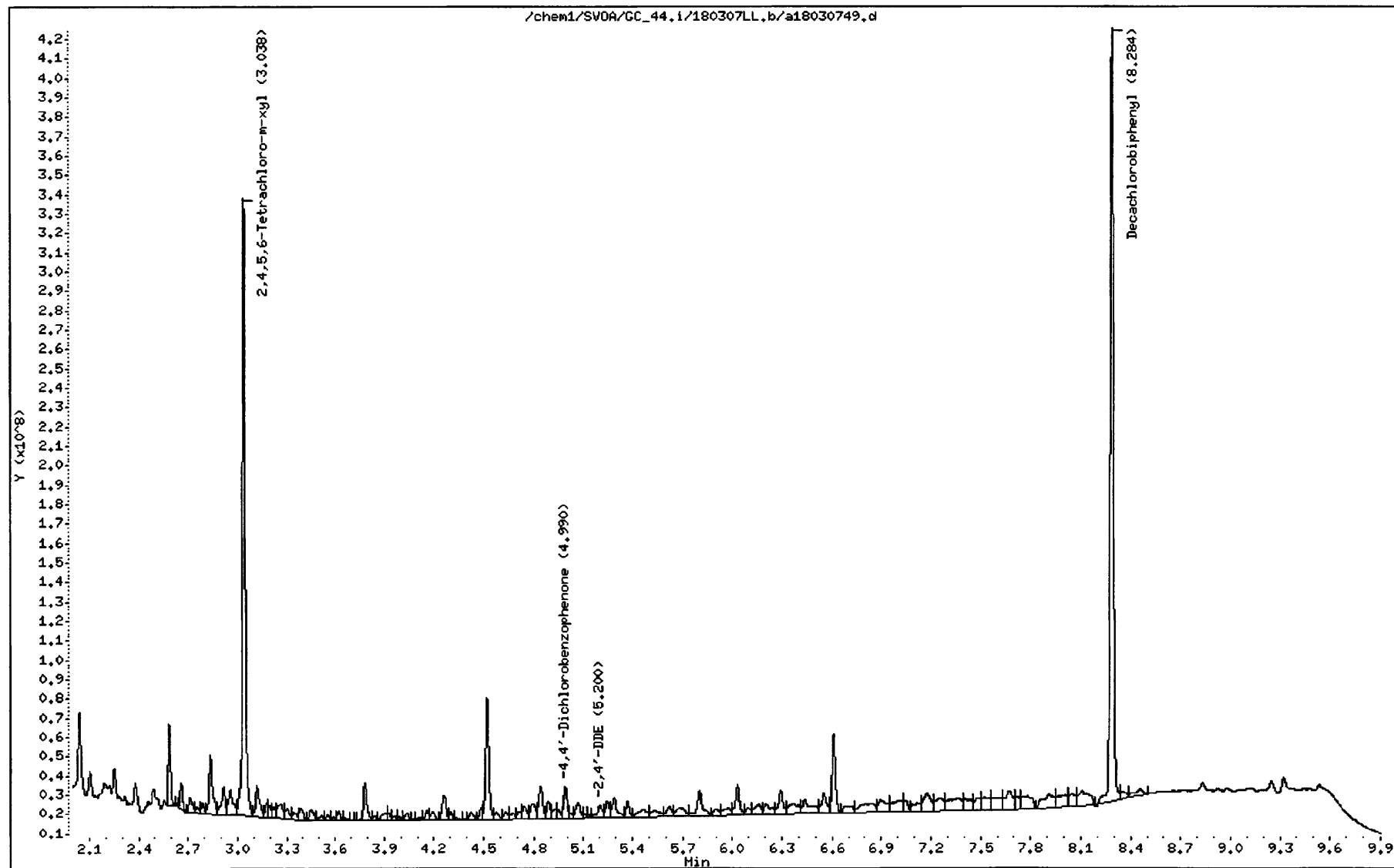
Instrument: GC_44.i

Sample Info: 18-02-1890-31

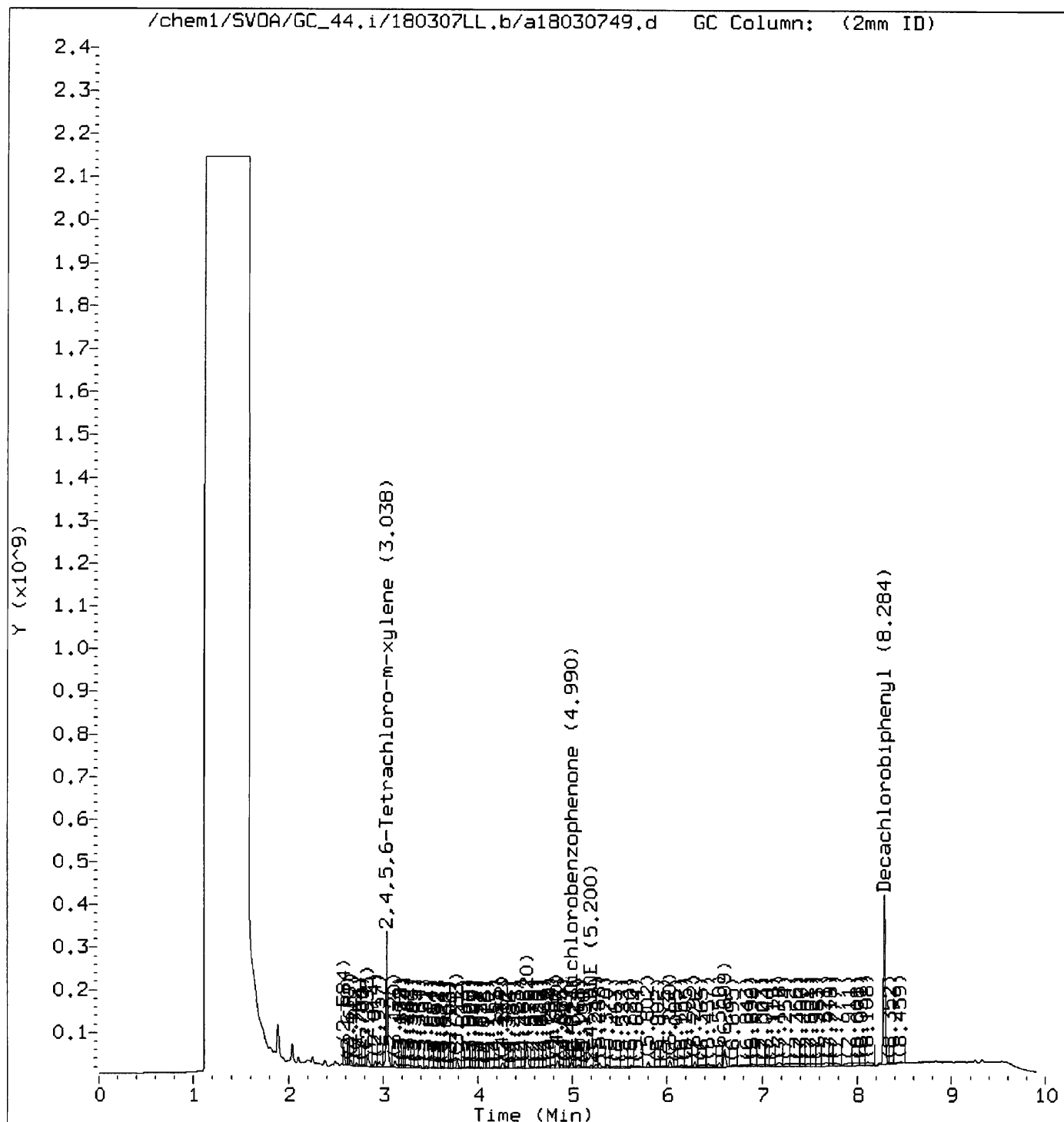
Operator: UHHN

Column phase:

Column diameter: 2.00



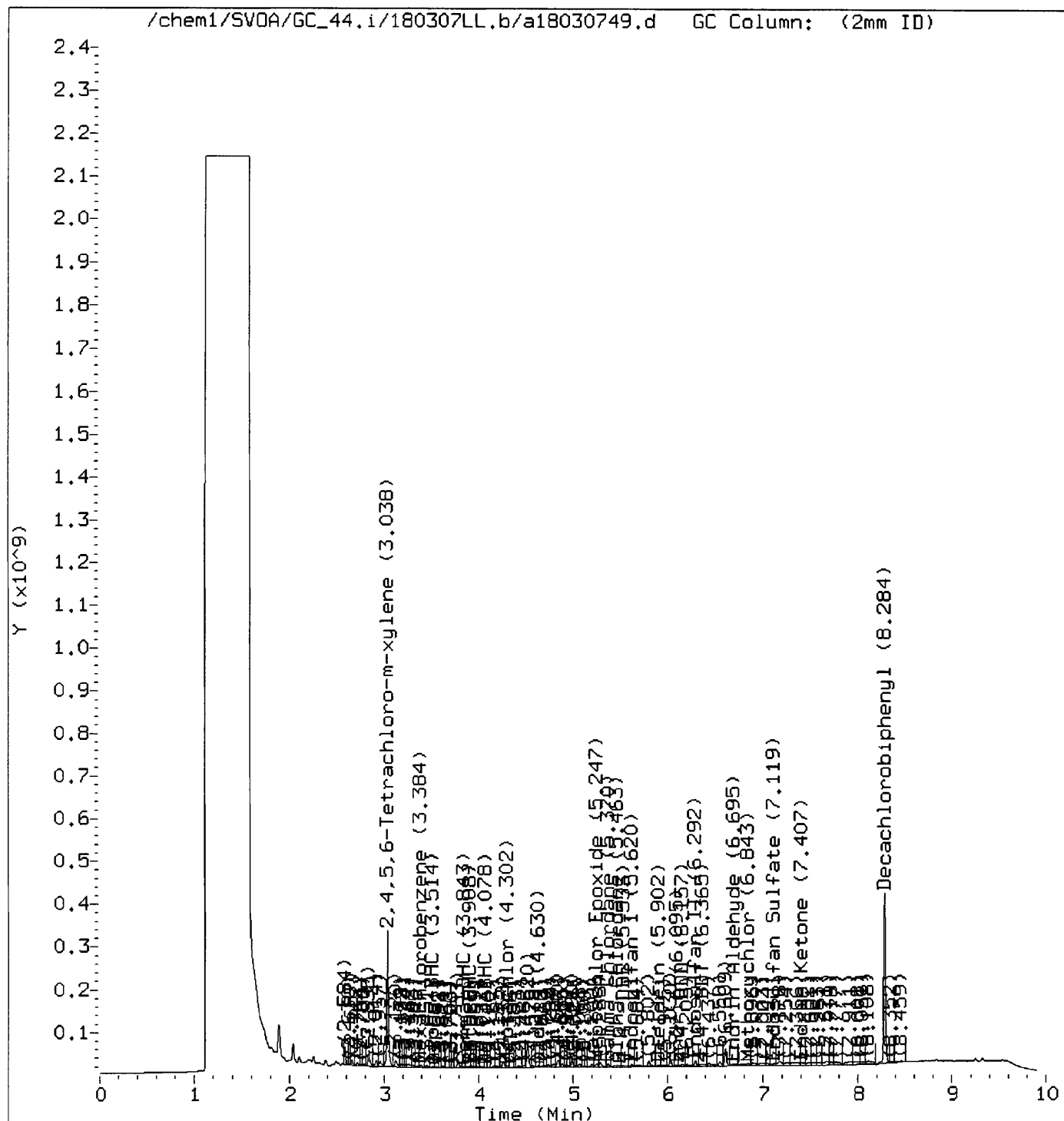
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhhn

Audit/management approval: 4m



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030749.d
Lab Smp Id:
Inj Date : 07-MAR-2018 15:08
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-31
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 49
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	=====	==	=====	=====	=====	=====	=====
T 1	2,4,5,6-Tetrachloro-m-xylene	2.843	2.842	0.001	8012398785	75.3745	75.374
2	Hexachlorobenzene	3.224	3.226	-0.002	193368182	1.24819	1.248 (a)
3	Alpha-BHC	3.338	3.337	0.001	239625871	1.31977	1.319 (a)
4	Gamma-BHC	3.666	3.656	0.010	932582436	5.88368	5.883
5	Beta-BHC	Compound Not Detected.					
6	Delta-BHC	Compound Not Detected.					
7	Heptachlor	Compound Not Detected.					
8	Aldrin	Compound Not Detected.					
9	4,4'-Dichlorobenzophenone	Compound Not Detected.					
10	Oxychlordane	Compound Not Detected.					
11	Heptachlor Epoxide	4.984	4.975	0.009	257708248	2.03008	2.030 (M)
12	2,4'-DDE	5.159	5.155	0.004	679590089	7.62891	7.628 (M)
13	Gamma Chlordane	5.159	5.162	-0.003	679590089	5.21089	5.210
14	Trans-Nonachlor	Compound Not Detected.					
15	Alpha Chlordane	Compound Not Detected.					
16	Endosulfan I	5.378	5.366	0.012	438407353	3.73195	3.731
17	4,4'-DDE	5.460	5.463	-0.003	269349051	2.27427	2.274
18	Dieldrin	Compound Not Detected.					
19	2,4'-DDD	Compound Not Detected.					
20	Endrin	Compound Not Detected.					
21	2,4'-DDT	Compound Not Detected.					

						CONCENTRATIONS	
						ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)	
=====	==	=====	=====	=====	=====	=====	
22 Cis-Nonachlor		Compound	Not	Detected.			
23 4,4'-DDD		Compound	Not	Detected.			
24 Endosulfan II		Compound	Not	Detected.			
25 4,4'-DDT	6.333	6.325	0.008	344614555	3.44961	3.449 (M)	
26 Endrin Aldehyde	6.453	6.450	0.003	1321827108	14.6989	14.698 (H)	
27 Endosulfan Sulfate		Compound	Not	Detected.			
28 Mirex		Compound	Not	Detected.			
29 Methoxychlor		Compound	Not	Detected.			
30 Endrin Ketone		Compound	Not	Detected.			
T 31 Decachlorobiphenyl	8.325	8.325	0.000	9605185162	99.4026	99.402 (A)	
M 32 Chlordane		Compound	Not	Detected.			
33 CHLD (1)		Compound	Not	Detected.			
34 CHLD (2)		Compound	Not	Detected.			
35 CHLD (3)		Compound	Not	Detected.			
36 CHLD (4)		Compound	Not	Detected.			
37 CHLD (5)		Compound	Not	Detected.			
M 38 Toxaphene		Compound	Not	Detected.			
39 TOXAPHENE (1)		Compound	Not	Detected.			
40 TOXAPHENE (2)		Compound	Not	Detected.			
41 TOXAPHENE (3)		Compound	Not	Detected.			
42 TOXAPHENE (4)		Compound	Not	Detected.			
43 TOXAPHENE (5)		Compound	Not	Detected.			

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030749.d

Date : 07-MAR-2018 15:08

Client ID:

Sample Info: 18-02-1890-31

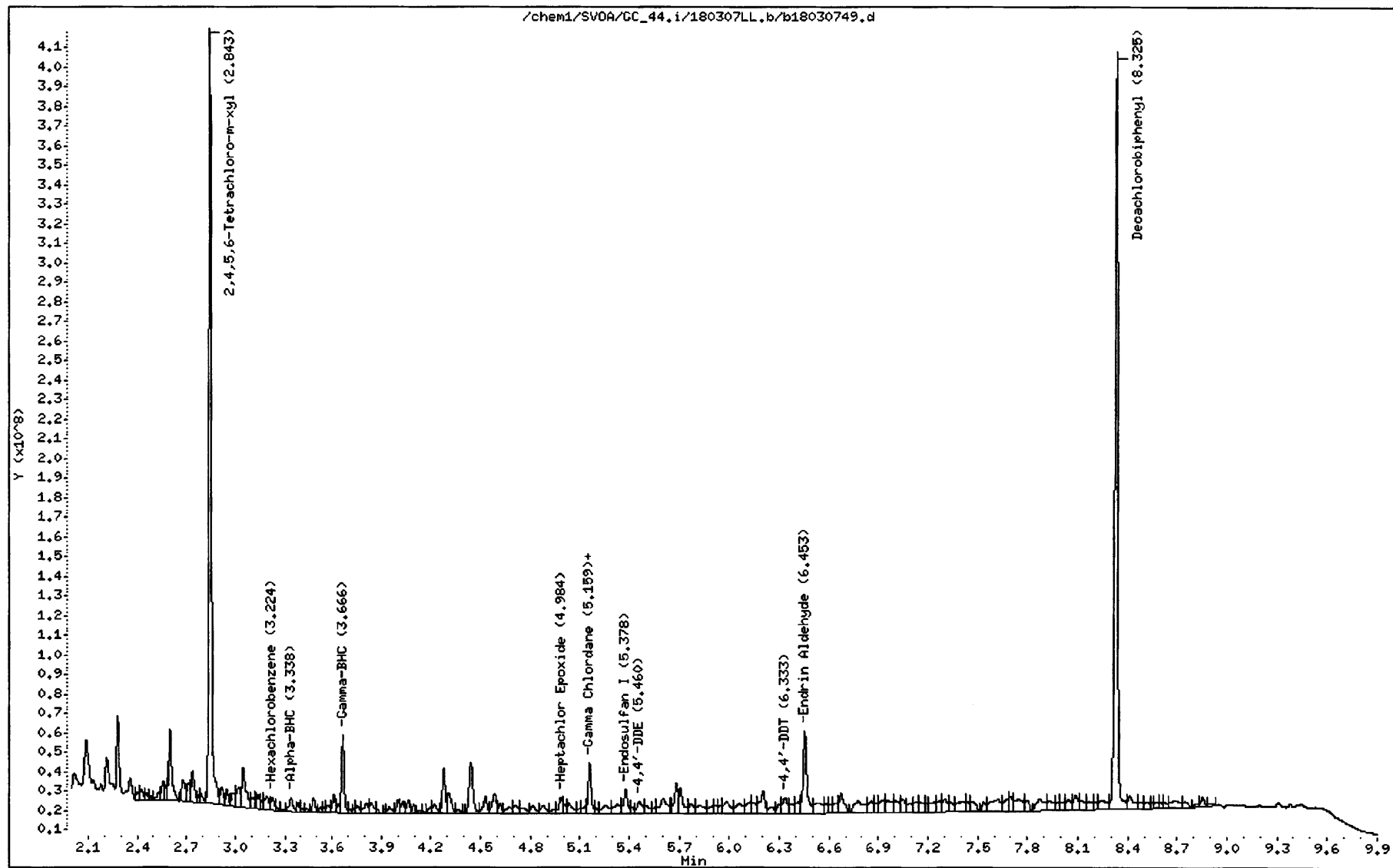
Page 1

Instrument: GC_44.i

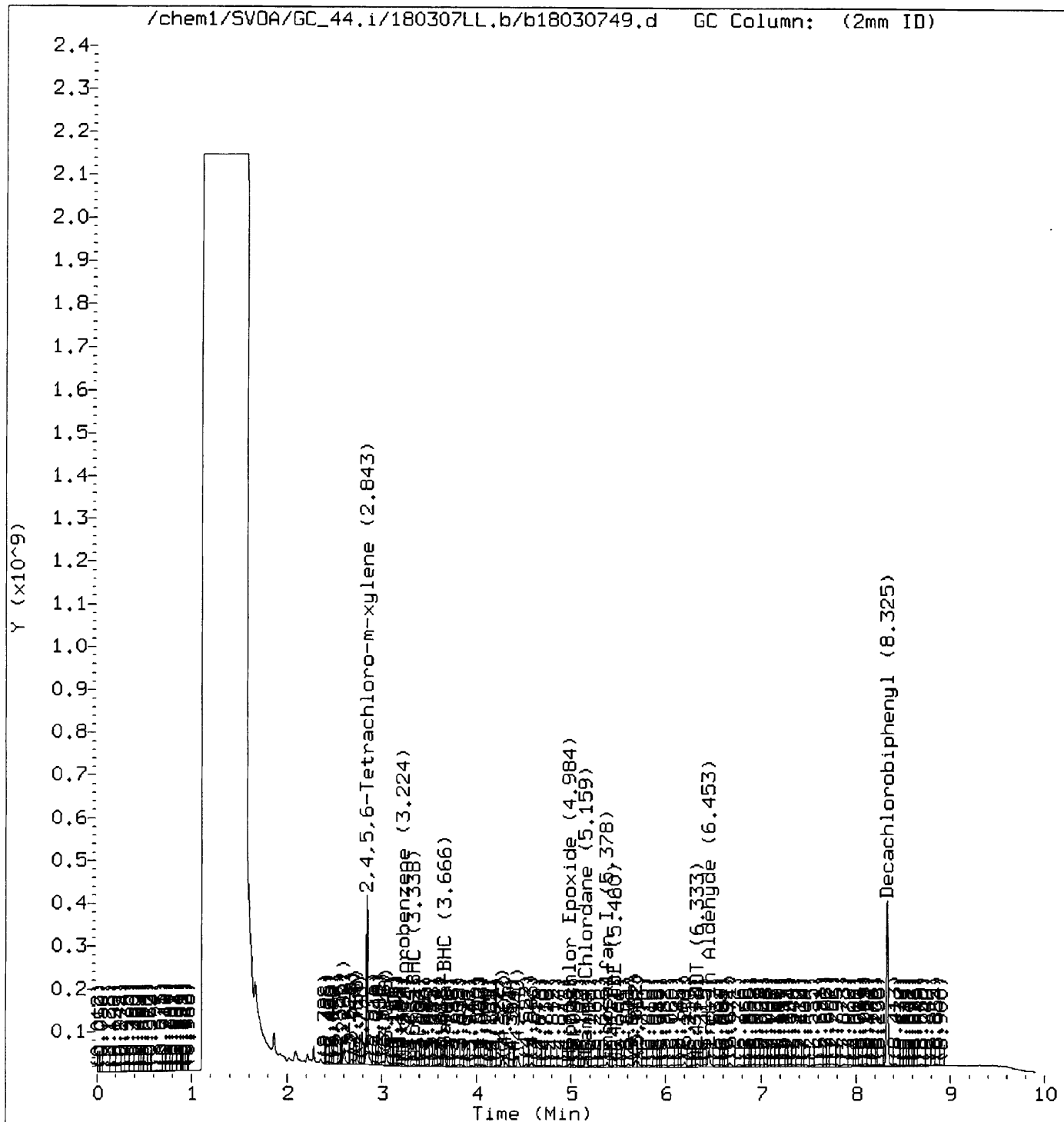
Operator: UHHN

Column diameter: 2.00

Column phase:



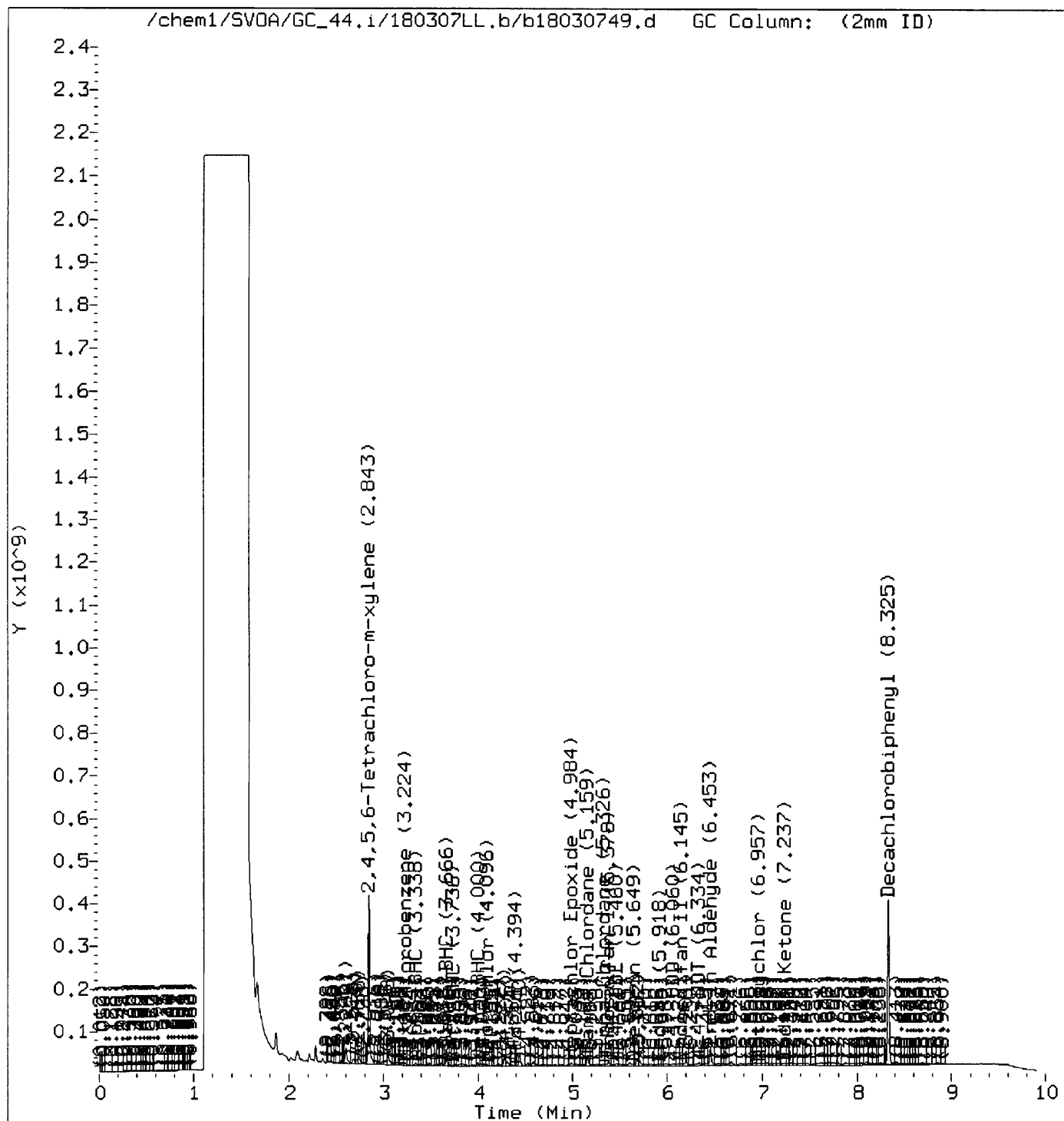
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhn

Audit/management approval: 4m



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030749.d
Lab Smp Id:
Inj Date : 07-MAR-2018 15:08
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-31
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:11 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 49
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.199	5.208	-0.009	292347891	7.27591	7.275	

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/a18030749.d

Page 1

Date : 07-MAR-2018 15:08

Client ID:

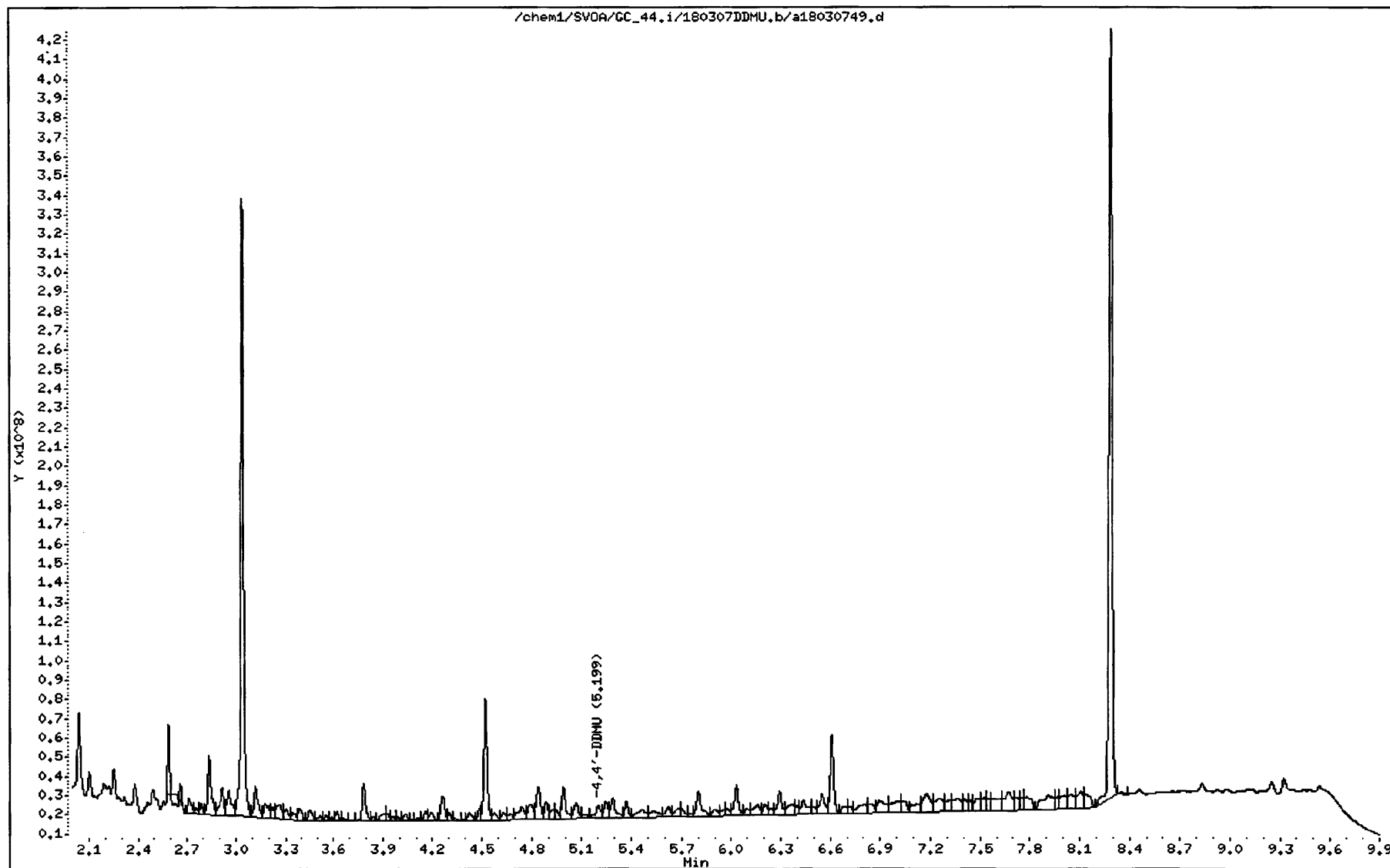
Instrument: GC_44.i

Sample Info: 18-02-1890-31

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030749.d
Lab Smp Id:
Inj Date : 07-MAR-2018 15:08
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-31
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 49
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.159	5.122	0.037	1155609880	26.5514	26.551

Data File: /chem1/SV0A/GC_44.i/180307DDMU.b/b18030749.d

Page 1

Date : 07-MAR-2018 15:08

Client ID:

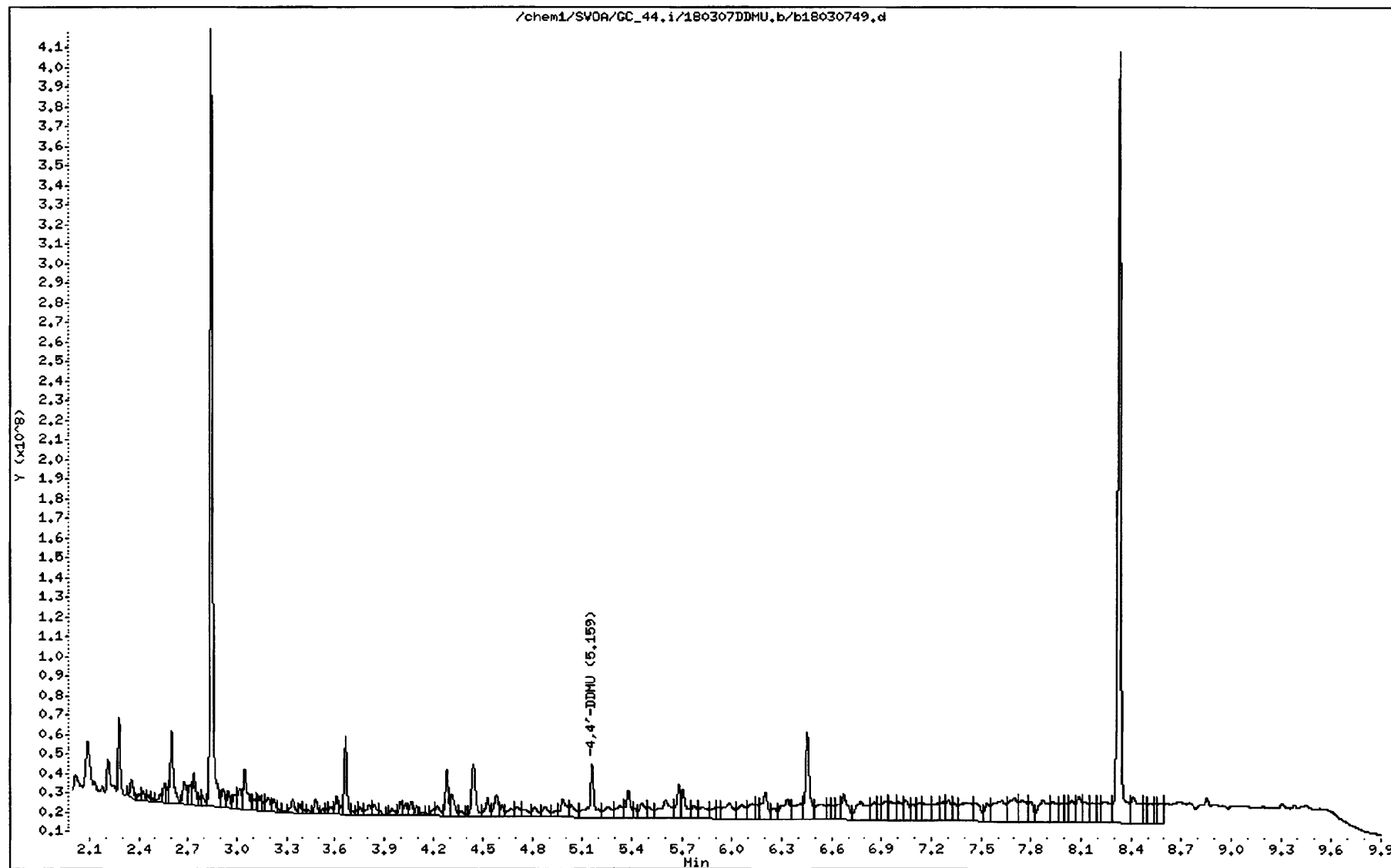
Instrument: GC_44.i

Sample Info: 18-02-1890-31

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 15:57
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803075018030750

34 **CLIENT SAMPLE NUMBER:** CM-RW-11-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	8.69	5.80	1.00	1.3	Y	65%	2	11.4
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	1.93	1.29	1.00	1.3	J	26%	2	1.67
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030750.d
Lab Smp Id:
Inj Date : 07-MAR-2018 15:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-34
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.037	3.036	0.001	6940016398	69.6187	69.618
2 Hexachlorobenzene	3.382	3.382	0.000	276352284	1.90387	1.903(a)
3 Alpha-BHC	Compound Not Detected.					
4 Gamma-BHC	Compound Not Detected.					
5 Beta-BHC	Compound Not Detected.					
6 Delta-BHC	Compound Not Detected.					
7 Heptachlor	Compound Not Detected.					
8 Aldrin	Compound Not Detected.					
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	4.989	5.198	-0.209	848370728	8.68818	8.688(M)
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	Compound Not Detected.					
16 4,4'-DDE	5.536	5.539	-0.003	220441464	1.93012	1.930(a)
17 Endosulfan I	5.619	5.625	-0.006	226520500	1.89950	1.899(aH)
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	Compound Not Detected.					

							CONCENTRATIONS	
							ON-COLUMN	FINAL
Compounds	RT	EXP	RT	DLT	RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor		Compound	Not	Detected.				
23 4,4'-DDD		Compound	Not	Detected.				
24 Endosulfan II		Compound	Not	Detected.				
25 4,4'-DDT		Compound	Not	Detected.				
26 Endrin Aldehyde		Compound	Not	Detected.				
27 Methoxychlor		Compound	Not	Detected.				
28 Mirex		Compound	Not	Detected.				
29 Endosulfan Sulfate		Compound	Not	Detected.				
30 Endrin Ketone		Compound	Not	Detected.				
\$ 31 Decachlorobiphenyl	8.282	8.284	-0.002	9263168654		88.7402		88.740
M 32 Chlordane		Compound	Not	Detected.				
33 CHLD (1)		Compound	Not	Detected.				
34 CHLD (2)		Compound	Not	Detected.				
35 CHLD (3)		Compound	Not	Detected.				
36 CHLD (4)		Compound	Not	Detected.				
37 CHLD (5)		Compound	Not	Detected.				
M 38 Toxaphene		Compound	Not	Detected.				
39 TOXAPHENE (1)		Compound	Not	Detected.				
40 TOXAPHENE (2)		Compound	Not	Detected.				
41 TOXAPHENE (3)		Compound	Not	Detected.				
42 TOXAPHENE (4)		Compound	Not	Detected.				
43 TOXAPHENE (5)		Compound	Not	Detected.				

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030750.d

Date : 07-MAR-2018 15:57

Client ID:

Sample Info: 18-02-1890-34

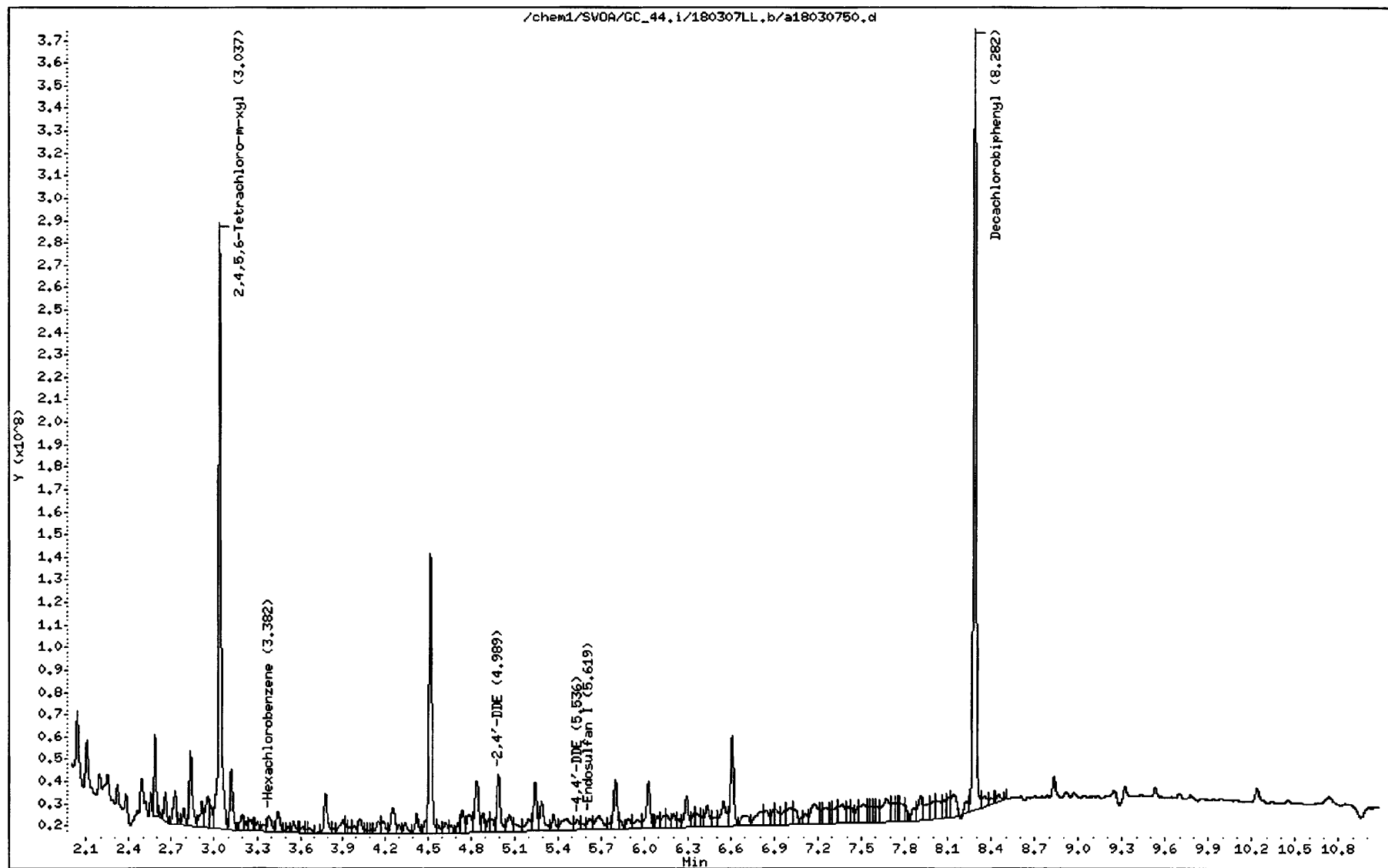
Page 1

Instrument: GC_44.i

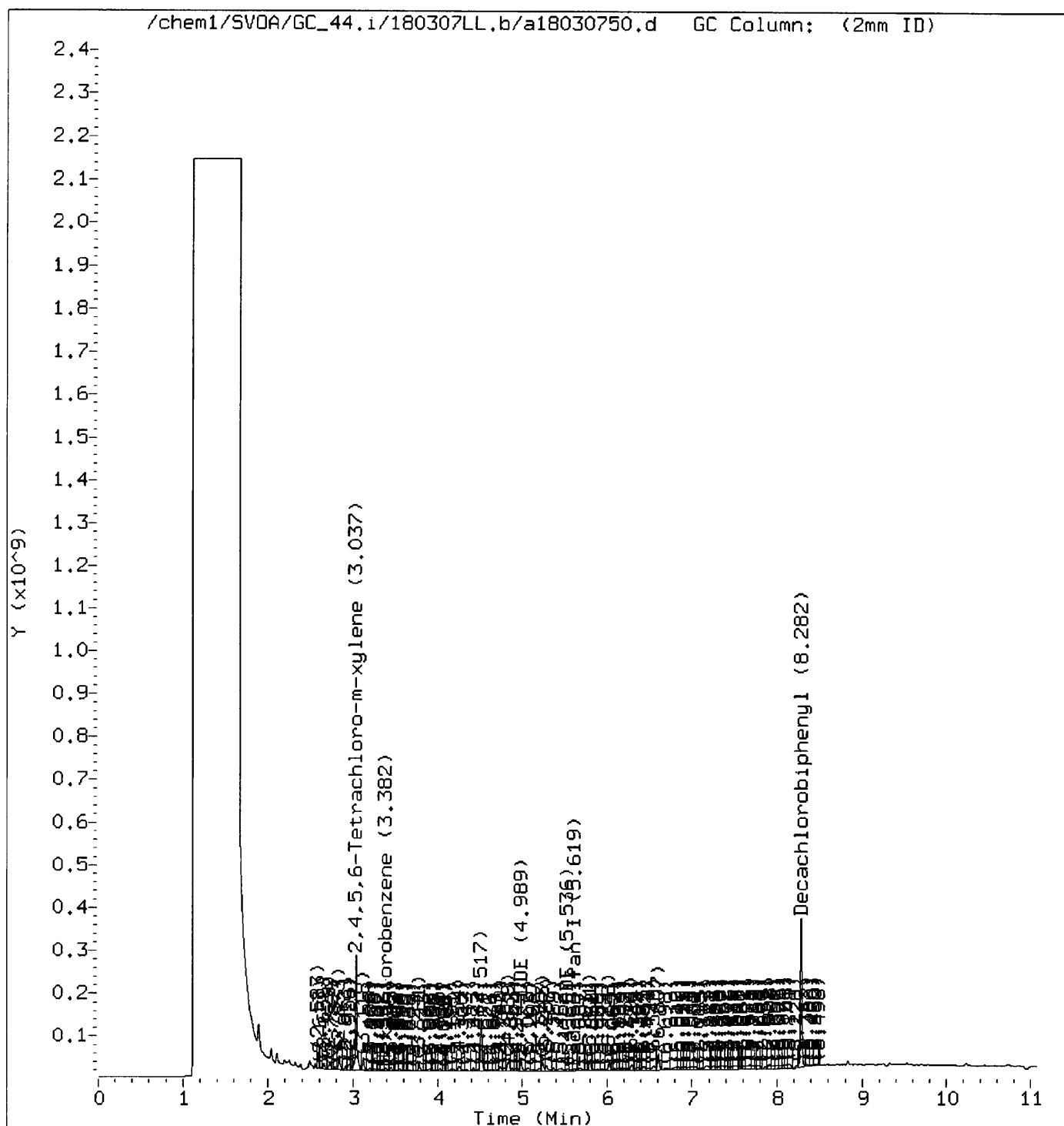
Operator: UHHN

Column diameter: 2.00

Column phase:



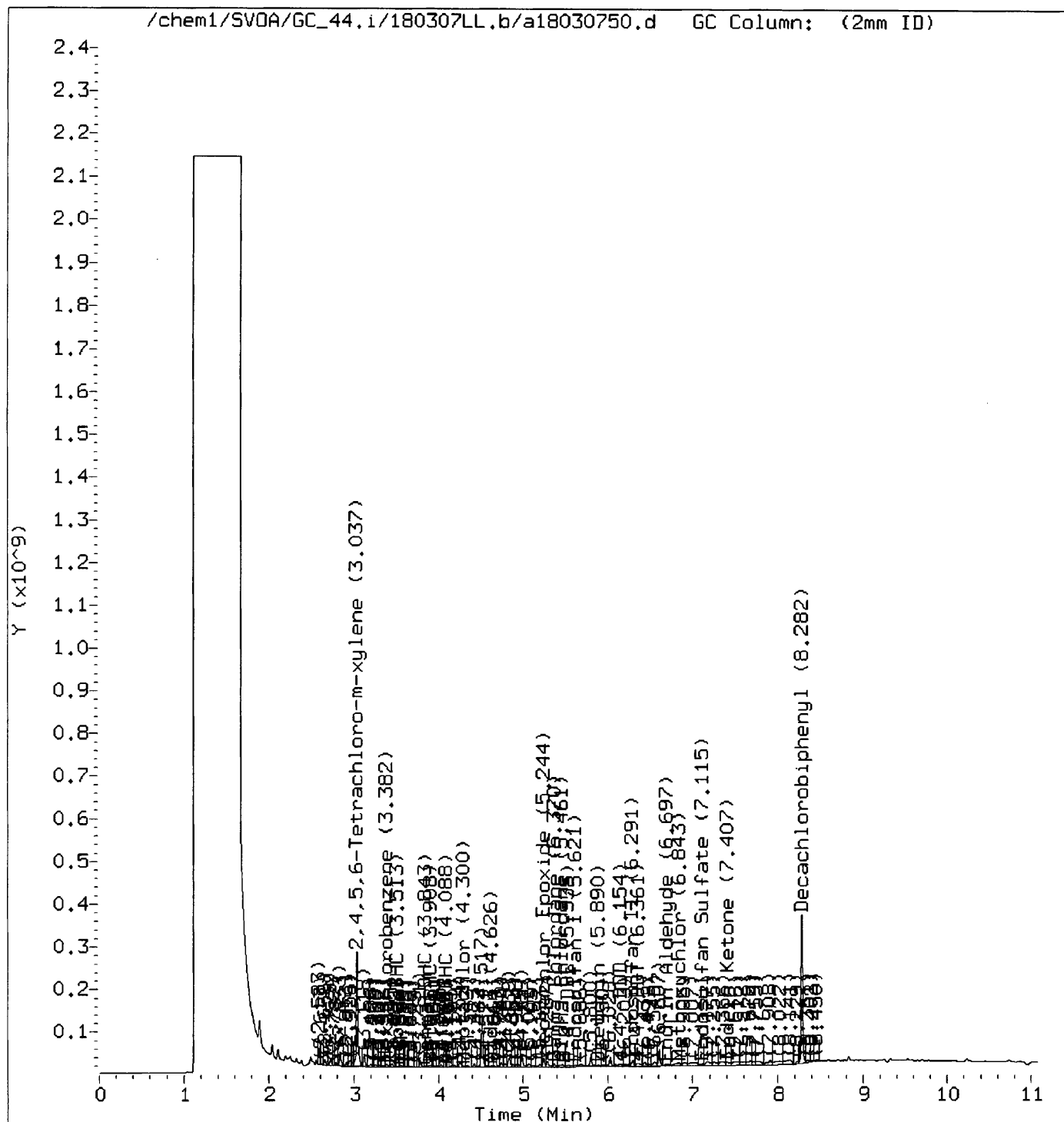
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:40.
Target 3.5 esignature user ID: uhhn

Audit/management approval: 4m



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030750.d
Lab Smp Id:
Inj Date : 07-MAR-2018 15:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-34
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

					CONCENTRATIONS		
					ON-COLUMN	FINAL	
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T	1 2,4,5,6-Tetrachloro-m-xylene	2.843	2.842	0.001	6925353787	65.1484	65.148
	2 Hexachlorobenzene	3.228	3.226	0.002	250076403	1.61425	1.614 (a)
	3 Alpha-BHC	3.337	3.337	0.000	302662325	1.66695	1.666 (a)
	4 Gamma-BHC	3.665	3.656	0.009	1025024535	6.46690	6.466
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordan	Compound Not Detected.					
	11 Heptachlor Epoxide	Compound Not Detected.					
	12 2,4'-DDE	5.158	5.155	0.003	1517260227	17.0324	17.032 (M)
	13 Gamma Chlordane	5.158	5.162	-0.004	1517260227	11.6339	11.633
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.377	5.366	0.011	585760082	4.98629	4.986
	17 4,4'-DDE	5.461	5.463	-0.002	297115210	2.50871	2.508
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

							CONCENTRATIONS	
							ON-COLUMN	FINAL
Compounds	RT	EXP	RT	DLT	RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor		Compound	Not	Detected.				
23 4,4'-DDD		Compound	Not	Detected.				
24 Endosulfan II		Compound	Not	Detected.				
25 4,4'-DDT	6.332	6.325	0.007	373392699		3.73768		3.737 (M)
26 Endrin Aldehyde	6.452	6.450	0.002	1320381031		14.6828		14.682
27 Endosulfan Sulfate		Compound	Not	Detected.				
28 Mirex		Compound	Not	Detected.				
29 Methoxychlor		Compound	Not	Detected.				
30 Endrin Ketone		Compound	Not	Detected.				
T 31 Decachlorobiphenyl	8.324	8.325	-0.001	8590254180		88.8993		88.899 (A)
M 32 Chlordane		Compound	Not	Detected.				
33 CHLD (1)		Compound	Not	Detected.				
34 CHLD (2)		Compound	Not	Detected.				
35 CHLD (3)		Compound	Not	Detected.				
36 CHLD (4)		Compound	Not	Detected.				
37 CHLD (5)		Compound	Not	Detected.				
M 38 Toxaphene		Compound	Not	Detected.				
39 TOXAPHENE (1)		Compound	Not	Detected.				
40 TOXAPHENE (2)		Compound	Not	Detected.				
41 TOXAPHENE (3)		Compound	Not	Detected.				
42 TOXAPHENE (4)		Compound	Not	Detected.				
43 TOXAPHENE (5)		Compound	Not	Detected.				

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030750.d

Date : 07-MAR-2018 15:57

Client ID:

Sample Info: 18-02-1890-34

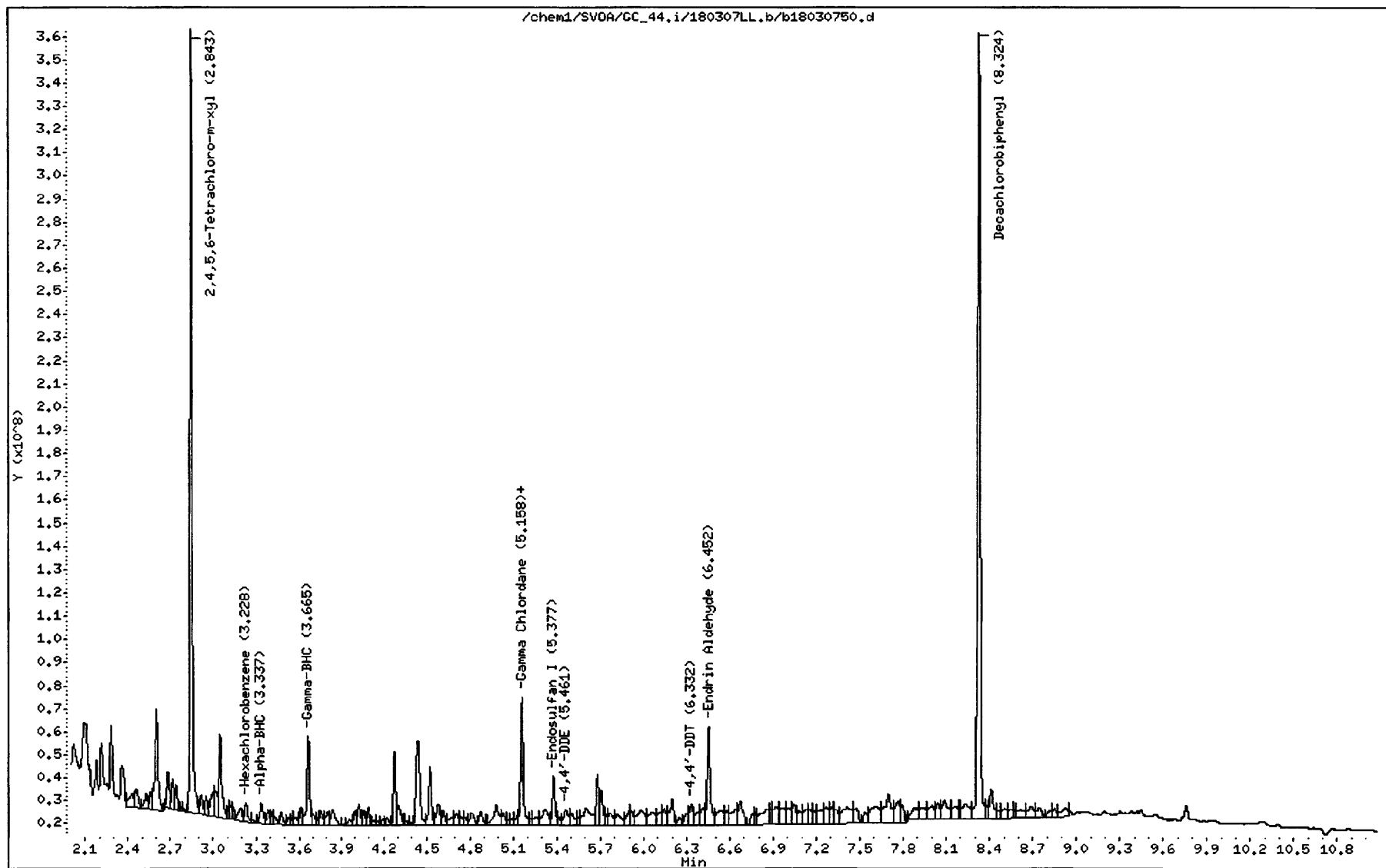
Column phase:

Instrument: GC_44.i

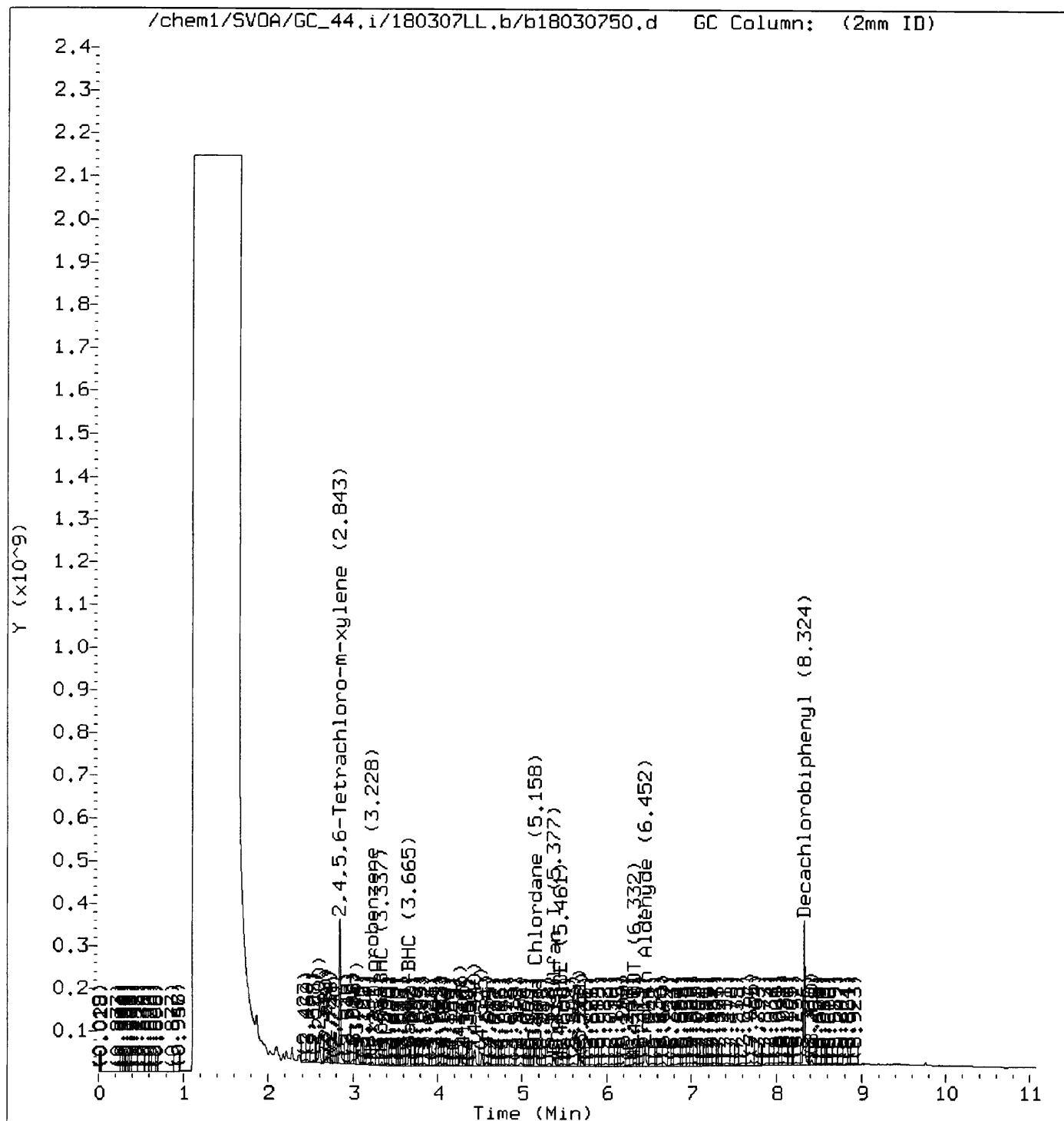
Operator: UHHN

Column diameter: 2.00

Page 1



Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhn

Audit/management approval: 4m

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030750.d
Lab Smp Id:
Inj Date : 07-MAR-2018 15:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-34
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	CONCENTRATIONS				
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN FINAL
				(ppb)	(ug/Kg)
-----	==	=====	=====	=====	=====
2 4,4'-DDMU				Compound Not Detected.	

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030750.d

Page 1

Date : 07-MAR-2018 15:57

Client ID:

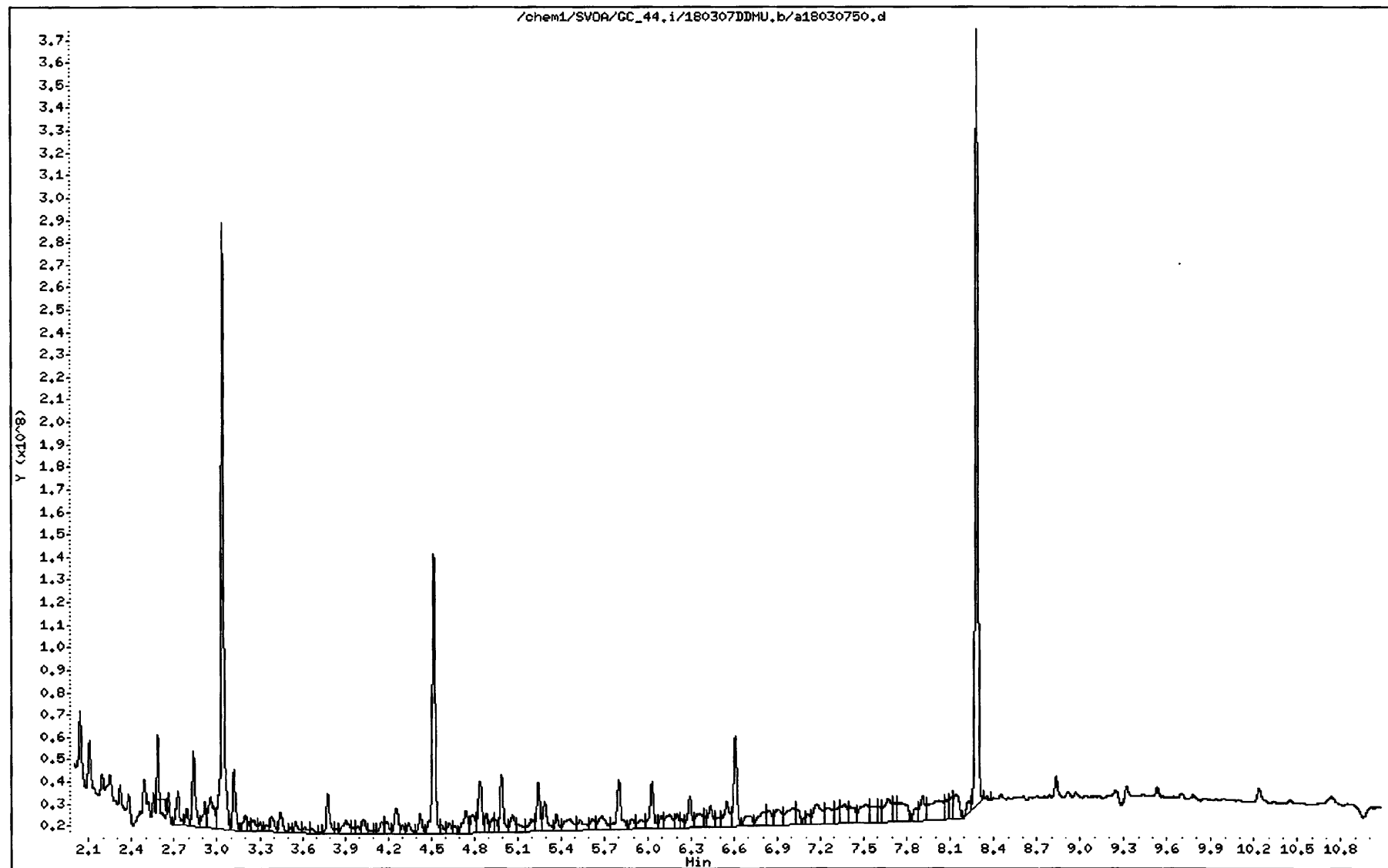
Instrument: GC_44.i

Sample Info: 18-02-1890-34

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030750.d
Lab Smp Id:
Inj Date : 07-MAR-2018 15:57
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-34
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 50
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	CONCENTRATIONS			RESPONSE	ON-COLUMN		FINAL
		EXP	RT	DLT		(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
2,4,4'-DDMU	5.090	5.122	-0.032		143463691	3.29623		3.296

Data File: /chem1/SVDA/GC_44.i/180307DDHU.b/b18030750.d

Page 1

Date : 07-MAR-2018 15:57

Client ID:

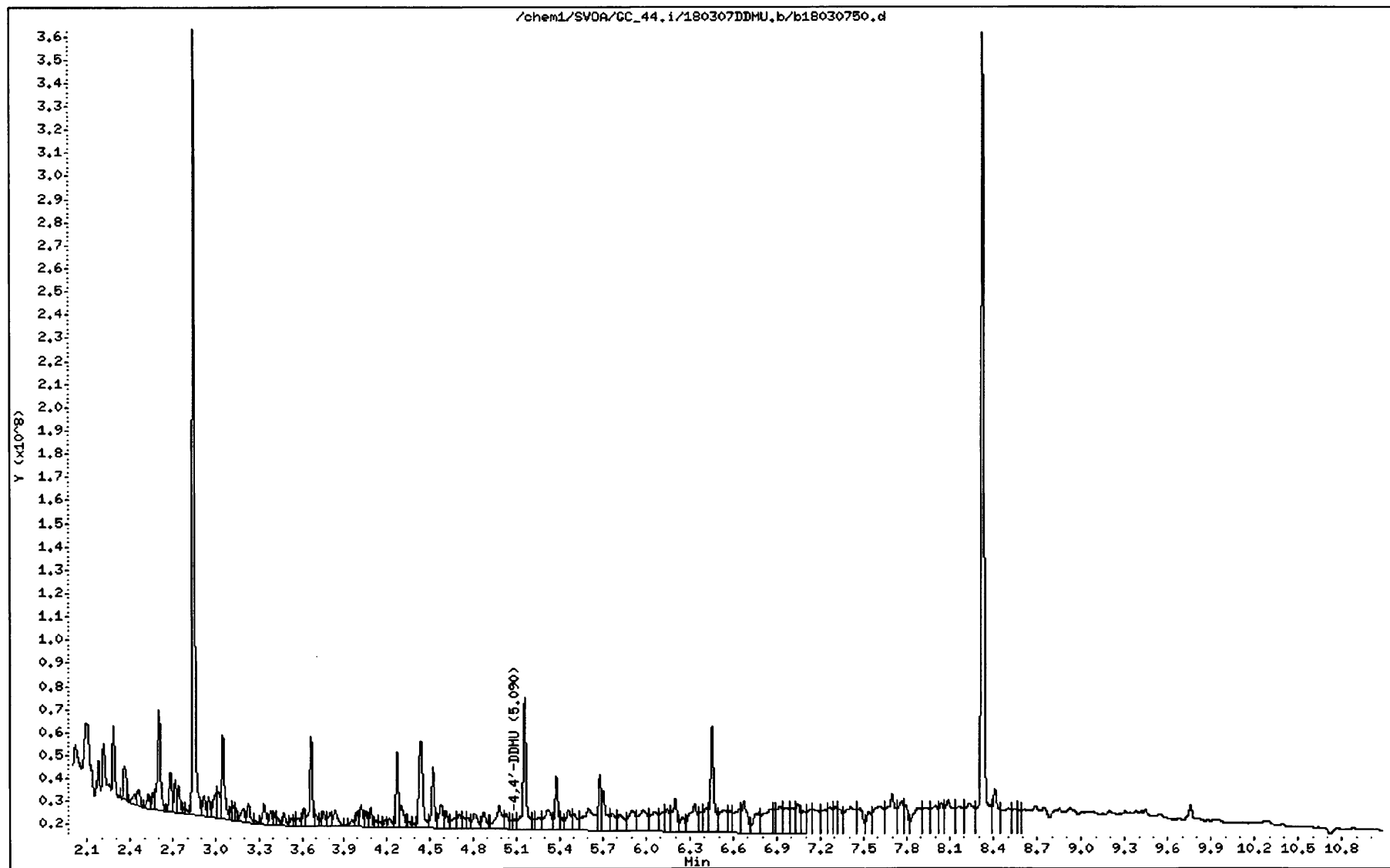
Instrument: GC_44.i

Sample Info: 18-02-1890-34

Operator: UHHN

Column phase:

Column diameter: 2.00



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 16:11
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803075118030751

38 **CLIENT SAMPLE NUMBER:** IB-RW-12-G-S-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	4.83	3.22	1.00	1.3	Y	119%	2	12.7
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030751.d
Lab Smp Id:
Inj Date : 07-MAR-2018 16:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-38
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 51
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
				RESPONSE	ON-COLUMN	FINAL	
Compounds		RT	EXP RT DLT RT		(ppb)	(ug/Kg)	
=====		==	=====	=====	=====	=====	
\$ 1 2,4,5,6-Tetrachloro-m-xylene		3.039	3.036 0.003	6465991852	64.8636	64.863	
2 Hexachlorobenzene		3.397	3.382 0.015	297850165	2.05198	2.051	
3 Alpha-BHC		Compound Not Detected.					
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		4.990	4.976 0.014	842362148	30.0160	30.016 (M)	
10 Oxychlordan		Compound Not Detected.					
11 2,4'-DDE		5.198	5.198 0.000	471562574	4.82928	4.829 (M)	
12 Heptachlor Epoxide		Compound Not Detected.					
13 Gamma Chlordane		Compound Not Detected.					
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 4,4'-DDE		Compound Not Detected.					
17 Endosulfan I		5.619	5.625 -0.006	338777650	2.84083	2.840	
18 2,4'-DDD		Compound Not Detected.					
19 Dieldrin		Compound Not Detected.					
20 2,4'-DDT		Compound Not Detected.					
21 Endrin		Compound Not Detected.					

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	=====
22 Cis-Nonachlor						Compound Not Detected.		
23 4,4'-DDD						Compound Not Detected.		
24 Endosulfan II						Compound Not Detected.		
25 4,4'-DDT						Compound Not Detected.		
26 Endrin Aldehyde						Compound Not Detected.		
27 Methoxychlor						Compound Not Detected.		
28 Mirex						Compound Not Detected.		
29 Endosulfan Sulfate						Compound Not Detected.		
30 Endrin Ketone						Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.282	8.284	-0.002		8755449296		83.8763	83.876
M 32 Chlordane						Compound Not Detected.		
33 CHLD (1)						Compound Not Detected.		
34 CHLD (2)						Compound Not Detected.		
35 CHLD (3)						Compound Not Detected.		
36 CHLD (4)						Compound Not Detected.		
37 CHLD (5)						Compound Not Detected.		
M 38 Toxaphene						Compound Not Detected.		
39 TOXAPHENE (1)						Compound Not Detected.		
40 TOXAPHENE (2)						Compound Not Detected.		
41 TOXAPHENE (3)						Compound Not Detected.		
42 TOXAPHENE (4)						Compound Not Detected.		
43 TOXAPHENE (5)						Compound Not Detected.		

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180307LL.b/a18030751.d

Page 1

Date : 07-MAR-2018 16:11

Client ID:

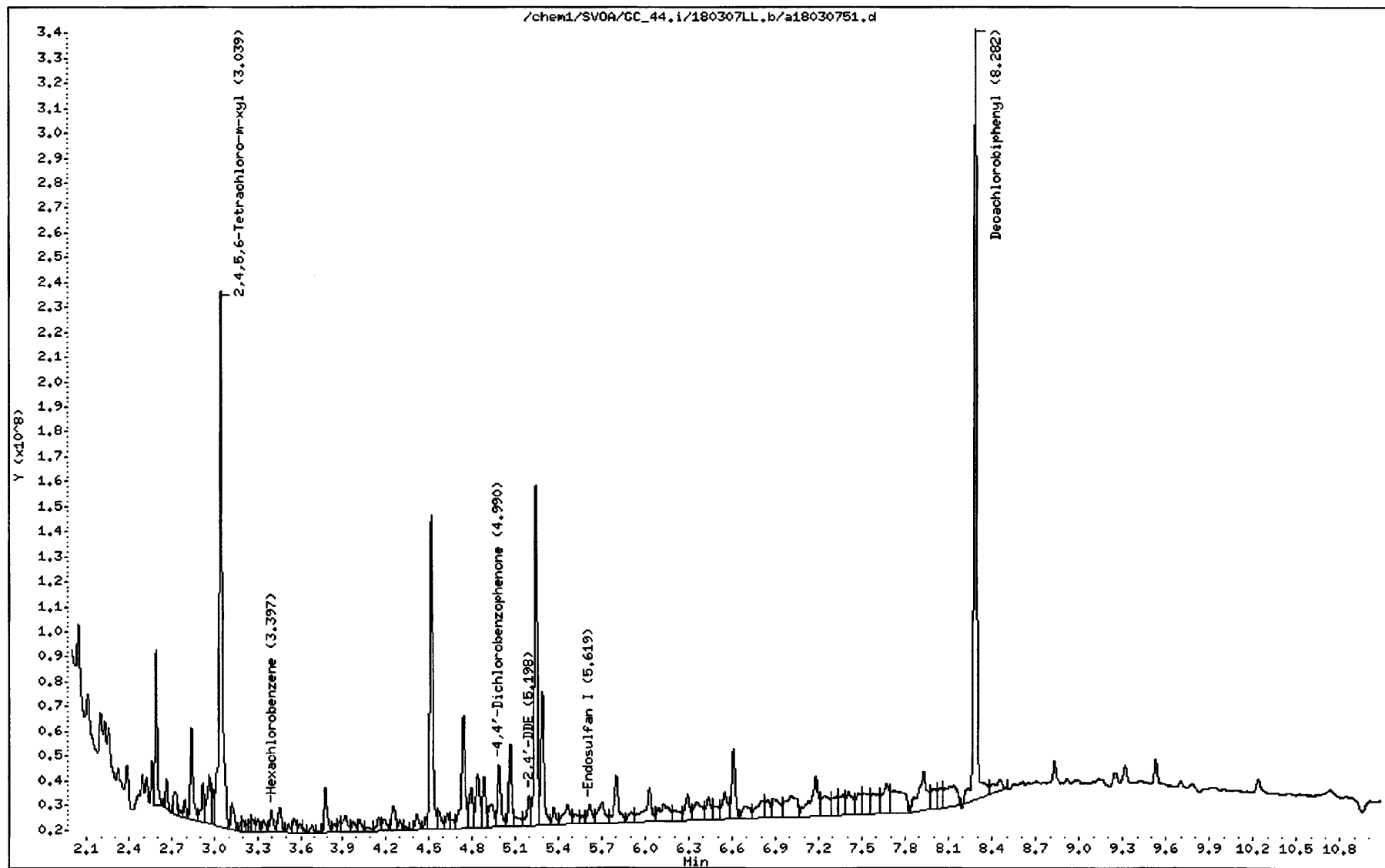
Instrument: GC_44.i

Sample Info: 18-02-1890-38

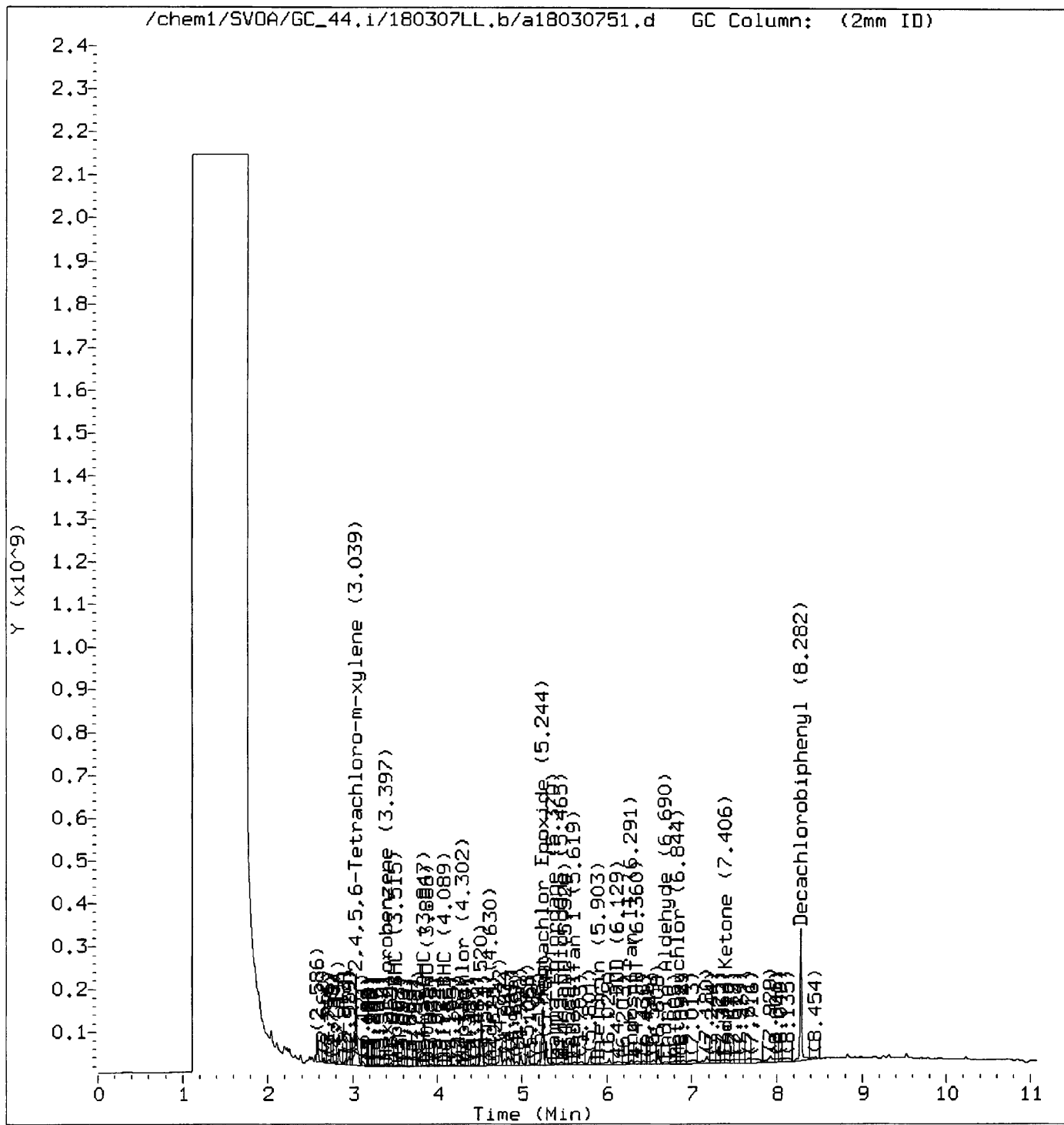
Operator: UHHN

Column phase:

Column diameter: 2.00



Original Data File



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030751.d
Lab Smp Id:
Inj Date : 07-MAR-2018 16:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-38
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 51
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
		RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL
=====		==	=====	=====	=====	(ppb)	(ug/Kg)
T	1 2,4,5,6-Tetrachloro-m-xylene	2.845	2.842	0.003	5726056965	53.8664	53.866
	2 Hexachlorobenzene	3.232	3.226	0.006	197250964	1.27326	1.273 (a)
	3 Alpha-BHC	3.339	3.337	0.002	242493283	1.33556	1.335 (a)
	4 Gamma-BHC	3.666	3.656	0.010	1121874108	7.07793	7.077
	5 Beta-BHC	Compound Not Detected.					
	6 Delta-BHC	Compound Not Detected.					
	7 Heptachlor	Compound Not Detected.					
	8 Aldrin	Compound Not Detected.					
	9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
	10 Oxychlordane	Compound Not Detected.					
	11 Heptachlor Epoxide	4.983	4.975	0.008	669673149	5.27530	5.275
	12 2,4'-DDE	5.159	5.155	0.004	1702649401	19.1135	19.113 (M)
	13 Gamma Chlordane	5.159	5.162	-0.003	1702649401	13.0554	13.055
	14 Trans-Nonachlor	Compound Not Detected.					
	15 Alpha Chlordane	Compound Not Detected.					
	16 Endosulfan I	5.377	5.366	0.011	664829548	5.65937	5.659
	17 4,4'-DDE	5.459	5.463	-0.004	271182669	2.28975	2.289
	18 Dieldrin	Compound Not Detected.					
	19 2,4'-DDD	Compound Not Detected.					
	20 Endrin	Compound Not Detected.					
	21 2,4'-DDT	Compound Not Detected.					

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor				Compound Not Detected.		
23 4,4'-DDD				Compound Not Detected.		
24 Endosulfan II				Compound Not Detected.		
25 4,4'-DDT	6.333	6.325	0.008	451975356	4.52430	4.524 (H)
26 Endrin Aldehyde	6.451	6.450	0.001	1119502773	12.4490	12.449
27 Endosulfan Sulfate				Compound Not Detected.		
28 Mirex				Compound Not Detected.		
29 Methoxychlor				Compound Not Detected.		
30 Endrin Ketone				Compound Not Detected.		
T 31 Decachlorobiphenyl	8.323	8.325	-0.002	7662660931	79.2998	79.299
M 32 Chlordane				Compound Not Detected.		
33 CHLD (1)				Compound Not Detected.		
34 CHLD (2)				Compound Not Detected.		
35 CHLD (3)				Compound Not Detected.		
36 CHLD (4)				Compound Not Detected.		
37 CHLD (5)				Compound Not Detected.		
M 38 Toxaphene				Compound Not Detected.		
39 TOXAPHENE (1)				Compound Not Detected.		
40 TOXAPHENE (2)				Compound Not Detected.		
41 TOXAPHENE (3)				Compound Not Detected.		
42 TOXAPHENE (4)				Compound Not Detected.		
43 TOXAPHENE (5)				Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030751.d

Date : 07-MAR-2018 16:11

Client ID:

Sample Info: 18-02-1890-38

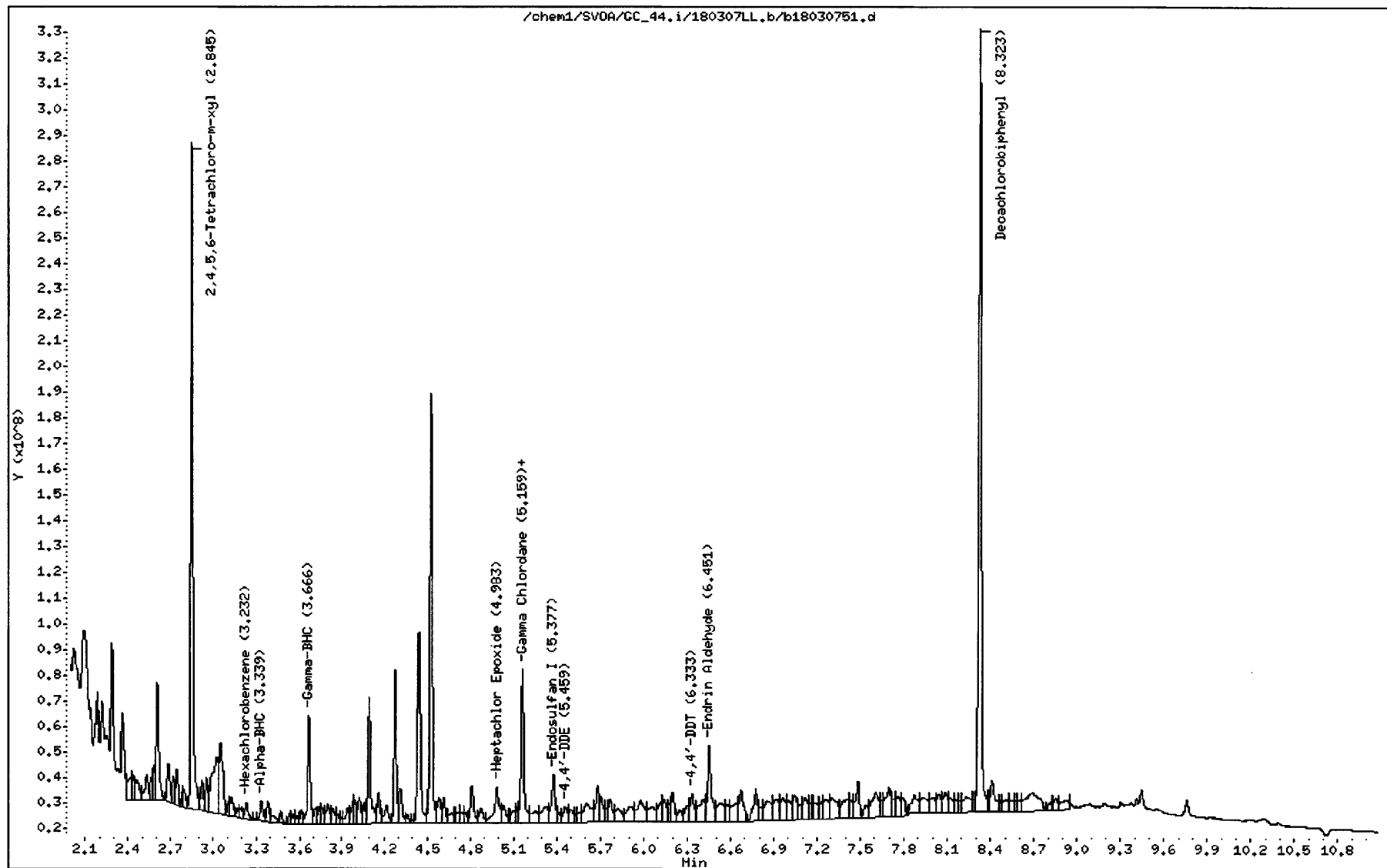
Column phase:

Instrument: GC_44.i

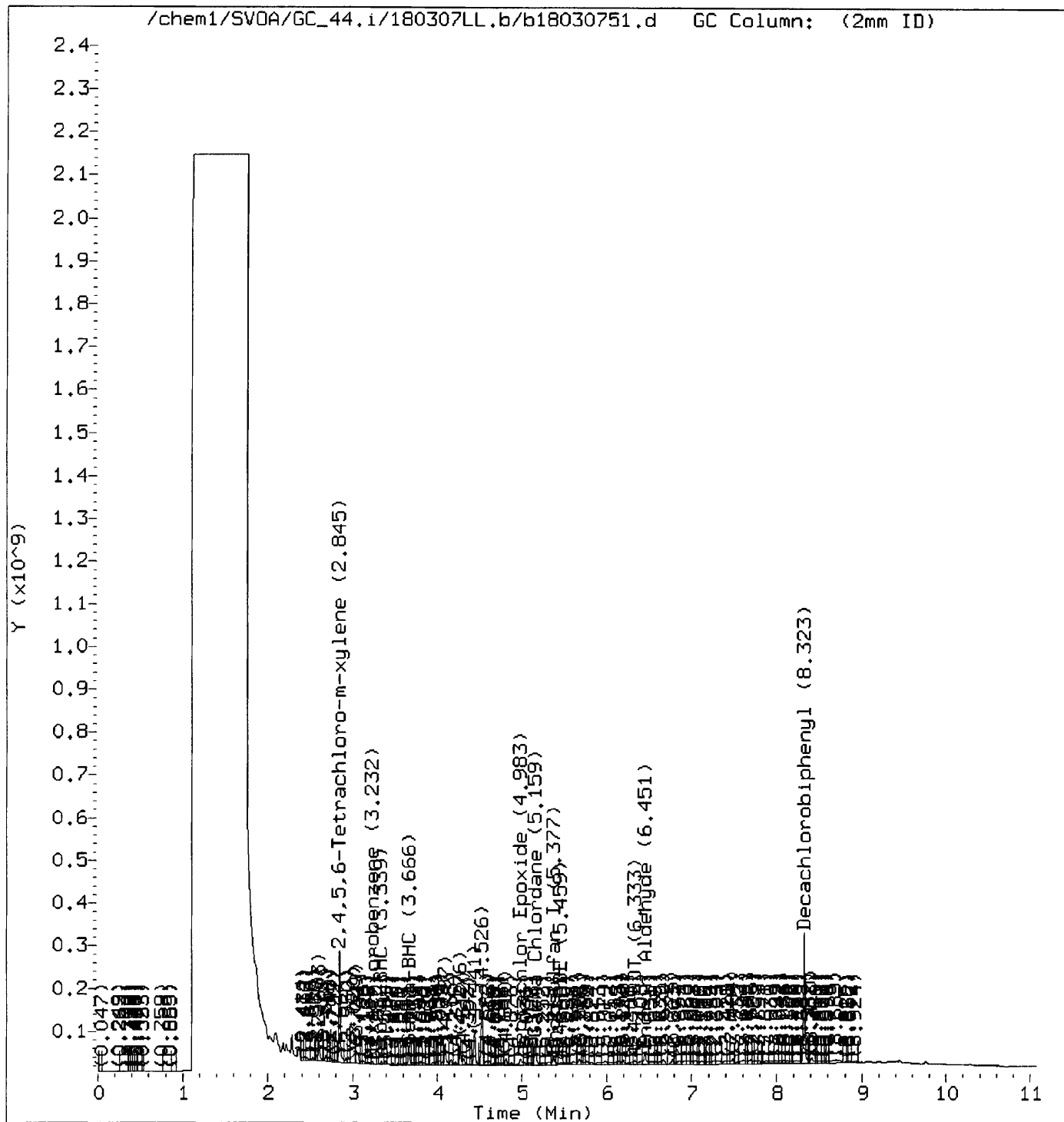
Operator: UHHN

Column diameter: 2.00

Page 1



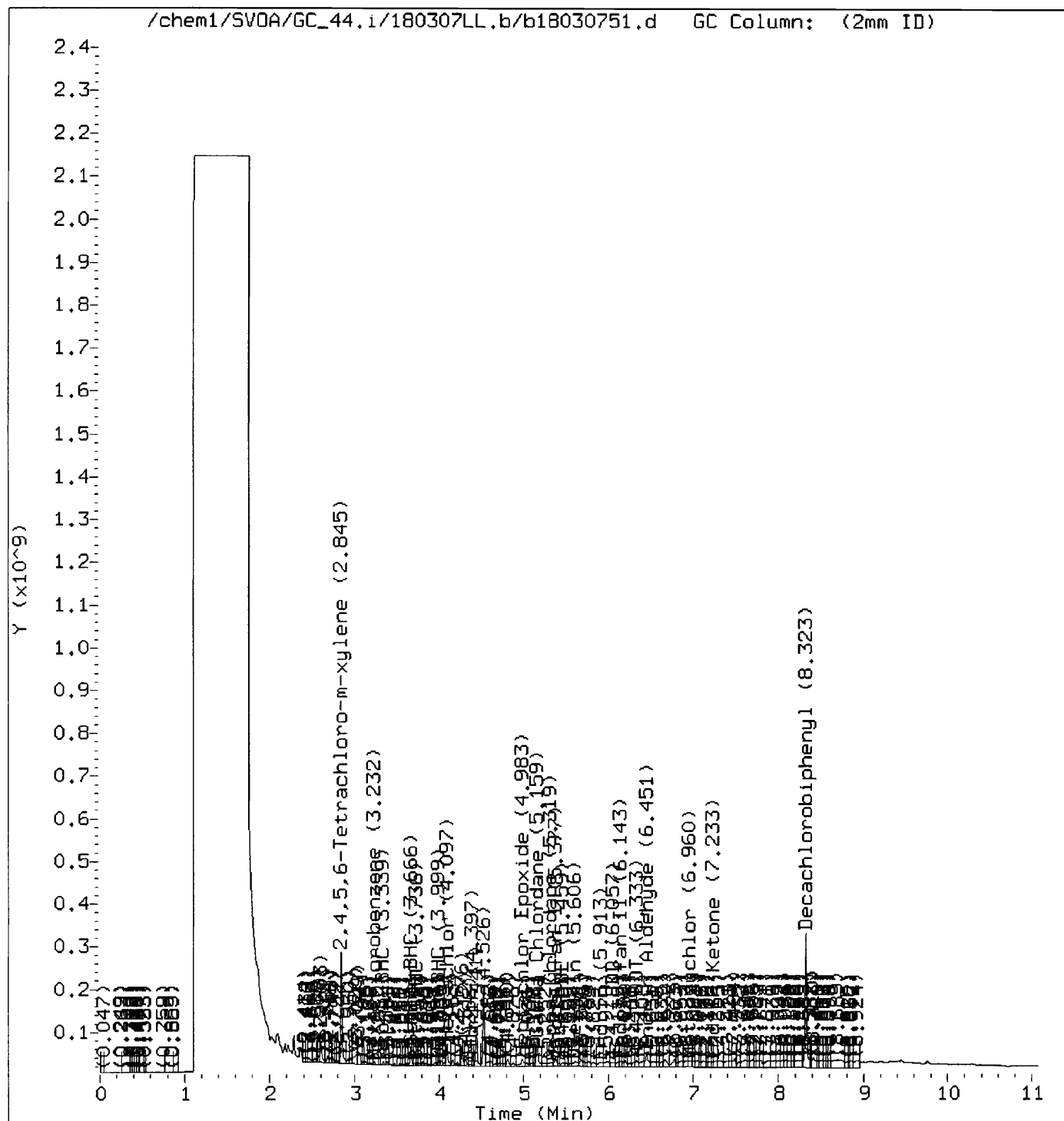
Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhhn

Audit/management approval: 



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030751.d
Lab Smp Id:
Inj Date : 07-MAR-2018 16:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-38
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: a18030530.d
Als bottle: 51
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====
2 4,4'-DDMU					Compound Not Detected.		

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/a18030751.d

Page 1

Date : 07-MAR-2018 16:11

Client ID:

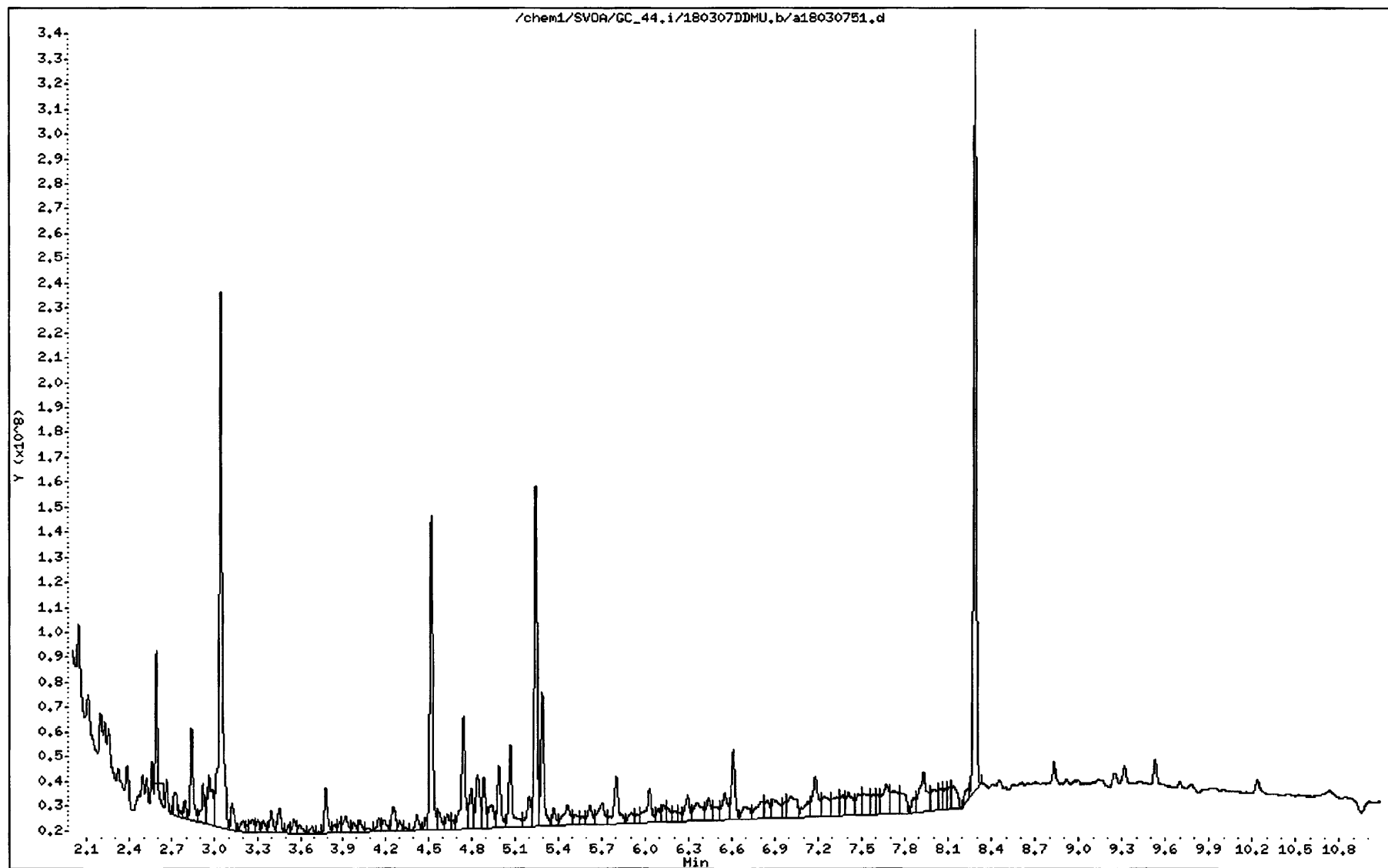
Instrument: GC_44.i

Sample Info: 18-02-1890-38

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030751.d
Lab Smp Id:
Inj Date : 07-MAR-2018 16:11
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-38
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 18:26 Cal File: b18030530.d
Als bottle: 51
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====		=====	=====	=====
2 4,4'-DDMU	5.159	5.122	0.037	2044473377	46.9740	46.973	

Data File: /chem1/SVDA/GC_44.i/180307DDMU,b/b18030751.d

Page 1

Date : 07-MAR-2018 16:11

Client ID:

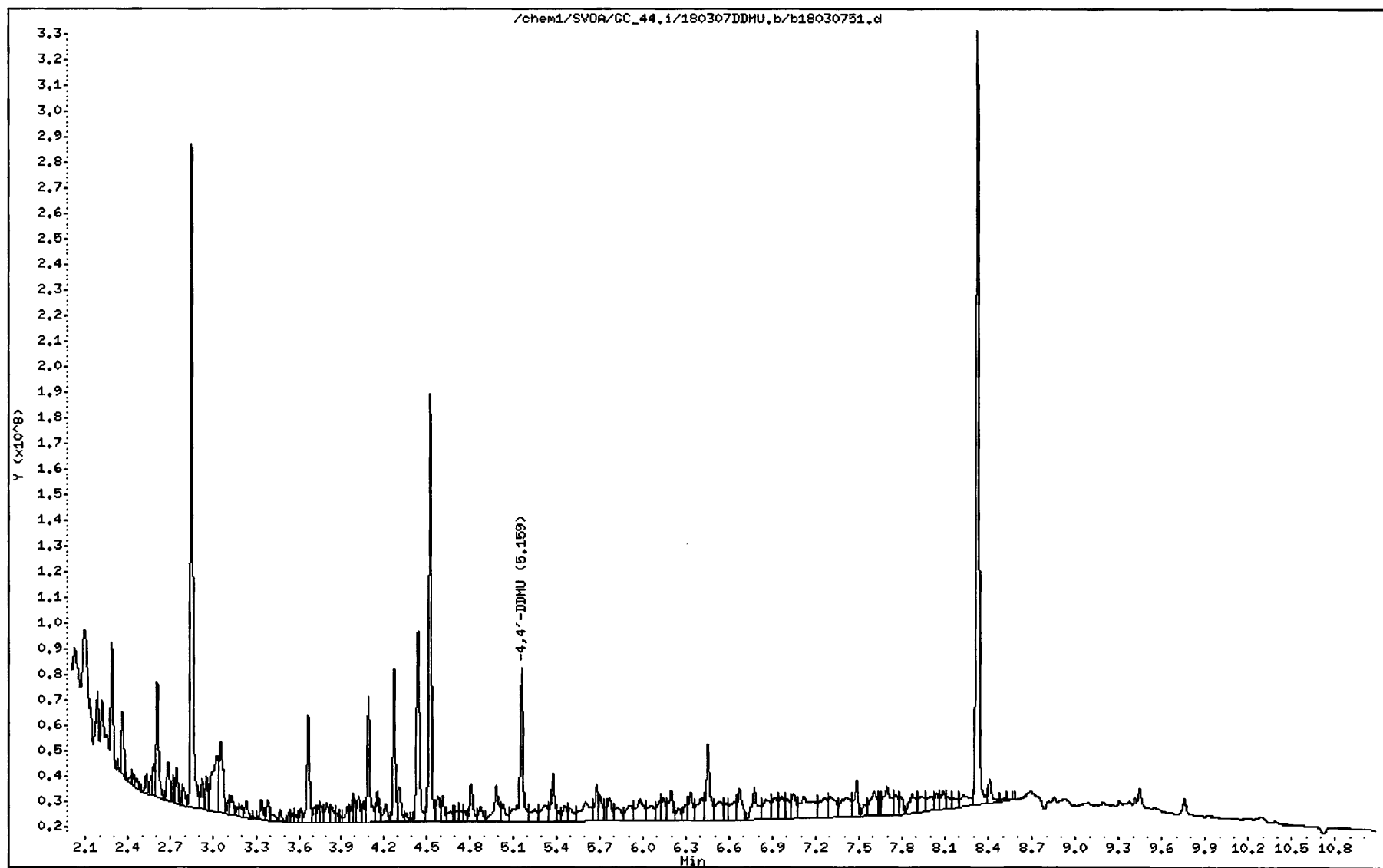
Instrument: GC_44.i

Sample Info: 18-02-1890-38

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180314LL.b/a18031456.d
Lab Smp Id:
Inj Date : 14-MAR-2018 08:16
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-38
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180314LL.b/a808111.m
Meth Date : 14-Mar-2018 10:31 uhhn Quant Type: ESTD
Cal Date : 13-MAR-2018 20:24 Cal File: a18031406.d
Als bottle: 56
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS				
		ON-COLUMN			FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.036	3.033	0.003	8268598098	72.2358	72.235
2 Hexachlorobenzene	3.394	3.379	0.015	308053564	1.89269	1.892 (a)
3 Alpha-BHC	3.509	3.528	-0.019	88530079	0.47505	0.475 (a)
4 Gamma-BHC	3.843	3.828	0.015	105139400	0.64537	0.645 (a)
5 Beta-BHC	3.922	3.904	0.018	371328097	5.31705	5.317
6 Delta-BHC	4.103	4.089	0.014	61200573	0.37505	0.375 (a)
7 Heptachlor	4.298	4.306	-0.008	194853243	1.21260	1.212 (a)
8 Aldrin	4.627	4.617	0.010	229090037	1.51450	1.514 (a)
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	5.196	5.195	0.001	516801836	5.19844	5.198 (M)
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	5.365	5.347	0.018	246502411	1.77402	1.774 (a)
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	5.462	5.478	-0.016	524555595	3.97812	3.978
16 4,4'-DDE	5.523	5.537	-0.014	221452244	1.74054	1.740 (a)
17 Endosulfan I	5.615	5.621	-0.006	360798765	2.87187	2.871
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	5.899	5.853	0.046	184041522	1.35608	1.356 (a)
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	Compound Not Detected.					

Ref.

					CONCENTRATIONS	
Compounds	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor	Compound Not Detected.					
23 4,4'-DDD	6.124	6.123	0.001	718821812	6.45133	6.451
24 Endosulfan II	6.286	6.302	-0.016	478958604	4.10137	4.101
25 4,4'-DDT	6.357	6.391	-0.034	629278459	6.39339	6.393
26 Endrin Aldehyde	6.689	6.698	-0.009	384011975	3.96168	3.961
27 Methoxychlor	6.837	6.838	-0.001	313681676	5.74696	5.746
28 Mirex	Compound Not Detected.					
29 Endosulfan Sulfate	Compound Not Detected.					
30 Endrin Ketone	7.363	7.383	-0.020	842999111	6.57917	6.579
\$ 31 Decachlorobiphenyl	8.279	8.279	0.000	9636299472	86.5026	86.502
M 32 Chlordane	Compound Not Detected.					
33 CHLD (1)	Compound Not Detected.					
34 CHLD (2)	Compound Not Detected.					
35 CHLD (3)	Compound Not Detected.					
36 CHLD (4)	Compound Not Detected.					
37 CHLD (5)	Compound Not Detected.					
M 38 Toxaphene	Compound Not Detected.					
39 TOXAPHENE (1)	Compound Not Detected.					
40 TOXAPHENE (2)	Compound Not Detected.					
41 TOXAPHENE (3)	Compound Not Detected.					
42 TOXAPHENE (4)	Compound Not Detected.					
43 TOXAPHENE (5)	Compound Not Detected.					

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180314LL.b/a18031456.d

Date : 14-MAR-2018 08:16

Client ID:

Sample Info: 18-02-1890-38

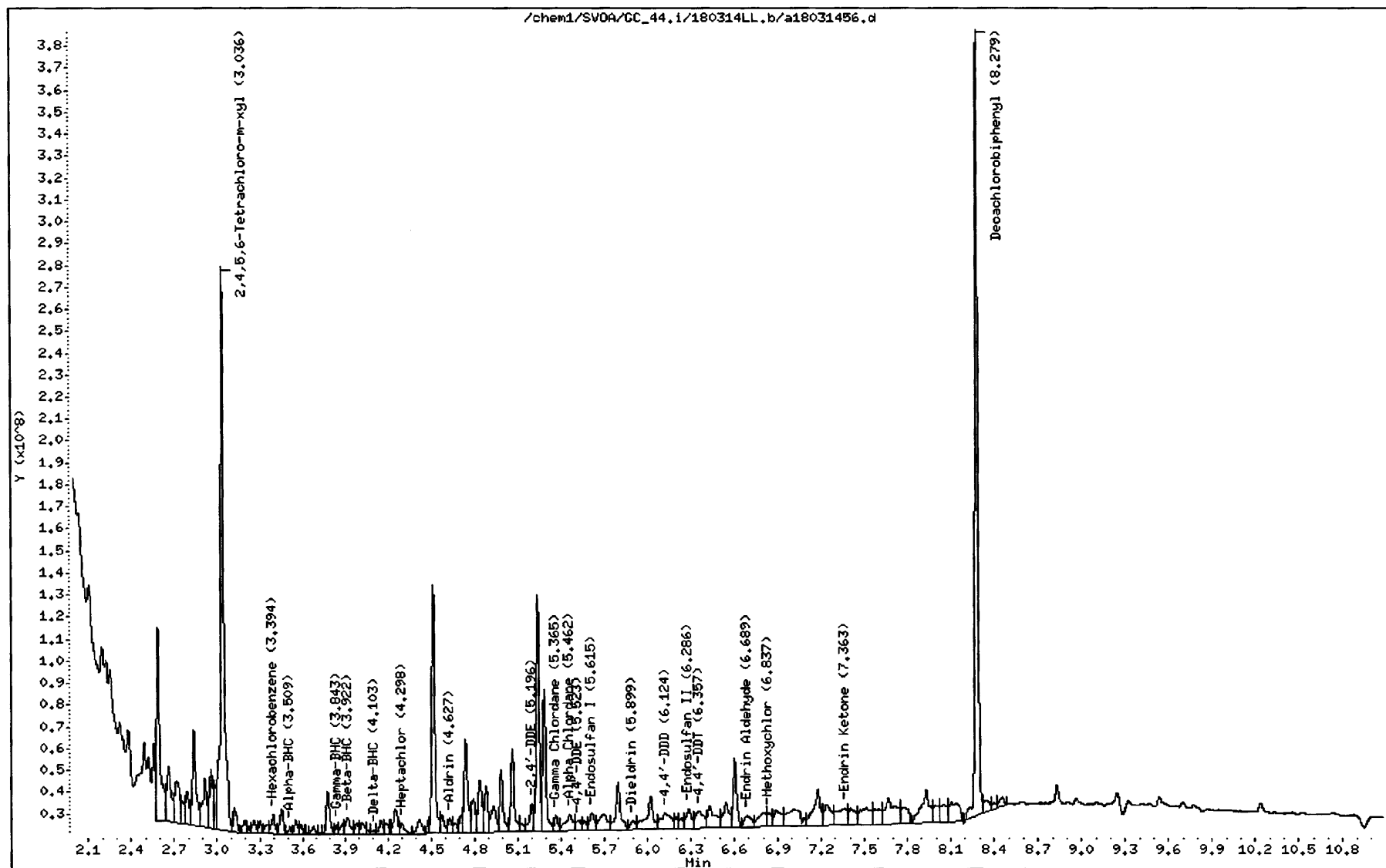
Column phase:

Instrument: GC_44.i

Operator: UHHN

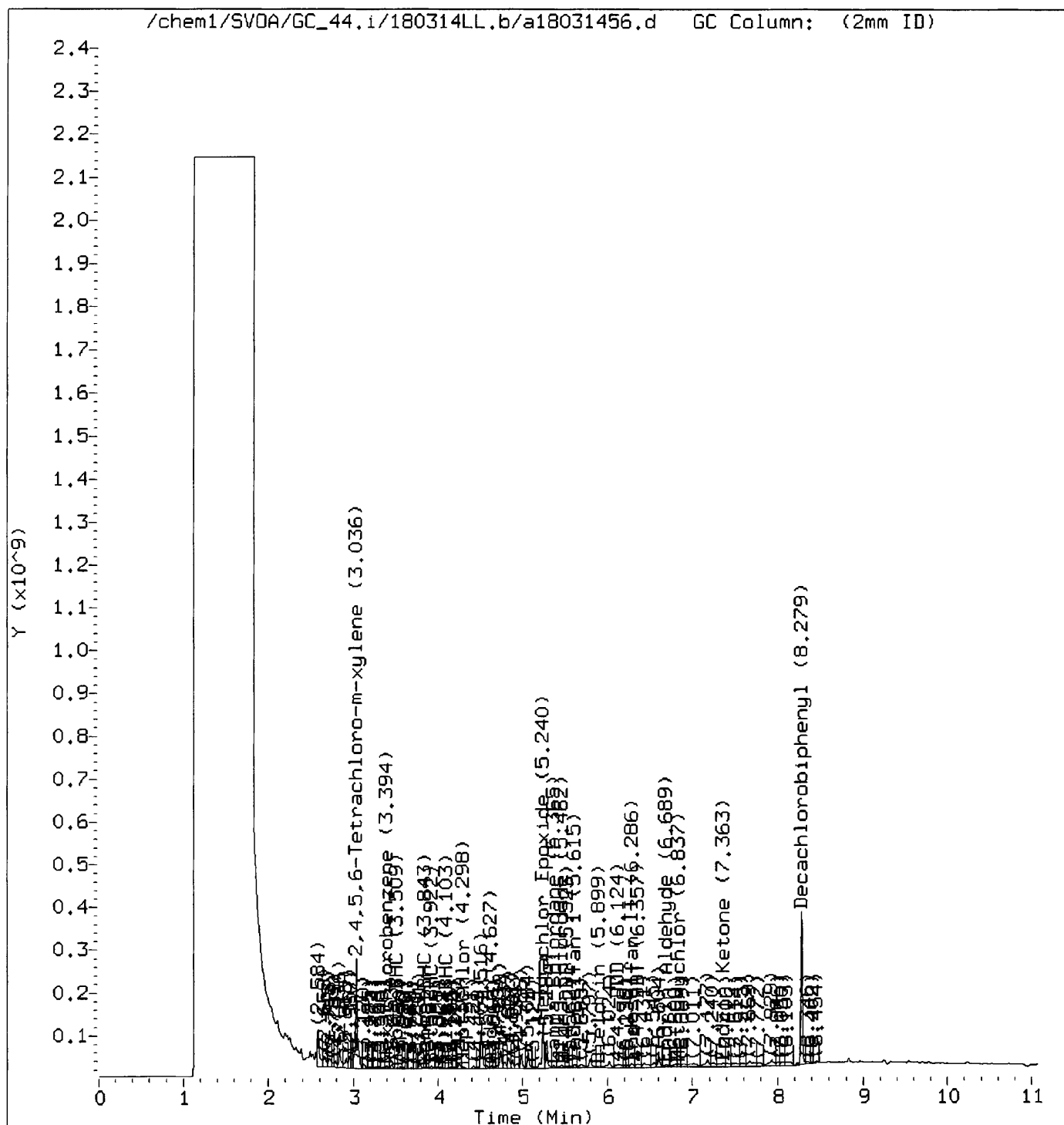
Column diameter: 2.00

Page 1



Analyst responsible for change: Digitally signed by Hong-Hanh Nguyen
on 03/14/2018 at 10:42.
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____ *4m*



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180314LL.b/b18031456.d
Lab Smp Id:
Inj Date : 14-MAR-2018 08:16
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-38
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180314LL.b/b808111.m
Meth Date : 14-Mar-2018 10:31 uhn Quant Type: ESTD
Cal Date : 13-MAR-2018 21:50 Cal File: b18031412.d
Als bottle: 56
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS				
		ON-COLUMN			FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene	2.841	2.856	-0.015	5976031699	55.0719	55.071
2 Hexachlorobenzene	3.186	3.222	-0.036	78500719	0.49975	0.499(a)
3 Alpha-BHC	3.333	3.332	0.001	267938697	1.49895	1.498(a)
4 Gamma-BHC	3.660	3.650	0.010	1124828588	7.19788	7.197
5 Beta-BHC	3.706	3.718	-0.012	157385276	2.24717	2.247
6 Delta-BHC	3.990	4.002	-0.012	419529679	2.62597	2.625
7 Heptachlor	4.056	4.076	-0.020	275269013	1.85243	1.852(a)
8 Aldrin	4.385	4.403	-0.018	24955812	0.17828	0.178(a)
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordan	Compound Not Detected.					
11 Heptachlor Epoxide	4.979	4.968	0.011	575155120	4.67256	4.672
12 2,4'-DDE	5.151	5.147	0.004	1326225139	16.2864	16.286(M)
13 Gamma Chlordane	5.122	5.156	-0.034	116553717	0.91680	0.916(a)
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	5.311	5.298	0.013	308765831	2.65255	2.652
16 Endosulfan I	5.370	5.359	0.011	652009313	5.73998	5.739
17 4,4'-DDE	5.451	5.457	-0.006	255908180	2.20812	2.208
18 Dieldrin	5.600	5.625	-0.025	438175498	3.58349	3.583
19 2,4'-DDD	Compound Not Detected.					
20 Endrin	5.910	5.921	-0.011	336326777	3.02946	3.029
21 2,4'-DDT	Compound Not Detected.					

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor	Compound Not Detected.					
23 4,4'-DDD	5.995	6.020	-0.025	163029555	1.73283	1.732 (a)
24 Endosulfan II	6.112	6.125	-0.013	323670162	3.07086	3.070
25 4,4'-DDT	6.295	6.319	-0.024	201544612	2.36086	2.360
26 Endrin Aldehyde	6.405	6.443	-0.038	324323256	3.70031	3.700
27 Endosulfan Sulfate	Compound Not Detected.					
28 Mirex	Compound Not Detected.					
29 Methoxychlor	6.921	6.959	-0.038	452846029	9.60582	9.605
30 Endrin Ketone	7.172	7.206	-0.034	232000685	2.12699	2.126
T 31 Decachlorobiphenyl	8.317	8.343	-0.026	7716344214	83.4991	83.499 (A)
M 32 Chlordane	Compound Not Detected.					
33 CHLD (1)	Compound Not Detected.					
34 CHLD (2)	Compound Not Detected.					
35 CHLD (3)	Compound Not Detected.					
36 CHLD (4)	Compound Not Detected.					
37 CHLD (5)	Compound Not Detected.					
M 38 Toxaphene	Compound Not Detected.					
39 TOXAPHENE (1)	Compound Not Detected.					
40 TOXAPHENE (2)	Compound Not Detected.					
41 TOXAPHENE (3)	Compound Not Detected.					
42 TOXAPHENE (4)	Compound Not Detected.					
43 TOXAPHENE (5)	Compound Not Detected.					

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180314LL.b/b18031456.d

Page 1

Date : 14-MAR-2018 08:16

Client ID:

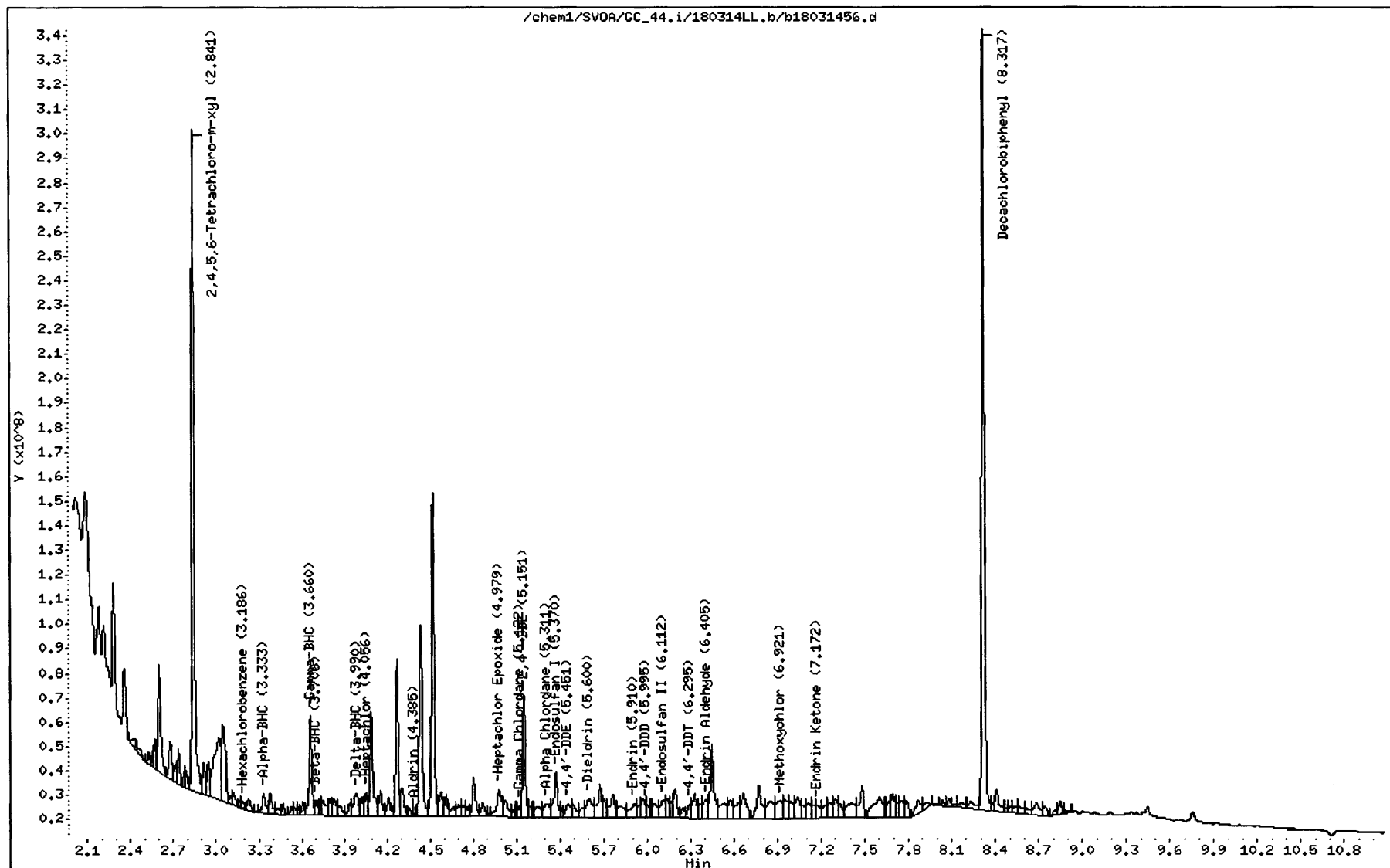
Instrument: GC_44.i

Sample Info: 18-02-1890-38

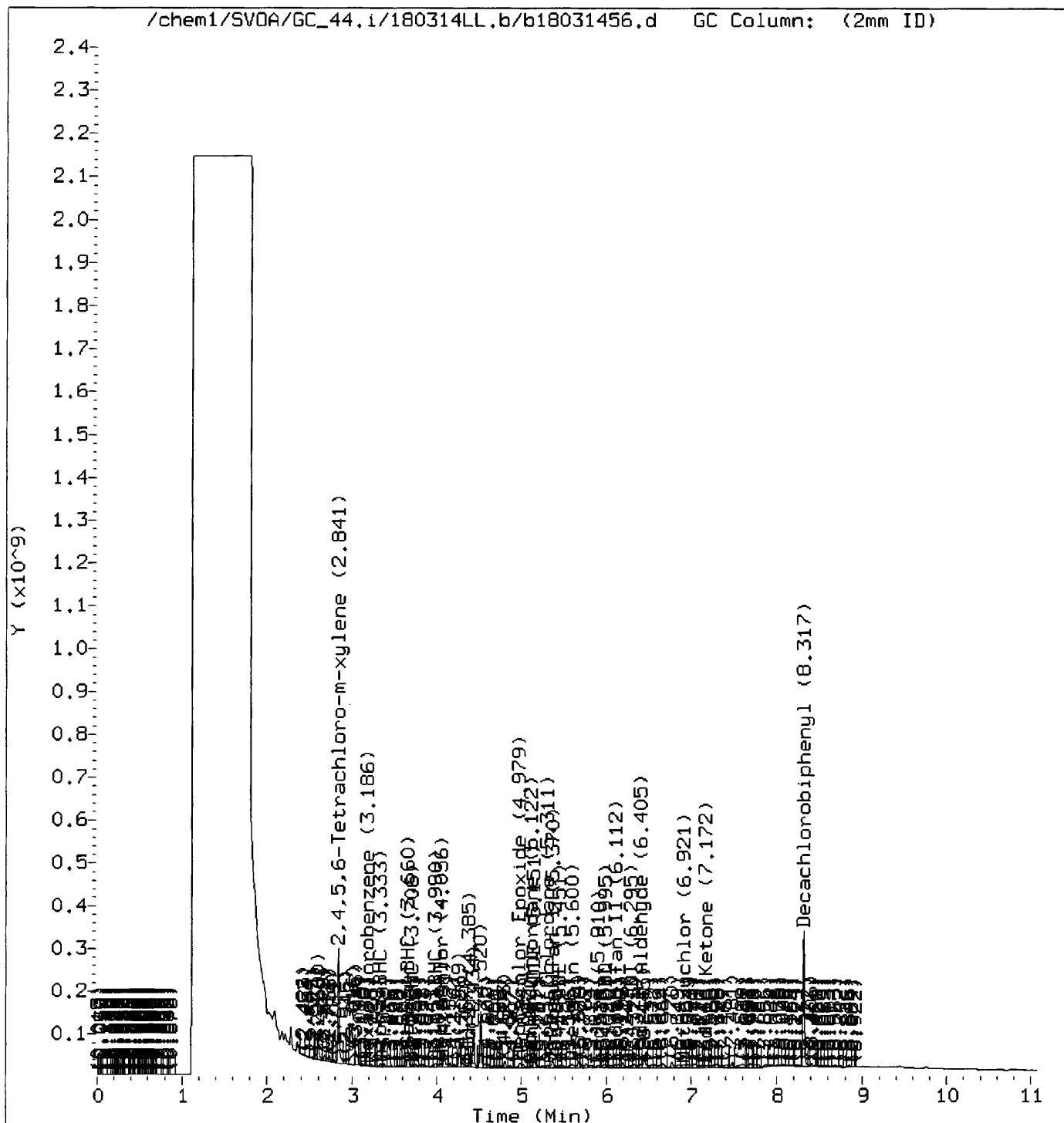
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

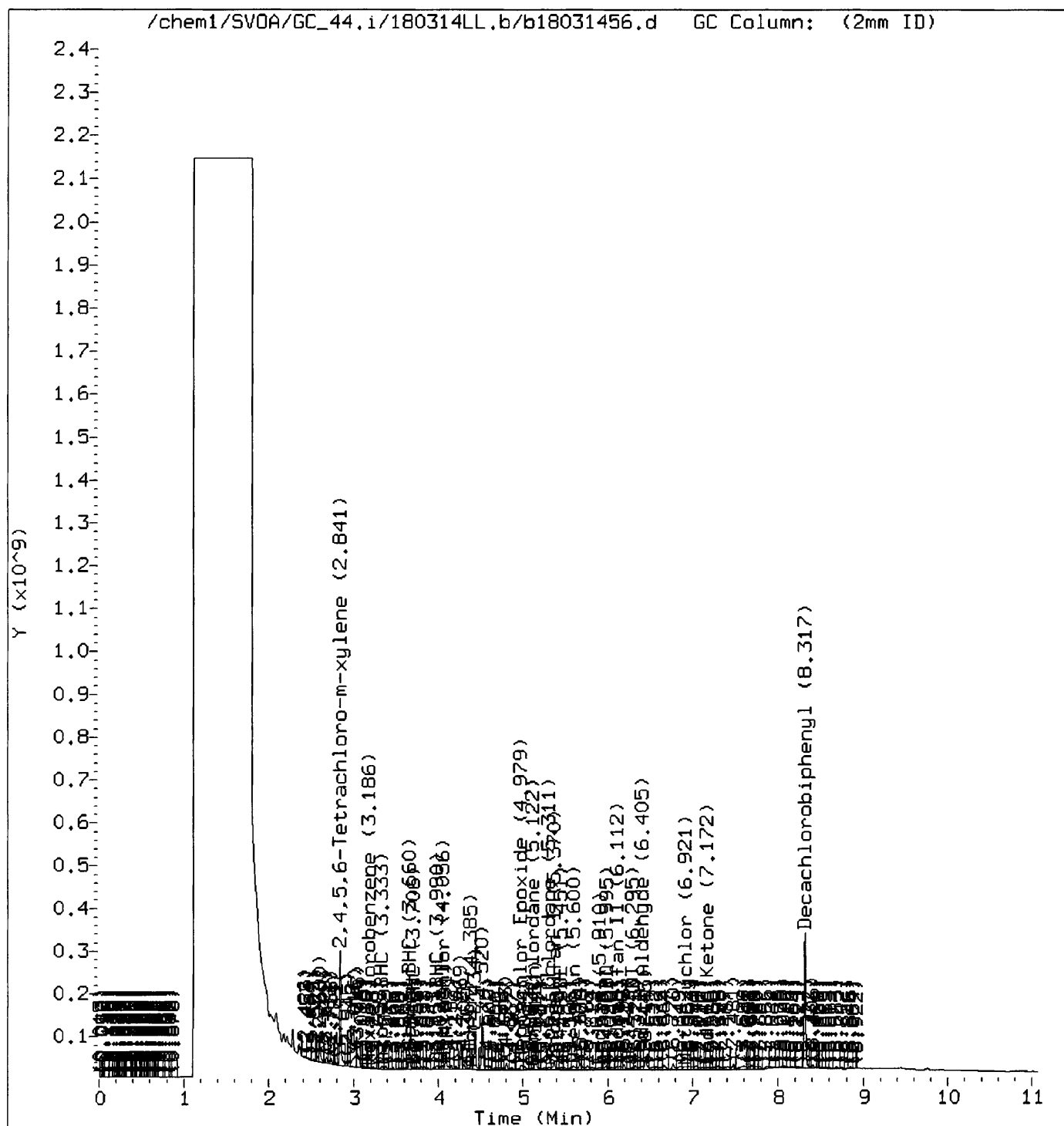
Digitally signed by Hong-Hanh Nguyen

Analyst responsible for change: on 03/14/2018 at 10:42.

Target 3.5 esignature user ID: uhn

Audit/management approval:

Original Data File



RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890
INSTRUMENT: GC 44
EXTRACTION : EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 16:25
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803075218030752

41 **CLIENT SAMPLE NUMBER:** EB-20180227

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: 180302S08 **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT: Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	1.70	ND	1.00	1.3	#		2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	9.56	6.38	1.00	1.3		3%	2	6.59
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	2.22	ND	1.00	1.3	#		2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/a18030752.d
Lab Smp Id:
Inj Date : 07-MAR-2018 16:25
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-41
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/a808111.m
Meth Date : 08-Mar-2018 16:51 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 11:34 Cal File: a18030502.d
Als bottle: 52
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene		3.036	3.036	0.000	7527458950	75.5117	75.511
2 Hexachlorobenzene		3.393	3.382	0.011	299491686	2.06329	2.063
3 Alpha-BHC		Compound Not Detected.					
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		4.090	4.093	-0.003	462392559	3.09962	2.099 (M)
7 Heptachlor		4.305	4.310	-0.005	320994219	2.21795	2.217 (H)
8 Aldrin		4.629	4.622	0.007	236638938	1.70459	1.704 (a)
9 4,4'-Dichlorobenzophenone		4.988	4.976	0.012	765339190	27.2715	27.271 (M)
10 Oxychlordane		Compound Not Detected.					
11 2,4'-DDE		5.196	5.198	-0.002	933288901	9.55783	9.557 (M)
12 Heptachlor Epoxide		Compound Not Detected.					
13 Gamma Chlordane		Compound Not Detected.					
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 4,4'-DDE		Compound Not Detected.					
17 Endosulfan I		Compound Not Detected.					
18 2,4'-DDD		Compound Not Detected.					
19 Dieldrin		Compound Not Detected.					
20 2,4'-DDT		Compound Not Detected.					
21 Endrin		Compound Not Detected.					

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Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====		=====	=====	=====
22 Cis-Nonachlor					Compound Not Detected.		
23 4,4'-DDD					Compound Not Detected.		
24 Endosulfan II					Compound Not Detected.		
25 4,4'-DDT					Compound Not Detected.		
26 Endrin Aldehyde					Compound Not Detected.		
27 Methoxychlor					Compound Not Detected.		
28 Mirex					Compound Not Detected.		
29 Endosulfan Sulfate					Compound Not Detected.		
30 Endrin Ketone					Compound Not Detected.		
\$ 31 Decachlorobiphenyl	8.283	8.284	-0.001	8350376566		79.9958	79.995
M 32 Chlordane					Compound Not Detected.		
33 CHLD (1)					Compound Not Detected.		
34 CHLD (2)					Compound Not Detected.		
35 CHLD (3)					Compound Not Detected.		
36 CHLD (4)					Compound Not Detected.		
37 CHLD (5)					Compound Not Detected.		
M 38 Toxaphene					Compound Not Detected.		
39 TOXAPHENE (1)					Compound Not Detected.		
40 TOXAPHENE (2)					Compound Not Detected.		
41 TOXAPHENE (3)					Compound Not Detected.		
42 TOXAPHENE (4)					Compound Not Detected.		
43 TOXAPHENE (5)					Compound Not Detected.		

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/a18030752.d

Page 1

Date : 07-MAR-2018 16:25

Client ID:

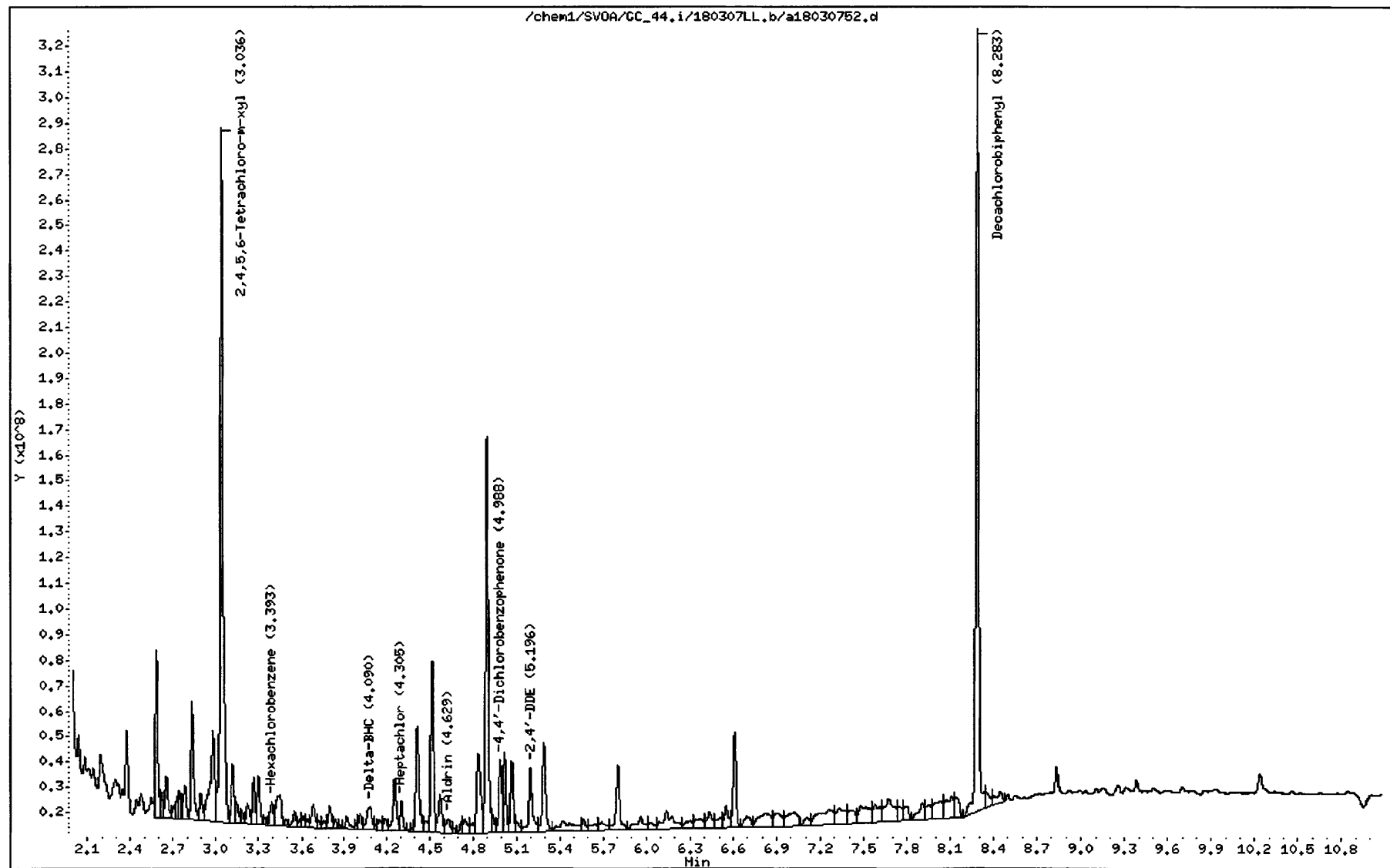
Instrument: GC_44.i

Sample Info: 18-02-1890-41

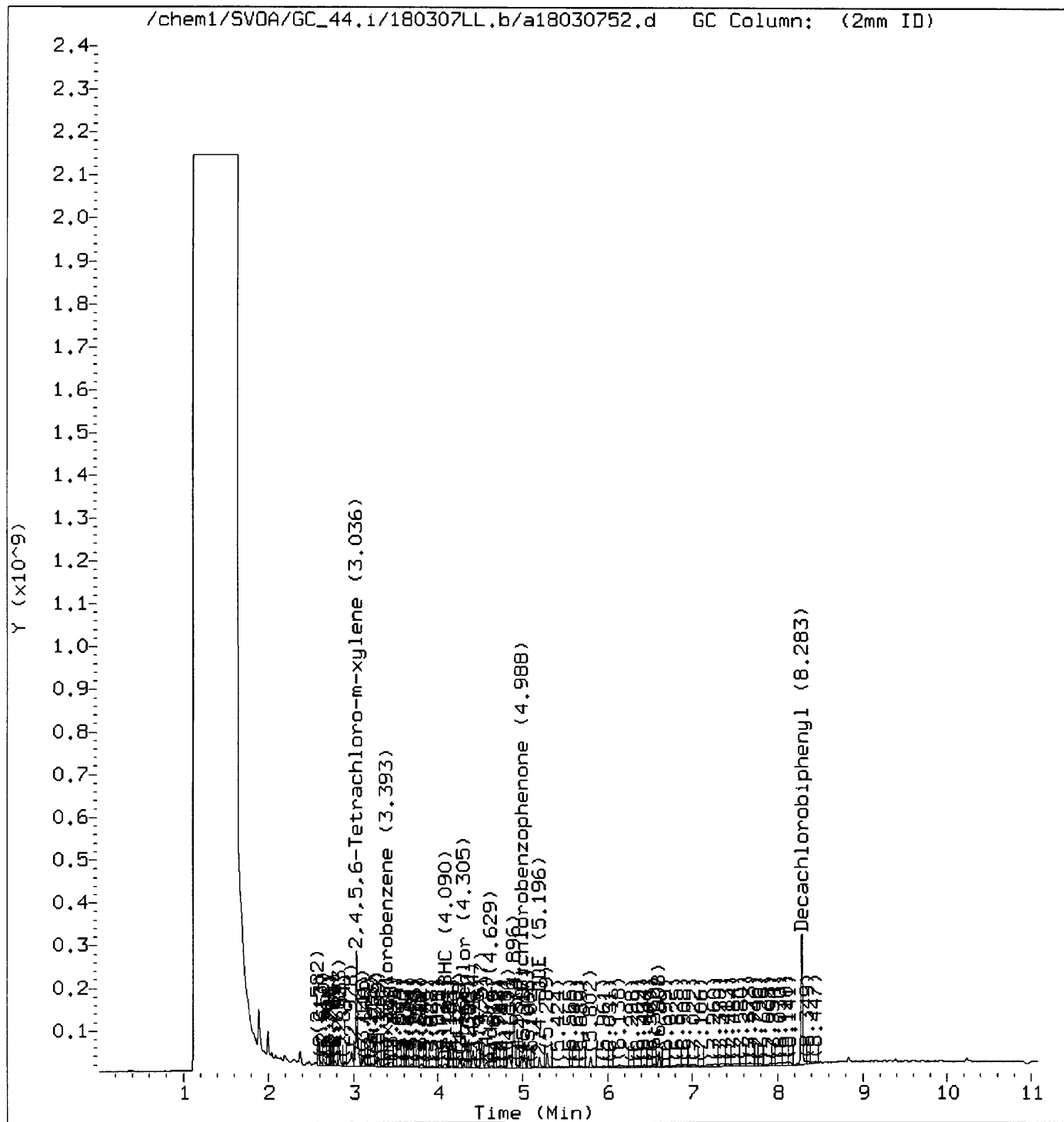
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: on 03/09/2018 at 10:40. Digitally signed by Hong-Hanh Nguyen
Target 3.5 esignature user ID: uhhn

Audit/management approval: _____

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307LL.b/b18030752.d
Lab Smp Id:
Inj Date : 07-MAR-2018 16:25
Operator : UHHN Inst ID: GC_44.i
Smp Info : 18-02-1890-41
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307LL.b/b808111.m
Meth Date : 08-Mar-2018 17:48 uhhn Quant Type: ESTD
Cal Date : 05-MAR-2018 13:13 Cal File: b18030599.d
Als bottle: 52
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: US26TAR4

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
					ON-COLUMN	FINAL	
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene		2.843	2.842	0.001	5717169271	53.7828	53.782
2 Hexachlorobenzene		3.226	3.226	0.000	315703962	2.03787	2.037
3 Alpha-BHC		Compound Not Detected.					
4 Gamma-BHC		Compound Not Detected.					
5 Beta-BHC		Compound Not Detected.					
6 Delta-BHC		Compound Not Detected.					
7 Heptachlor		Compound Not Detected.					
8 Aldrin		Compound Not Detected.					
9 4,4'-Dichlorobenzophenone		Compound Not Detected.					
10 Oxychlordane		Compound Not Detected.					
11 Heptachlor Epoxide		4.982	4.975	0.007	900164546	7.09098	7.090
12 2,4'-DDE		5.159	5.155	0.004	880162315	9.88049	9.880 (M)
13 Gamma Chlordane		5.159	5.162	-0.003	880162315	6.74882	6.748
14 Trans-Nonachlor		Compound Not Detected.					
15 Alpha Chlordane		Compound Not Detected.					
16 Endosulfan I		5.377	5.366	0.011	556195867	4.73462	4.734
17 4,4'-DDE		Compound Not Detected.					
18 Dieldrin		Compound Not Detected.					
19 2,4'-DDD		Compound Not Detected.					
20 Endrin		Compound Not Detected.					
21 2,4'-DDT		Compound Not Detected.					

							CONCENTRATIONS		
							ON-COLUMN	FINAL	
Compounds		RT	EXP	RT	DLT	RT	RESPONSE	(ppb)	(ug/Kg)
=====		==	=====	=====	=====	=====	=====	=====	=====
	22 Cis-Nonachlor		Compound	Not	Detected.				
	23 4,4'-DDD		Compound	Not	Detected.				
	24 Endosulfan II		Compound	Not	Detected.				
	25 4,4'-DDT		Compound	Not	Detected.				
	26 Endrin Aldehyde	6.452	6.450	0.002	1133737527		12.6073		12.607
	27 Endosulfan Sulfate		Compound	Not	Detected.				
	28 Mirex		Compound	Not	Detected.				
	29 Methoxychlor		Compound	Not	Detected.				
	30 Endrin Ketone		Compound	Not	Detected.				
T	31 Decachlorobiphenyl	8.324	8.325	-0.001	7431373332		76.9062		76.906
M	32 Chlordane		Compound	Not	Detected.				
	33 CHLD (1)		Compound	Not	Detected.				
	34 CHLD (2)		Compound	Not	Detected.				
	35 CHLD (3)		Compound	Not	Detected.				
	36 CHLD (4)		Compound	Not	Detected.				
	37 CHLD (5)		Compound	Not	Detected.				
M	38 Toxaphene		Compound	Not	Detected.				
	39 TOXAPHENE (1)		Compound	Not	Detected.				
	40 TOXAPHENE (2)		Compound	Not	Detected.				
	41 TOXAPHENE (3)		Compound	Not	Detected.				
	42 TOXAPHENE (4)		Compound	Not	Detected.				
	43 TOXAPHENE (5)		Compound	Not	Detected.				

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/SV0A/GC_44.i/180307LL.b/b18030752.d

Date : 07-MAR-2018 16:25

Client ID:

Sample Info: 18-02-1890-41

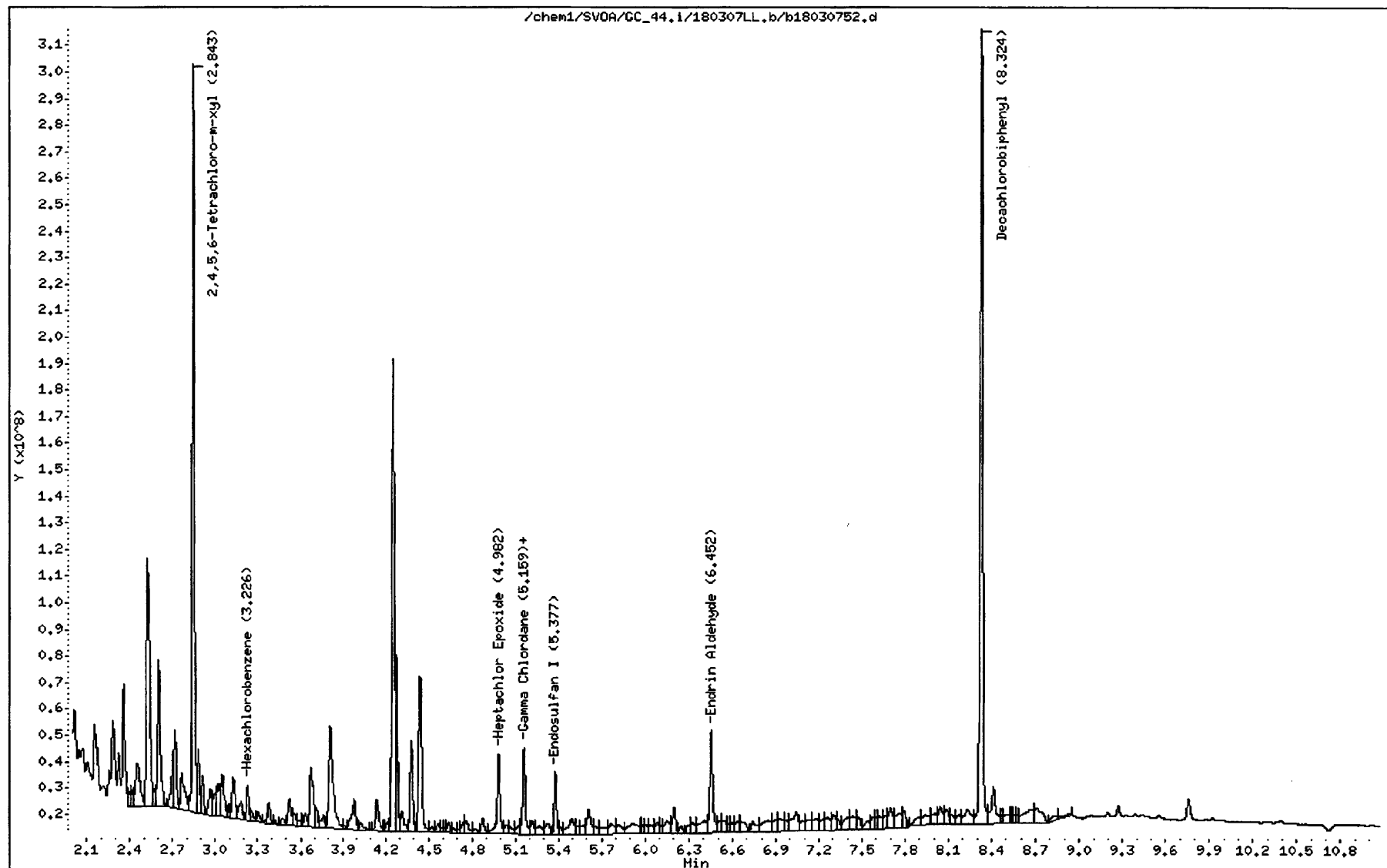
Column phase:

Instrument: GC_44.i

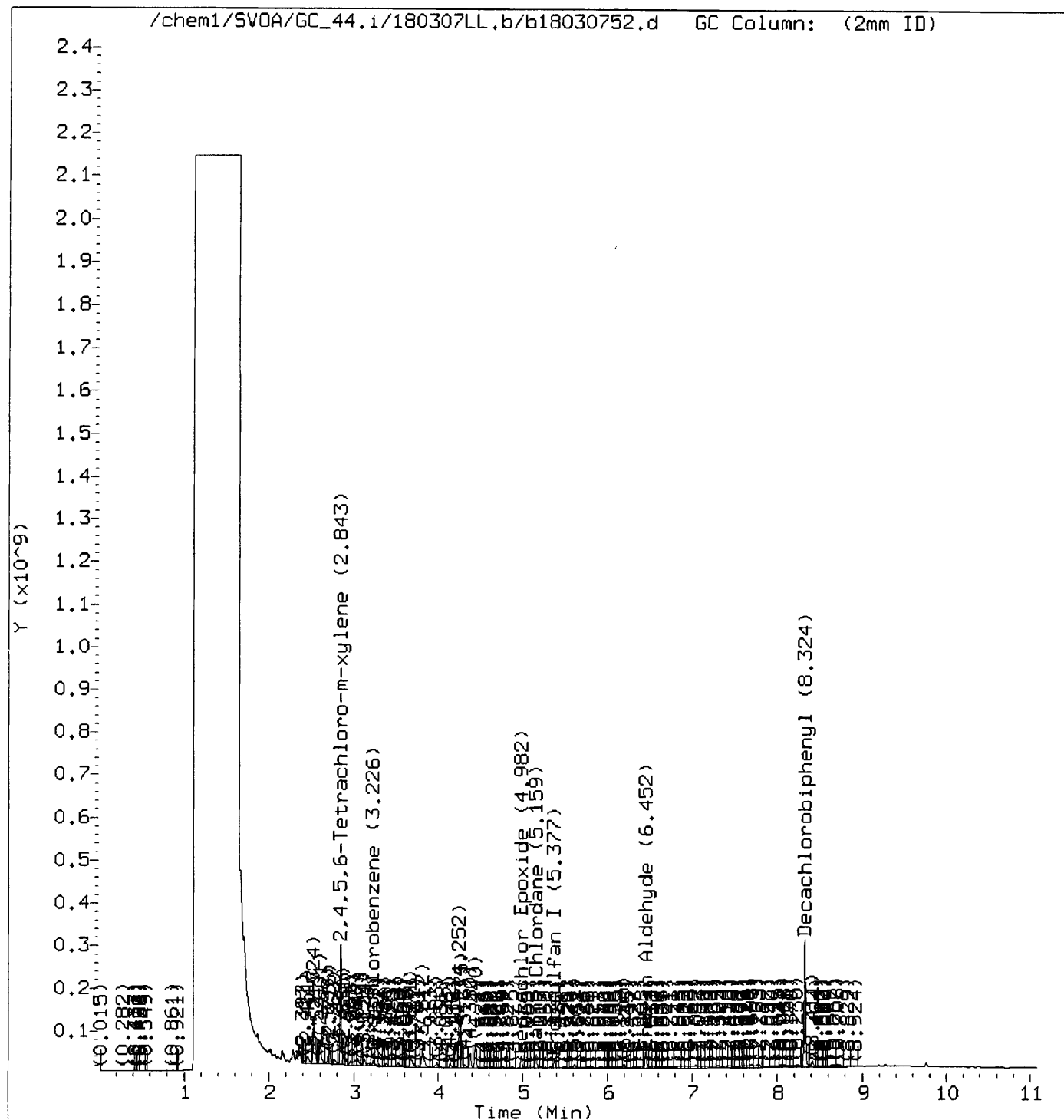
Operator: UHHN

Column diameter: 2.00

Page 1



Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen
Analyst responsible for change: on 03/09/2018 at 10:41.
Target 3.5 esignature user ID: uhn

Audit/management approval: _____

LM

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/a18030752.d
Lab Smp Id:
Inj Date : 07-MAR-2018 16:25
Operator : UHHN
Smp Info : 18-02-1890-41
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/a8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:12 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 52
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4
Inst ID: GC_44.i
Quant Type: ESTD
Cal File: a18030530.d
Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====	
2 4,4'-DDMU					Compound Not Detected.			

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/a18030752.d

Page 1

Date : 07-MAR-2018 16:25

Client ID:

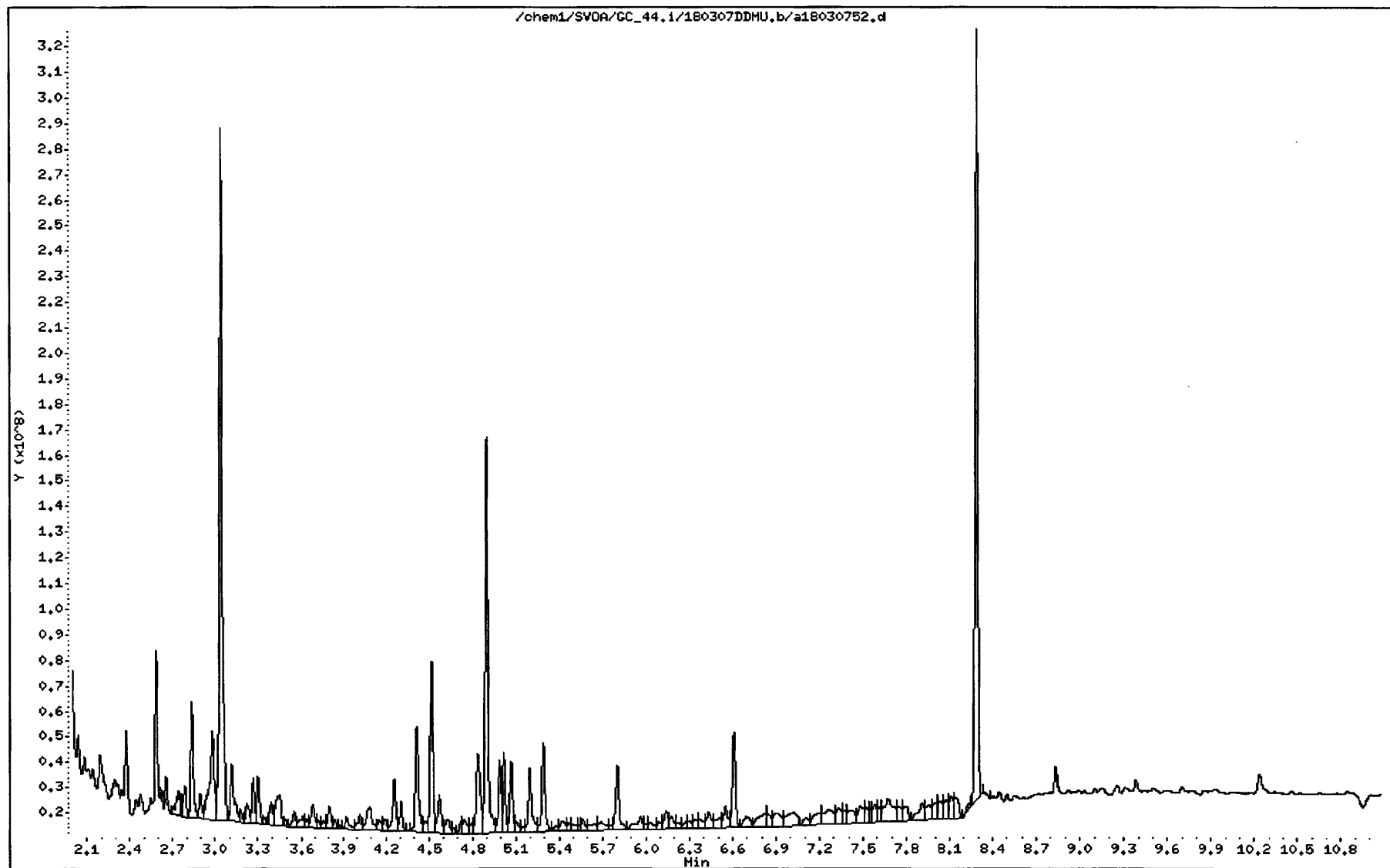
Instrument: GC_44.i

Sample Info: 18-02-1890-41

Operator: UHHN

Column phase:

Column diameter: 2.00



Data File: /chem1/SVOA/GC_44.i/180307DDMU.b/b18030752.d
Report Date: 08-Mar-2018 18:17

Page 1

Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180307DDMU.b/b18030752.d
Lab Smp Id:
Inj Date : 07-MAR-2018 16:25
Operator : UHHN
Smp Info : 18-02-1890-41
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180307DDMU.b/b8081LL_DDMU.m
Meth Date : 08-Mar-2018 18:17 uhhn
Cal Date : 05-MAR-2018 18:26
Als bottle: 52
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4

Inst ID: GC_44.i

Quant Type: ESTD

Cal File: b18030530.d

Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable

Local Compound Variable

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
2 4,4'-DDMU	5.159	5.122	0.037	1242809673	28.5549	28.554

Data File: /chem1/SVDA/GC_44.i/180307DDMU.b/b18030752.d

Page 1

Date : 07-MAR-2018 16:25

Client ID:

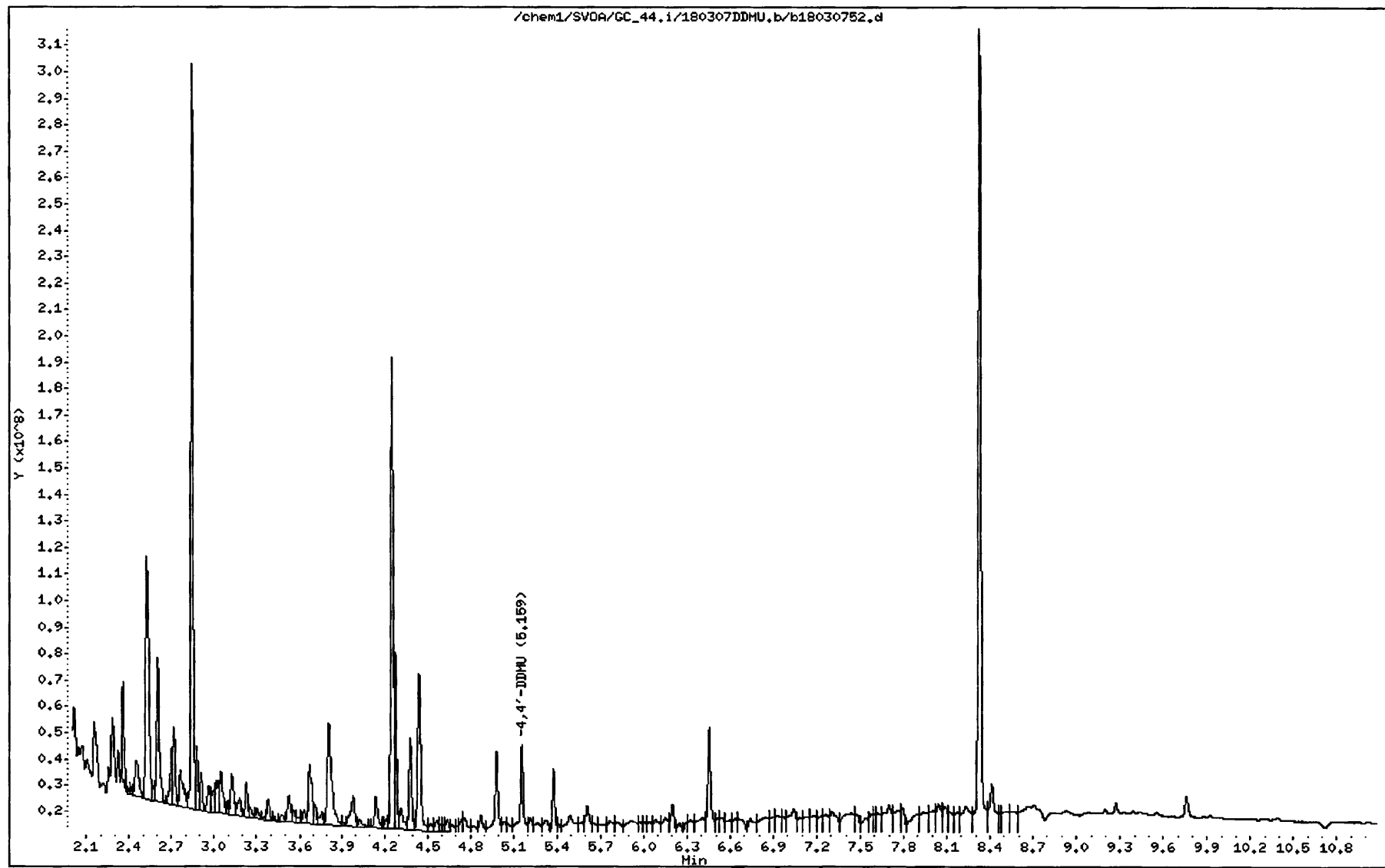
Instrument: GC_44.i

Sample Info: 18-02-1890-41

Operator: UHHN

Column phase:

Column diameter: 2.00



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180314LL.b/a18031457.d
Lab Smp Id:
Inj Date : 14-MAR-2018 08:30
Operator : UHHN
Smp Info : 18-02-1890-461 6643/14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180314LL.b/a808111.m
Meth Date : 14-Mar-2018 10:31 uhhn
Cal Date : 13-MAR-2018 20:24
Als bottle: 57
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4
Inst ID: GC_44.i
Quant Type: ESTD
Cal File: a18031406.d
Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS				
		ON-COLUMN			FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====
\$ 1 2,4,5,6-Tetrachloro-m-xylene	3.032	3.033	-0.001	9796802749	85.5864	85.586
2 Hexachlorobenzene	3.388	3.379	0.009	454717781	2.79380	2.793
3 Alpha-BHC	3.520	3.528	-0.008	46134712	0.24756	0.247 (a)
4 Gamma-BHC	3.840	3.828	0.012	147385386	0.90469	0.904 (a)
5 Beta-BHC	3.923	3.904	0.019	295788016	4.23539	4.235
6 Delta-BHC	4.088	4.089	-0.001	136408686	0.83593	0.835 (a)
7 Heptachlor	4.300	4.306	-0.006	442962439	2.75661	2.756
8 Aldrin	4.624	4.617	0.007	273481086	1.80797	1.807 (a)
9 4,4'-Dichlorobenzophenone	Compound Not Detected.					
10 Oxychlordane	Compound Not Detected.					
11 2,4'-DDE	5.193	5.195	-0.002	986623408	9.92431	9.924 (M)
12 Heptachlor Epoxide	Compound Not Detected.					
13 Gamma Chlordane	Compound Not Detected.					
14 Trans-Nonachlor	Compound Not Detected.					
15 Alpha Chlordane	5.493	5.478	0.015	242799317	1.84134	1.841 (a)
16 4,4'-DDE	5.560	5.537	0.023	345712169	2.71718	2.717
17 Endosulfan I	Compound Not Detected.					
18 2,4'-DDD	Compound Not Detected.					
19 Dieldrin	Compound Not Detected.					
20 2,4'-DDT	Compound Not Detected.					
21 Endrin	6.085	6.085	0.000	121180620	0.99221	0.992 (a)
22 Cis-Nonachlor	Compound Not Detected.					

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
23 4,4'-DDD	6.136	6.123	0.013	619495354	5.55989	5.559
24 Endosulfan II	6.294	6.302	-0.008	196306272	1.68099	1.680 (a)
25 4,4'-DDT	6.363	6.391	-0.028	357251993	3.62963	3.629
26 Endrin Aldehyde	6.692	6.698	-0.006	258001633	2.66169	2.661
27 Methoxychlor	6.834	6.838	-0.004	564445391	10.3412	10.341
28 Mirex	Compound Not Detected.					
29 Endosulfan Sulfate	7.100	7.111	-0.011	68958322	0.63966	0.639 (a)
30 Endrin Ketone	7.410	7.383	0.027	314227958	2.45238	2.452
\$ 31 Decachlorobiphenyl	8.278	8.279	-0.001	9345678544	83.8937	83.893
M 32 Chlordane	Compound Not Detected.					
33 CHLD (1)	Compound Not Detected.					
34 CHLD (2)	Compound Not Detected.					
35 CHLD (3)	Compound Not Detected.					
36 CHLD (4)	Compound Not Detected.					
37 CHLD (5)	Compound Not Detected.					
M 38 Toxaphene	Compound Not Detected.					
39 TOXAPHENE (1)	Compound Not Detected.					
40 TOXAPHENE (2)	Compound Not Detected.					
41 TOXAPHENE (3)	Compound Not Detected.					
42 TOXAPHENE (4)	Compound Not Detected.					
43 TOXAPHENE (5)	Compound Not Detected.					

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180314LL.b/a18031457.d

Date : 14-MAR-2018 08:30

Client ID:

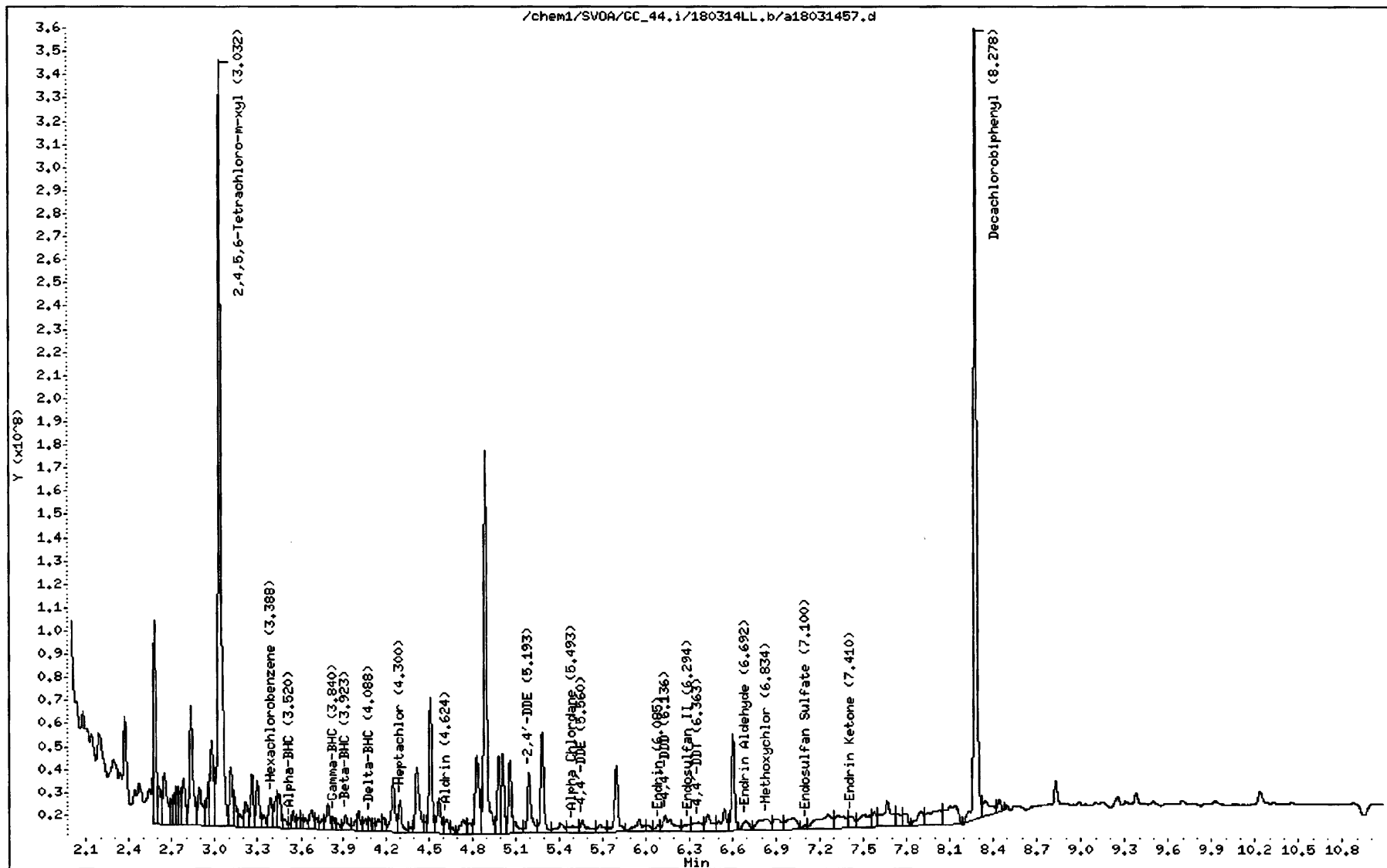
Sample Info: 18-02-1890-40

Instrument: GC_44.i

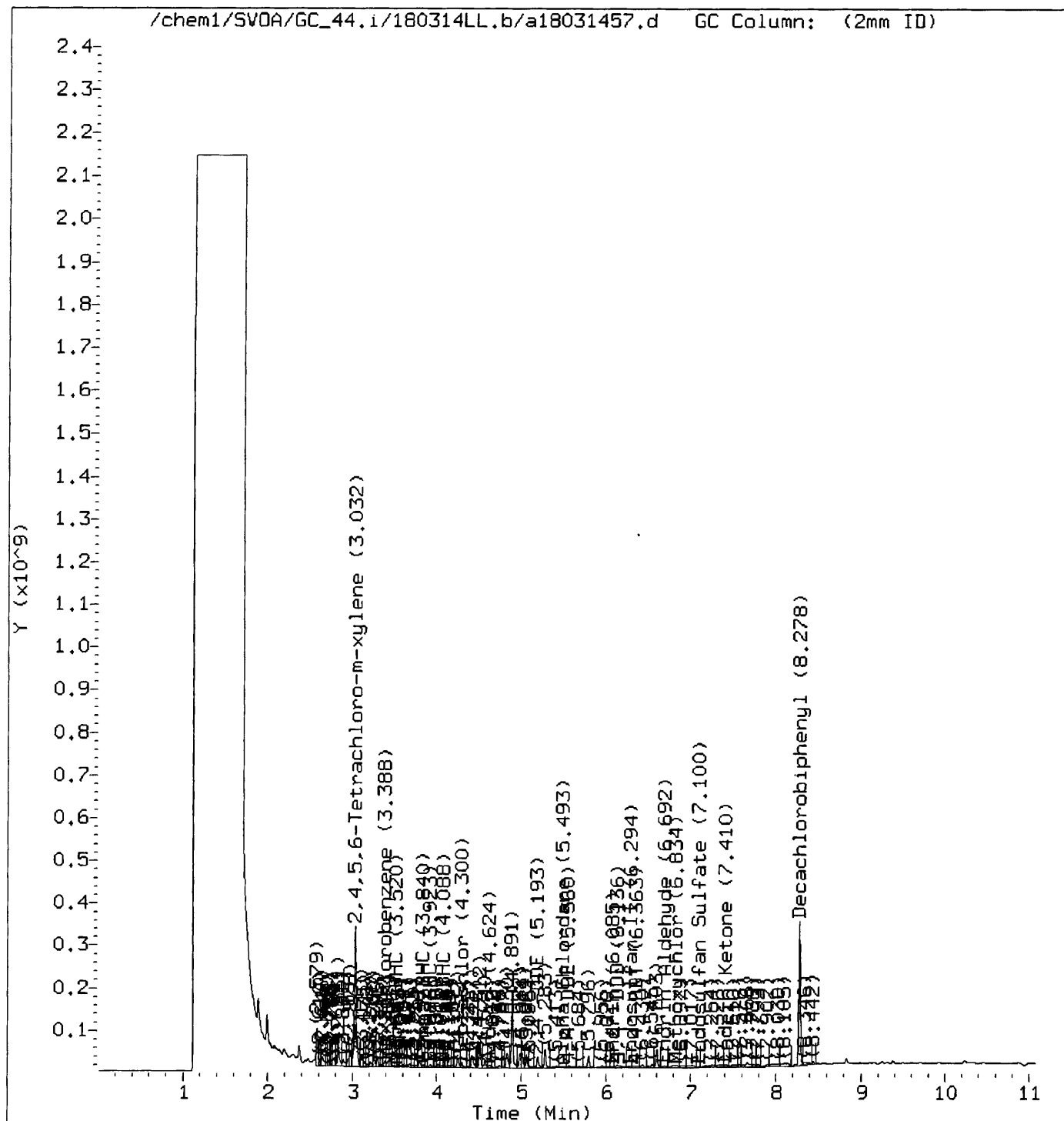
Operator: UHHN

Column diameter: 2.00

Column phase:



Manually Integrated Data File



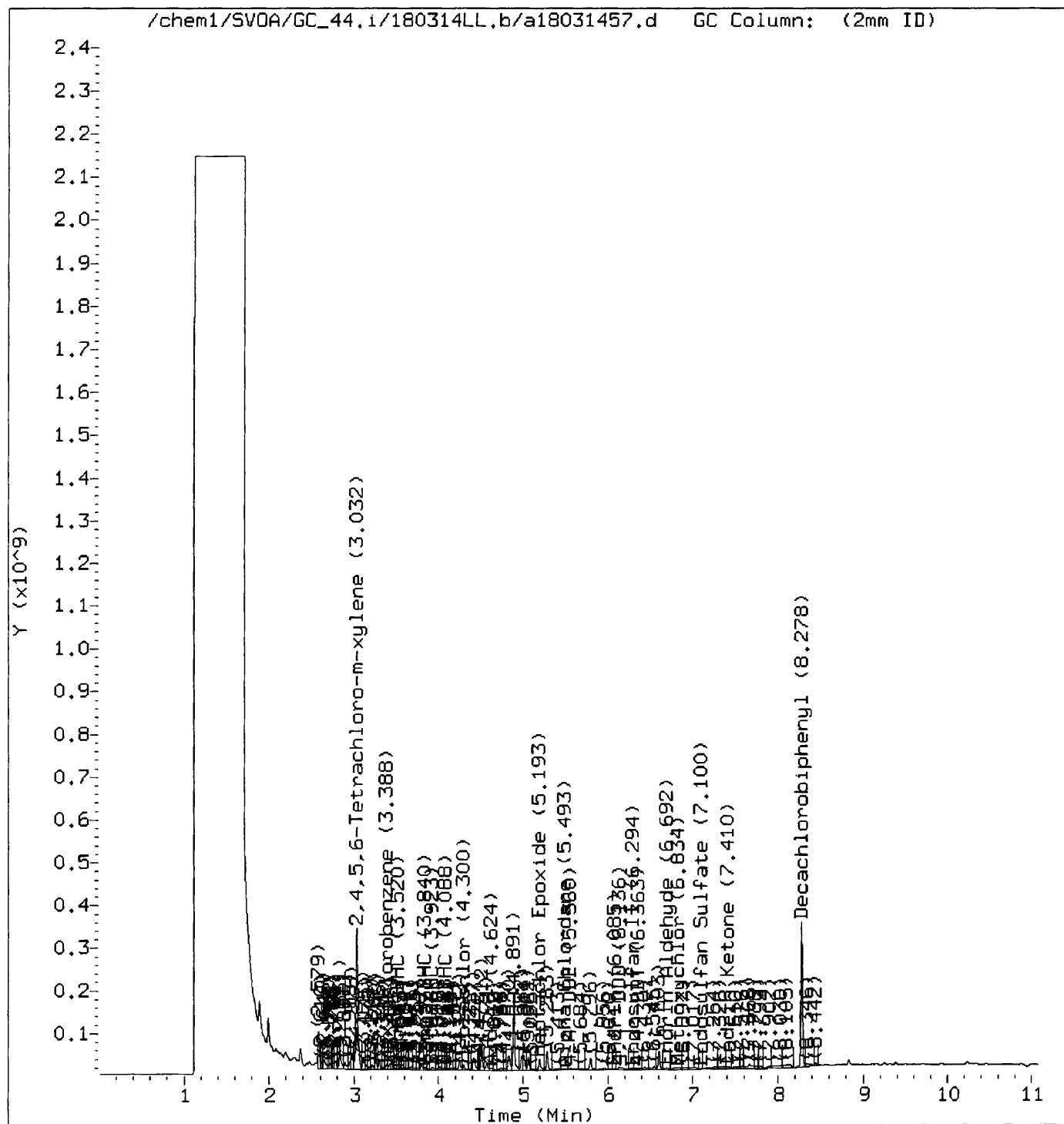
Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen

Analyst responsible for change: on 03/14/2018 at 10:42.

Target 3.5 esignature user ID: uhhn

Audit/management approval: 44



Eurofins Calscience

Data file : /chem1/SVOA/GC_44.i/180314LL.b/b18031457.d
Lab Smp Id:
Inj Date : 14-MAR-2018 08:30
Operator : UHHN
Smp Info : 18-02-1890-40 | 669 3/14
Misc Info :
Comment :
Method : /chem1/SVOA/GC_44.i/180314LL.b/b808111.m
Meth Date : 14-Mar-2018 10:31 uhhn
Cal Date : 13-MAR-2018 21:50
Als bottle: 57
Dil Factor: 1.00000
Integrator: HP Genie
Target Version: 3.50
Processing Host: US26TAR4
Inst ID: GC_44.i
Quant Type: ESTD
Cal File: b18031412.d
Compound Sublist: all.sub

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

		CONCENTRATIONS					
					ON-COLUMN	FINAL	
Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	(ppb)	(ug/Kg)
=====	==	=====	=====	=====	=====	=====	=====
T 1 2,4,5,6-Tetrachloro-m-xylene	2.839	2.856	-0.017	6241524312	57.5185	57.518	
2 Hexachlorobenzene	3.220	3.222	-0.002	353374037	2.24962	2.249	
3 Alpha-BHC	3.296	3.332	-0.036	163034022	0.91207	0.912 (a)	
4 Gamma-BHC	3.626	3.650	-0.024	161135356	1.03112	1.031 (a)	
5 Beta-BHC	3.704	3.718	-0.014	185557210	2.64941	2.649	
6 Delta-BHC	3.977	4.002	-0.025	500919063	3.13541	3.135	
7 Heptachlor	4.075	4.076	-0.001	25395669	0.17090	0.170 (a)	
8 Aldrin	4.372	4.403	-0.031	870625209	6.21944	6.219	
9 4,4'-Dichlorobenzophenone	Compound Not Detected.						
10 Oxychlordan	Compound Not Detected.						
11 Heptachlor Epoxide	4.977	4.968	0.009	855477971	6.94990	6.949	
12 2,4'-DDE	5.149	5.147	0.002	834429674	10.2470	10.247 (M)	
13 Gamma Chlordane	5.149	5.156	-0.007	834429674	6.56355	6.563	
14 Trans-Nonachlor	Compound Not Detected.						
15 Alpha Chlordane	5.260	5.298	-0.038	159629359	1.37135	1.371 (a)	
16 Endosulfan I	5.370	5.359	0.011	554264827	4.87948	4.879	
17 4,4'-DDE	5.483	5.457	0.026	482245210	4.16107	4.161	
18 Dieldrin	5.605	5.625	-0.020	551619098	4.51126	4.511	
19 2,4'-DDD	Compound Not Detected.						
20 Endrin	5.935	5.921	0.014	381088669	3.43265	3.432	
21 2,4'-DDT	Compound Not Detected.						

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ppb)	FINAL (ug/Kg)
=====	==	=====	=====	=====	=====	=====
22 Cis-Nonachlor	Compound Not Detected.					
23 4,4'-DDD	5.995	6.020	-0.025	149608323	1.59018	1.590 (a)
24 Endosulfan II	6.144	6.125	0.019	209052168	1.98341	1.983 (a)
25 4,4'-DDT	6.291	6.319	-0.028	88970618	1.04219	1.042 (a)
26 Endrin Aldehyde	6.444	6.443	0.001	1121054553	12.7905	12.790
27 Endosulfan Sulfate	6.734	6.706	0.028	57776425	0.60668	0.606 (a)
28 Mirex	Compound Not Detected.					
29 Methoxychlor	6.920	6.959	-0.039	354425231	7.51811	7.518
30 Endrin Ketone	7.174	7.206	-0.032	222775715	2.04242	2.042
T 31 Decachlorobiphenyl	8.316	8.343	-0.027	7430295661	80.4037	80.403 (A)
M 32 Chlordane	Compound Not Detected.					
33 CHLD (1)	Compound Not Detected.					
34 CHLD (2)	Compound Not Detected.					
35 CHLD (3)	Compound Not Detected.					
36 CHLD (4)	Compound Not Detected.					
37 CHLD (5)	Compound Not Detected.					
M 38 Toxaphene	Compound Not Detected.					
39 TOXAPHENE (1)	Compound Not Detected.					
40 TOXAPHENE (2)	Compound Not Detected.					
41 TOXAPHENE (3)	Compound Not Detected.					
42 TOXAPHENE (4)	Compound Not Detected.					
43 TOXAPHENE (5)	Compound Not Detected.					

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: /chem1/SVDA/GC_44.i/180314LL.b/b18031457.d

Page 1

Date : 14-MAR-2018 08:30

Client ID:

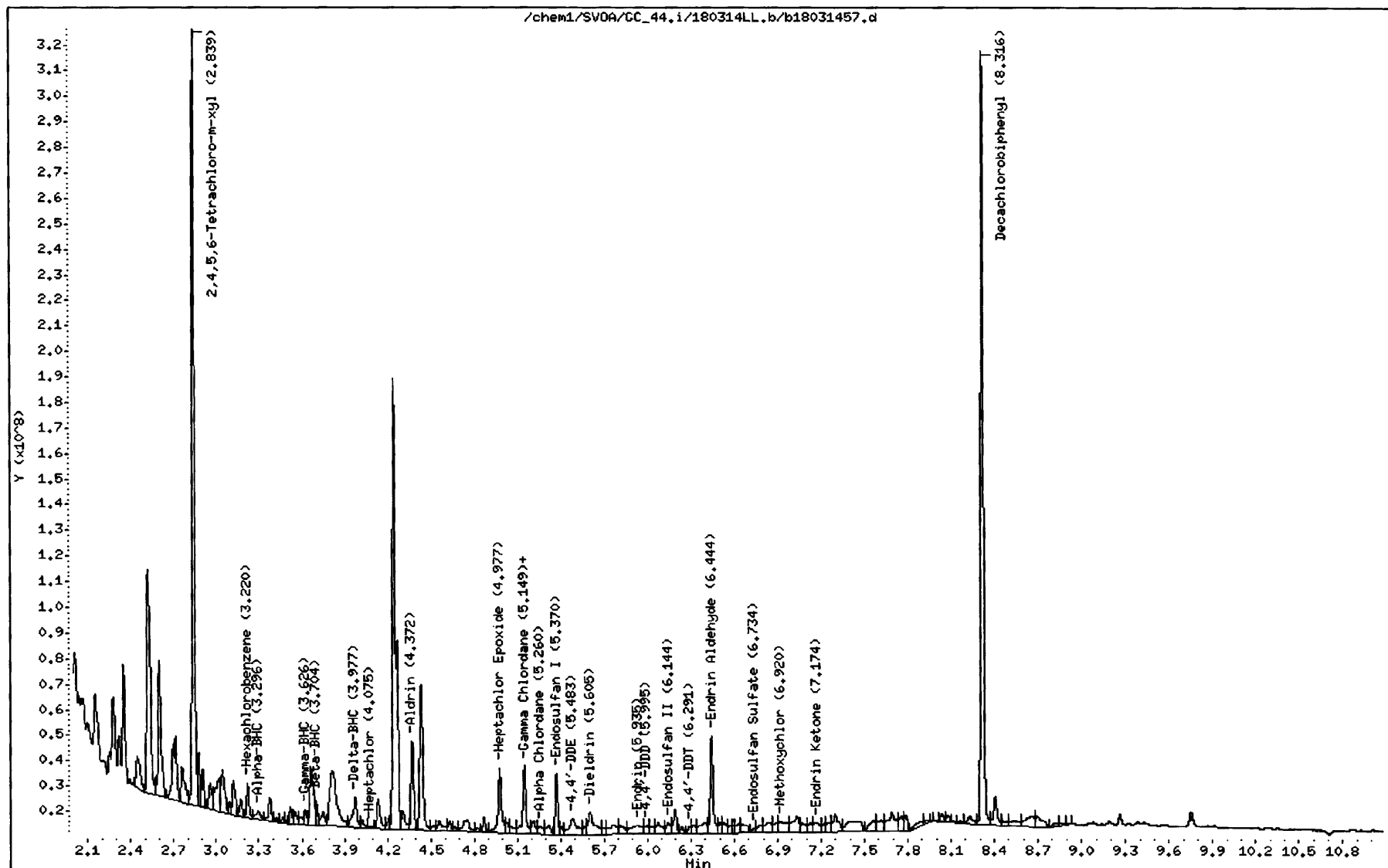
Instrument: GC_44.i

Sample Info: 18-02-1890-40

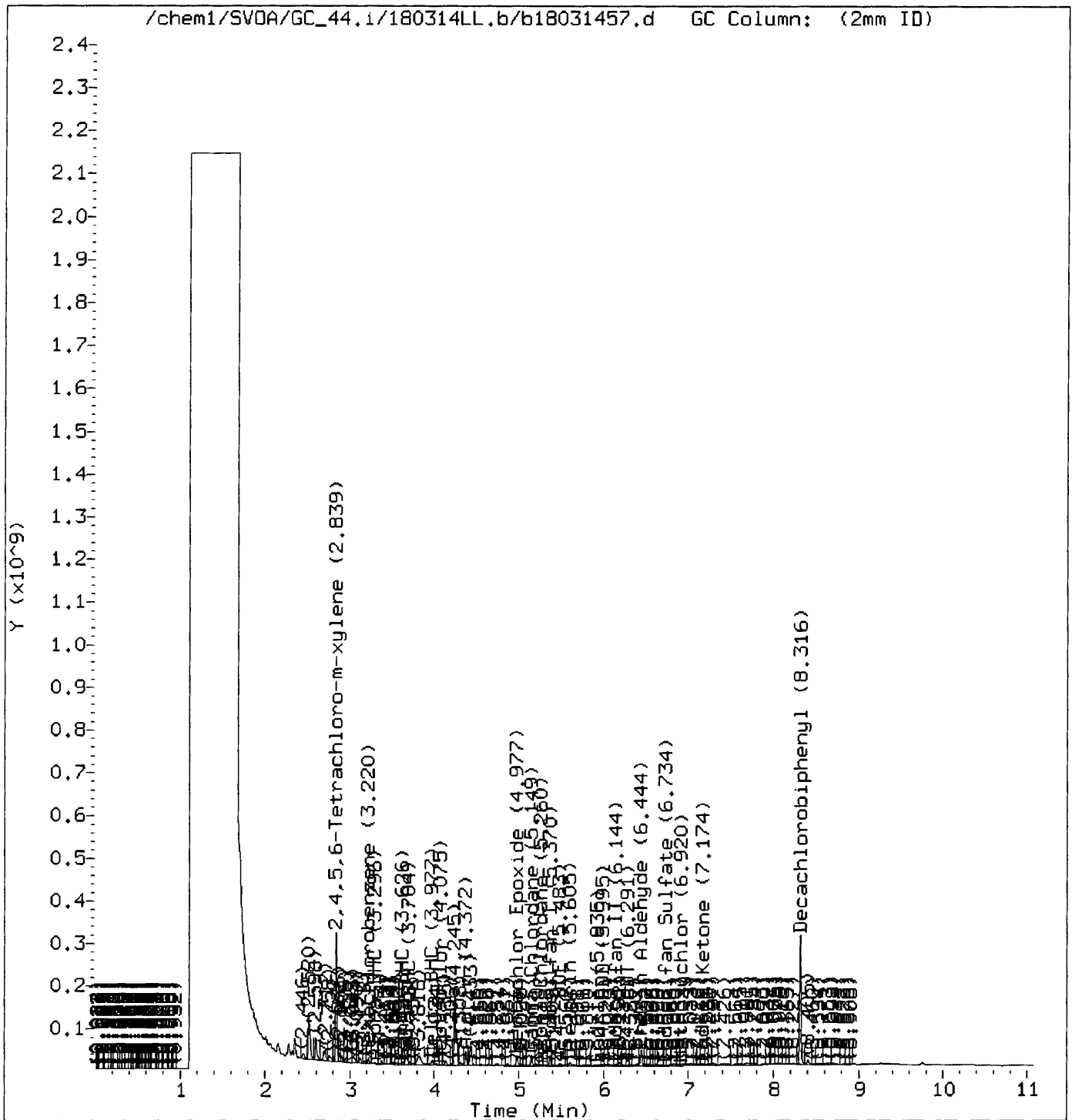
Operator: UHHN

Column phase:

Column diameter: 2.00



Manually Integrated Data File



Reason for manual integration: Signal not integrated by automation

Digitally signed by Hong-Hanh Nguyen

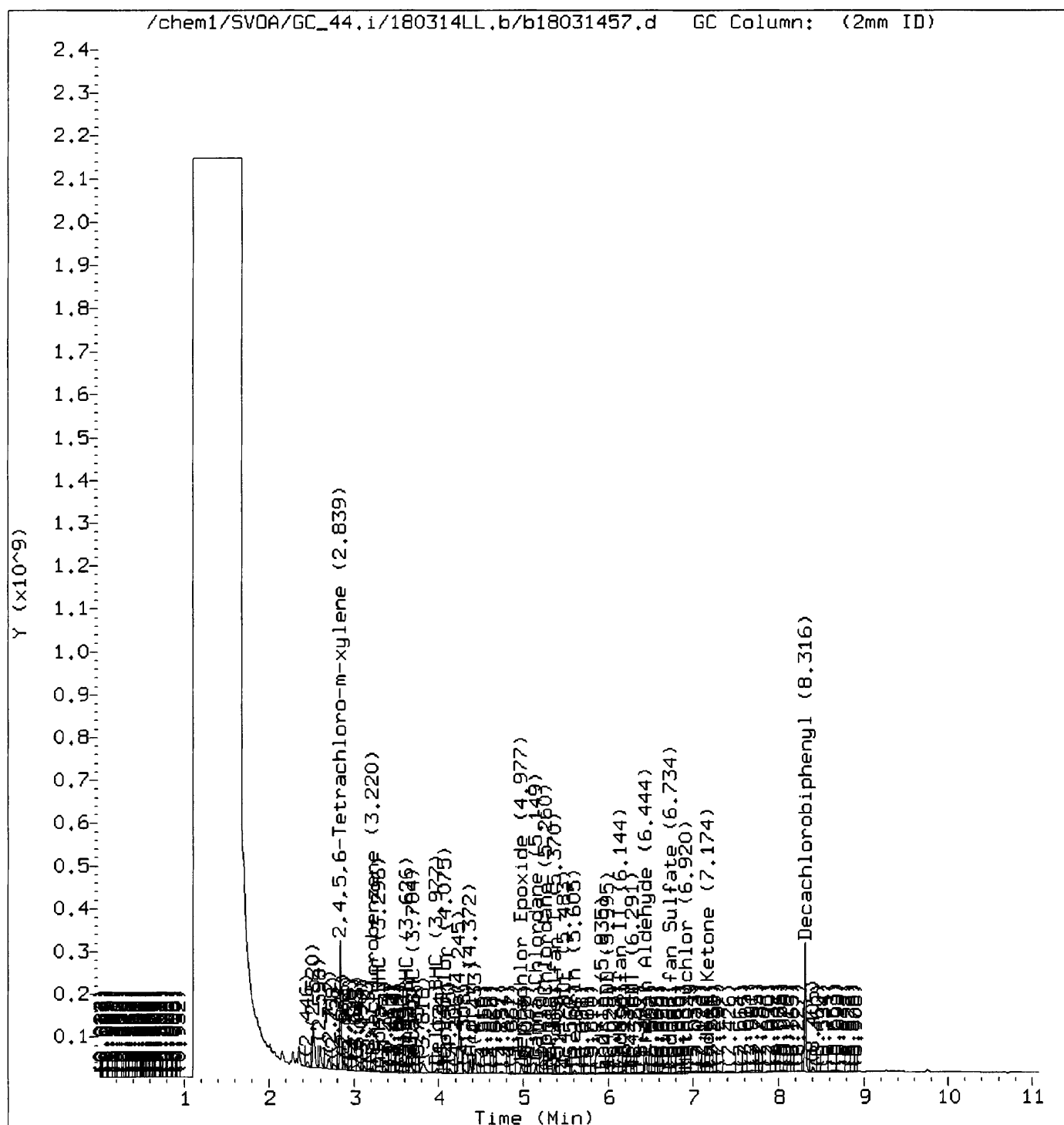
Analyst responsible for change: on 03/14/2018 at 10:42.

Target 3.5 esignature user ID: uhhn

Audit/management approval:

4m

Original Data File



Analysis Method (EPA Method): <input type="checkbox"/> 608 <input checked="" type="checkbox"/> 8081 <input type="checkbox"/> 8082 <input type="checkbox"/> 8141 <input type="checkbox"/> 8310 <input type="checkbox"/> TO-13 <input type="checkbox"/> TO-4 <input checked="" type="checkbox"/> TMDL <input type="checkbox"/> 8270 (<input type="checkbox"/> Soil <input type="checkbox"/> Soil SIM SUPER <input type="checkbox"/> PAH <input type="checkbox"/> SIM PAH <input type="checkbox"/> SIM Pest <input type="checkbox"/> SIM PCB cong. <input type="checkbox"/> SIM FL)				
Extraction Method (EPA Method): <input checked="" type="checkbox"/> 3510 <input type="checkbox"/> 3520 <input type="checkbox"/> 3540 <input type="checkbox"/> 3541 <input type="checkbox"/> 3545 <input type="checkbox"/> 3550 <input type="checkbox"/> 3580				
Analyst ID#: Measuring Sample- 785 Start Extraction- 785/1138 Blow Down- 605 Clean Up-				
Matrix: <input type="checkbox"/> Soil <input checked="" type="checkbox"/> Aqueous <input type="checkbox"/> Oil <input type="checkbox"/> Wipe <input type="checkbox"/> Filter <input type="checkbox"/> Tissue <input type="checkbox"/> Air				
Balance ID#:		Filter ID#:	ASE ID#:	Soxtherm ID#: Orbit Shaker ID#: #1/2 Sonicator ID#:
Ext. Start Date/Time: 3-2-18 15:00			Ext. End Date/Time: 3-2-18 17:30 #3	
Sand or Wipe ID#:		Drying Agent: <input checked="" type="checkbox"/> Na ₂ SO ₄ <input type="checkbox"/> Diatomaceous Earth Drying Agent(s) ID#: 507-97-14		
Surrogate Std ID# & Volume Added (mL): 55022618A 2ppm/0.05mL				
Spike Std ID# & Volume Added (mL): 55022718A 1ppm/0.05mL Spike Added to: <input checked="" type="checkbox"/> LCS <input checked="" type="checkbox"/> LCSD <input type="checkbox"/> MS <input type="checkbox"/> MSD				
Extraction Solvent: <input checked="" type="checkbox"/> MeCl ₂ <input type="checkbox"/> 1:1 Hexane-Acetone <input type="checkbox"/> 1:1 MeCl ₂ -Acetone <input type="checkbox"/> 9:1 Hexane-Diethyl-ether <input type="checkbox"/> Acetonitrile				
Extraction Solvent ID#: 507-97-25		Exchange Solvent (<input checked="" type="checkbox"/> Hexane <input type="checkbox"/> Acetonitrile) ID#: 507-93-10		
Clean Up Start Date & Time:		Clean Up End Date & Time:		
Clean Up: <input type="checkbox"/> 3620 Florisil <input type="checkbox"/> 3630 SGC <input type="checkbox"/> 3660 Sulfur <input type="checkbox"/> 3665 Acid <input type="checkbox"/> Other				Cartridge ID#:
Clean Up Reagent ID#:			Cartridge Conditioning Column Pre-Elution Reagent ID#:	
MB/LCS/MS Batch #:		Sample W (g) / $\sqrt{\text{mL}}$		
180302608				
Cel ID#:	Initial	Final	Clean Up Performed	Comments
MB	1500	1	<input type="checkbox"/>	PH~6
LCS	1500	1	<input type="checkbox"/>	PH~6
LCSD	1500	1	<input type="checkbox"/>	PH~6
MS 18-02-1890- 11mg M,L	1500	1	<input type="checkbox"/>	PH~7
MSD 1 11mgSD N,L	1500	1	<input type="checkbox"/>	PH~7
18-02-1890- 1 F,G	1500	1	<input type="checkbox"/>	PH~7
4 F,G	1500	1	<input type="checkbox"/>	PH~7
8 F,G	1500	1	<input type="checkbox"/>	PH~7
11 F,G	1500	1	<input type="checkbox"/>	PH~7
14 F,G	1500	1	<input type="checkbox"/>	PH~7
18 F,G	1500	1	<input type="checkbox"/>	PH~7
21 F,G	1500	1	<input type="checkbox"/>	PH~7
24 F,G	1500	1	<input type="checkbox"/>	PH~7
27 F,G	1500	1	<input type="checkbox"/>	PH~7
31 F,G	1500	1	<input type="checkbox"/>	PH~7
34 F,G	1500	1	<input type="checkbox"/>	PH~7
38 F,G	1500	1	<input type="checkbox"/>	PH~7
✓ 41 E,F	1500	1	<input type="checkbox"/>	PH~6
			<input type="checkbox"/>	
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Peer Reviewed by: 605

Peer Reviewed Date: 3-6-18

Revision Date: 10/20/16

INITIAL CALIBRATION QUALITY CONTROL SUMMARY

FOR METHOD: EPA 8081A

ICAL WORK ORDER: 099-14-434-447-5941
 ICAL BATCH ID: 180305I002
 INSTRUMENT: GC 44

ANALYZED BY: 1,096
 ICAL D/T ANALYZED: 2018-03-05 16:04
 REVIEWED BY: 421
 D/T REVIEWED: 2018-03-12 09:53

COMPOUND	COMP. TYPE	CALIB. MODEL	1	2	3	4	5	6	7	8	9	Avg. RF	Min. RF	%RSD	%RSD CL	R or R^2	R or R^2 CL	STATUS
Gamma-BHC	C	Avg RF	147,978,95 4	149,289,02 4	149,082,1 49	153,333 ,759	149,200,5 97					149,7 76,89 6	0.00	1	0-20			PASS
Heptachlor	C	Avg RF	150,776,85 1	147,257,11 1	142,416,2 21	143,936 ,734	139,241,3 36					144,7 25,65 1	0.00	3	0-20			PASS
Aldrin	C	Avg RF	143,101,30 2	141,122,71 6	136,972,1 83	138,793 ,598	134,130,9 28					138,8 24,14 5	0.00	3	0-20			PASS
Heptachlor Epoxide	C	Avg RF	135,006,44 6	129,726,14 6	124,009,1 72	125,223 ,102	121,228,9 49					127,0 38,76 3	0.00	4	0-20			PASS
Gamma Chlordane	C	Avg RF	137,651,73 5	130,731,10 7	126,472,6 08	128,347 ,689	124,540,1 46					129,5 48,65 7	0.00	4	0-20			PASS
Alpha Chlordane	C	Avg RF	135,042,09 8	125,821,16 6	120,155,6 22	121,754 ,465	117,894,1 16					124,1 33,49 4	0.00	5	0-20			PASS
4,4'-DDE	C	Avg RF	114,565,98 5	113,800,40 7	113,803,0 87	116,375 ,347	112,512,1 10					114,2 11,38 7	0.00	1	0-20			PASS
Dieldrin	C	Avg RF	134,456,11 6	128,151,34 0	124,933,4 25	127,057 ,115	123,667,4 04					127,6 53,08 0	0.00	3	0-20			PASS
Endrin	C	Avg RF	124,164,56 7	119,441,74 9	115,496,7 36	117,877 ,592	114,927,1 59					118,3 81,56 0	0.00	3	0-20			PASS
4,4'-DDD	C	Avg RF	103,096,05 6	99,857,858	98,469,12 0	100,411 ,048	98,150,74 3					99,99 6,965	0.00	2	0-20			PASS
4,4'-DDT	C	Avg RF	102,982,02 8	98,899,701	97,104,80 8	102,690 ,185	98,849,54 6					100,1 05,25 3	0.00	3	0-20			PASS
4,4'-DDMU		Avg RF	42,859,133	43,907,127	40,664,05 2	35,620, 718	37,850,28 5					40,18 0,263	0.00	9	0-20			PASS
Toxaphene	C	Avg RF	19,627,747	25,166,160	25,150,68 2	24,404, 685	23,705,77 7					23,61 1,010	0.00	10	0-20			PASS

INITIAL CALIBRATION QUALITY CONTROL SUMMARY

FOR METHOD: EPA 8081A

ICAL WORK ORDER: 099-14-434-447-5941
 ICAL BATCH ID: 180305I002
 INSTRUMENT: GC 44

ANALYZED BY: 1,096
 ICAL D/T ANALYZED: 2018-03-05 16:04
 REVIEWED BY: 421
 D/T REVIEWED: 2018-03-12 09:53

COMPOUND	COMP. TYPE	CALIB. MODEL	1	2	3	4	5	6	7	8	9	Avg. RF	Min. RF	%RSD	%RSD CL	R or R^2	R or R^2 CL	STATUS
Oxychlorane	Avg RF		142,677,371	137,114,599	121,816,365	122,834,322	119,168,479					128,722,227	0.00	8	0-20			PASS
2,4'-DDE	Avg RF		100,221,353	103,706,734	98,628,480	91,999,371	93,676,893					97,646,566	0.00	5	0-20			PASS
Trans-nonachlor	Avg RF		141,952,687	154,065,591	142,781,363	147,007,962	141,972,494					145,556,019	0.00	4	0-20			PASS
2,4'-DDD	Avg RF		81,648,754	87,821,705	80,440,104	82,550,626	79,785,527					82,449,343	0.00	4	0-20			PASS
2,4'-DDT	Avg RF		89,463,360	98,490,744	92,555,307	96,375,473	93,458,049					94,068,587	0.00	4	0-20			PASS
Cis-nonachlor	Avg RF		92,786,916	99,514,954	93,817,219	97,725,464	95,120,895					95,793,090	0.00	3	0-20			PASS

Data Files:

Level #	D/T Analyzed	Data File
1	2018-03-05 16:04	/chem1/SVOA/GC_44/180305LL/a1803052018030520
2	2018-03-05 16:18	/chem1/SVOA/GC_44/180305LL/a1803052118030521
3	2018-03-05 16:32	/chem1/SVOA/GC_44/180305LL/a1803052218030522
4	2018-03-05 16:46	/chem1/SVOA/GC_44/180305LL/a1803052318030523
5	2018-03-05 17:01	/chem1/SVOA/GC_44/180305LL/a1803052418030524

INITIAL CALIBRATION VERIFICATION QUALITY CONTROL SHEET FOR METHOD: EPA 8081A

ICV WORK ORDER: 099-14-434-447-5941

INITIAL BATCH: 180305I002

INSTRUMENT: GC 44

ANALYZED BY: 1096

D/T ANALYZED:

INITIAL: 2018-03-05 16:04

ICV: 2018-03-05 17:15

REVIEWED BY: 421

D/T REVIEWED: 2018-03-12 09:53

DATA FILE: /chem1/SVOA/GC_44/180305LL/a1803052518030525

<u>COMPOUND NAME</u>	<u>COMP TYPE</u>	<u>CALIB MODEL</u>	<u>MIN RF</u>	<u>AVG RF</u>	<u>ICV RF</u>	<u>AMOUNT</u>	<u>ICV CONC</u>	<u>ICV %D</u>	<u>ICV %D CL</u>	<u>STATUS</u>
Gamma-BHC	C	Avg Resp	0.00	149776896.311	160573568.625			-7	0-15	PASS
Heptachlor	C	Avg Resp	0.00	144725650.637	153740279.025			-6	0-15	PASS
Aldrin	C	Avg Resp	0.00	138824145.347	147223797.725			-6	0-15	PASS
Heptachlor Epoxide	C	Avg Resp	0.00	127038762.936	133516948.075			-5	0-15	PASS
Gamma Chlordane	C	Avg Resp	0.00	129548657.117	136043090.850			-5	0-15	PASS
Alpha Chlordane	C	Avg Resp	0.00	124133493.626	128715152.250			-4	0-15	PASS
4,4'-DDE	C	Avg Resp	0.00	114211387.185	123387052.300			-8	0-15	PASS
Dieldrin	C	Avg Resp	0.00	127653079.898	134617264.725			-5	0-15	PASS
Endrin	C	Avg Resp	0.00	118381560.285	125026493.550			-6	0-15	PASS
4,4'-DDD	C	Avg Resp	0.00	99996965.032	106427458.450			-6	0-15	PASS
4,4'-DDT	C	Avg Resp	0.00	100105253.431	103719845.900			-4	0-15	PASS
4,4'-DDMU		Avg Resp	0.00	40180263.236	36391696.175			9	0-15	PASS
Toxaphene	C	Avg Resp	0.00	23611010.194	22766440.958			4	0-15	PASS
Oxychlordane		Avg Resp	0.00	128722227.057	119878294.375			7	0-15	PASS
2,4'-DDE		Avg Resp	0.00	97646566.327	90364430.125			7	0-15	PASS
Trans-nonachlor		Avg Resp	0.00	145556019.398	141104248.875			3	0-15	PASS
2,4'-DDD		Avg Resp	0.00	82449343.429	75240034.725			9	0-15	PASS
2,4'-DDT		Avg Resp	0.00	94068586.781	93257346.200			1	0-15	PASS
Cis-nonachlor		Avg Resp	0.00	95793089.818	93441316.525			2	0-15	PASS

MIN RF: Method Specified Minimum Response Factor

METHOD BLANK ASSOCIATION SUMMARY

FOR METHOD: EPA 8081A

MB SAMPLE ID: 099-16-704-21
MB BATCH ID: 180302L08
INSTRUMENT: GC 44
EXTRACTION: EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 10:22
REVIEWED BY:
D/T REVIEWED:
MATRIX: Water

DATA FILE: /chem1/SVOA/GC_44/180307LL/a1803073118030731

CLIENT WORK ORDER: 18-02-1890

<u>S#</u>	<u>RUN TYPE</u>	<u>CLIENT SAMPLE ID</u>	<u>D/T ANALYZED</u>	<u>DATA FILE</u>
1	CS-RW-01-G-S-20180227		2018-03-07 13:00	/chem1/SVOA/GC_44/180307DDMU/a1803074018030740
4	IA-RW-02-G-S-20180227		2018-03-07 13:14	/chem1/SVOA/GC_44/180307DDMU/a1803074118030741
8	IA-RW-03-G-S-20180227		2018-03-07 13:28	/chem1/SVOA/GC_44/180307DDMU/a1803074218030742
11	IA-RW-04-G-S-20180227		2018-03-07 13:42	/chem1/SVOA/GC_44/180307DDMU/a1803074318030743
14	IA-RW-05-G-S-20180227		2018-03-07 13:57	/chem1/SVOA/GC_44/180307DDMU/a1803074418030744
18	IA-RW-06-G-S-20180227		2018-03-07 14:11	/chem1/SVOA/GC_44/180307DDMU/a1803074518030745
21	FH-RW-07-G-S-20180227		2018-03-07 14:25	/chem1/SVOA/GC_44/180307DDMU/a1803074618030746
24	OA-RW-08-G-S-20180227		2018-03-07 14:39	/chem1/SVOA/GC_44/180307DDMU/a1803074718030747
27	OA-RW-09-G-S-20180227		2018-03-07 14:54	/chem1/SVOA/GC_44/180307DDMU/a1803074818030748
31	CM-RW-10-G-S-20180227		2018-03-07 15:08	/chem1/SVOA/GC_44/180307DDMU/a1803074918030749
34	CM-RW-11-G-S-20180227		2018-03-07 15:57	/chem1/SVOA/GC_44/180307DDMU/a1803075018030750
38	IB-RW-12-G-S-20180227		2018-03-07 16:11	/chem1/SVOA/GC_44/180307DDMU/a1803075118030751
41	EB-20180227		2018-03-07 16:25	/chem1/SVOA/GC_44/180307DDMU/a1803075218030752

RAW DATA SHEET FOR METHOD: EPA 8081A

WORK ORDER: 099-16-704
INSTRUMENT: GC 44
EXTRACTION : EPA 3510C
D/T EXTRACTED: 2018-03-02 00:00

ANALYZED BY: 669
D/T ANALYZED: 2018-03-07 10:22
REVIEWED BY:
D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307LL/a1803073118030731

MB CLIENT SAMPLE NUMBER: Method Blank

LCS/MB BATCH: 180302L08 **SAMPLE VOLUME / WEIGHT:** DEFAULT: 1,500.00 ml / ACTUAL: 1,500.00 ml
MS/MSD BATCH: **FINAL VOLUME / WEIGHT:** DEFAULT: 1.00 ml / ACTUAL: 1.00 ml
UNITS: ng/L **ADJUSTMENT RATIO TO PF:** 1.00

COMMENT:

COMPOUND NAME	ON COL CONC	CONC	DF	RL	QUAL	RPD	TYPE	CONF CONC
Aldrin	0.000	ND	1.00	1.3			2	ND
2,4'-DDD	0.000	ND	1.00	1.3			2	ND
2,4'-DDE	0.000	ND	1.00	1.3			2	ND
2,4'-DDT	0.000	ND	1.00	2.0			2	ND
4,4'-DDD	0.000	ND	1.00	1.3			2	ND
4,4'-DDE	0.000	ND	1.00	1.3			2	ND
4,4'-DDT	0.000	ND	1.00	1.3			2	ND
4,4'-DDMU	0.000	ND	1.00	2.0			2	ND
Alpha Chlordane	0.000	ND	1.00	3.3			2	ND
Cis-nonachlor	0.000	ND	1.00	3.3			2	ND
Dieldrin	0.000	ND	1.00	1.3			2	ND
Gamma Chlordane	0.000	ND	1.00	3.3			2	ND
Oxychlordane	0.000	ND	1.00	3.3			2	ND
Toxaphene	0.000	ND	1.00	50			2	ND
Trans-nonachlor	0.000	ND	1.00	3.3			2	ND
Endrin	0.000	ND	1.00	1.3			2	ND
Gamma-BHC	0.000	ND	1.00	1.3			2	ND
Heptachlor	0.000	ND	1.00	1.3			2	ND
Heptachlor Epoxide	0.000	ND	1.00	1.3			2	ND

LCS / LCSD QUALITY CONTROL SHEET

FOR METHOD: EPA 8081A

LCS/LCSD SAMPLE ID: 099-16-704-21

LCS/LCSD BATCH: 180302L08

INSTRUMENTS:

LCS: GC 44

LCSD: GC 44

EXTRACTION: EPA 3510C

D/T EXTRACTED:

LCS: 2018-03-02 00:00

LCSD: 2018-03-02 00:00

ANALYZED BY: 669

D/T ANALYZED:

LCS: 2018-03-07 16:48

LCSD: 2018-03-08 11:08

REVIEWED BY:

D/T REVIEWED:

COMMENT:

COMPOUND	ADDED	LCS CONC	LCS%REC	LCSD CON	LCSD%REC	% REC CL	ME CL	RPD	RPD CL	STATUS	QUALIFIERS
Alpha-BHC	33.35	31.43	94	28.24	85	50-150	33-167	11	0-25	PASS	
Gamma-BHC	33.35	32.88	99	28.70	86	50-150	33-167	14	0-25	PASS	
Beta-BHC	33.35	30.14	90	26.32	79	50-150	33-167	14	0-25	PASS	
Heptachlor	33.35	33.60	101	28.69	86	50-150	33-167	16	0-25	PASS	
Delta-BHC	33.35	32.82	98	29.50	88	50-150	33-167	11	0-25	PASS	
Aldrin	33.35	28.25	85	24.95	75	50-150	33-167	12	0-25	PASS	
Heptachlor Epoxide	33.35	32.22	97	28.81	86	50-150	33-167	11	0-25	PASS	
Endosulfan I	33.35	32.54	98	29.21	88	50-150	33-167	11	0-25	PASS	
Dieldrin	33.35	31.22	94	28.11	84	50-150	33-167	10	0-25	PASS	
4,4'-DDE	33.35	35.94	108	31.42	94	50-150	33-167	13	0-25	PASS	
Endrin	33.35	31.51	94	24.83	74	50-150	33-167	24	0-25	PASS	
Endrin Aldehyde	33.35	32.47	97	31.89	96	50-150	33-167	2	0-25	PASS	
4,4'-DDD	33.35	34.00	102	30.62	92	50-150	33-167	10	0-25	PASS	
Endosulfan II	33.35	33.55	101	30.74	92	50-150	33-167	9	0-25	PASS	
4,4'-DDT	33.35	37.60	113	34.37	103	50-150	33-167	9	0-25	PASS	
Endosulfan Sulfate	33.35	31.43	94	30.23	91	50-150	33-167	4	0-25	PASS	
Methoxychlor	33.35	35.55	107	29.50	88	50-150	33-167	19	0-25	PASS	
Alpha Chlordane	33.35	32.40	97	29.25	88	50-150	33-167	10	0-25	PASS	
Gamma Chlordane	33.35	31.49	94	27.84	83	50-150	33-167	12	0-25	PASS	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Data Files:

TYPE	DATA FILE	DATA FILE PATH
LCS	18030753	/chem1/SVOA/GC_44/180307LL/a18030753
LCSD	18030806	/chem1/SVOA/GC_44/180308LL/a18030806

MATRIX SPIKE / MATRIX SPIKE DUPLICATE QUALITY CONTROL SHEET

FOR METHOD: EPA 8081A

SPIKED SAMPLE ID: 18-02-1890-11

MS/MSD BATCH: 180302S08

INSTRUMENTS:

SAMPLE: GC 44

MS: GC 44

MSD: GC 44

EXTRACTION: EPA 3510C

D/T EXTRACTED:

SAMPLE: 2018-03-02 00:00

MS: 2018-03-02 00:00

MSD: 2018-03-02 00:00

ANALYZED BY: 669

D/T ANALYZED:

SAMPLE: 2018-03-07 13:42

MS: 2018-03-07 10:48

MSD: 2018-03-07 11:02

REVIEWED BY:

D/T REVIEWED:

COMMENT:

COMPOUND NAME	SAMPLE	INITIAL	FINAL	MS CONC	% MS.REC	MSD CONC	% MSD.REC	% REC.CL	RPD	RPD.CL	STATUS	QUALIFIERS
Alpha-BHC	ND	50.00	33.35	19.94	60	22.50	67	50-150	12	0-25	PASS	
Gamma-BHC	ND	50.00	33.35	20.70	62	23.48	70	50-150	13	0-25	PASS	
Beta-BHC	ND	50.00	33.35	20.51	62	24.17	72	50-150	16	0-25	PASS	
Heptachlor	ND	50.00	33.35	20.10	60	22.26	67	50-150	10	0-25	PASS	
Delta-BHC	ND	50.00	33.35	20.93	63	24.07	72	50-150	14	0-25	PASS	
Aldrin	ND	50.00	33.35	18.28	55	20.53	62	50-150	12	0-25	PASS	
Heptachlor Epoxide	ND	50.00	33.35	21.66	65	25.31	76	50-150	16	0-25	PASS	
Endosulfan I	1.674	50.00	33.35	21.46	59	25.03	70	50-150	15	0-25	PASS	
Dieldrin	ND	50.00	33.35	20.73	62	24.13	72	50-150	15	0-25	PASS	
4,4'-DDE	ND	50.00	33.35	22.69	68	26.38	79	50-150	15	0-25	PASS	
Endrin	ND	50.00	33.35	21.08	63	24.90	75	50-150	17	0-25	PASS	
Endrin Aldehyde	ND	50.00	33.35	19.84	59	24.97	75	50-150	23	0-25	PASS	
4,4'-DDD	ND	50.00	33.35	21.95	66	26.31	79	50-150	18	0-25	PASS	
Endosulfan II	ND	50.00	33.35	21.36	64	25.89	78	50-150	19	0-25	PASS	
4,4'-DDT	ND	50.00	33.35	42.53	128	30.74	92	50-150	32	0-25	FAIL	4
Endosulfan Sulfate	ND	50.00	33.35	21.04	63	24.95	75	50-150	17	0-25	PASS	
Methoxychlor	ND	50.00	33.35	25.72	77	29.17	87	50-150	13	0-25	PASS	
Alpha Chlordane	ND	50.00	33.35	20.66	62	24.22	73	50-150	16	0-25	PASS	
Gamma Chlordane	ND	50.00	33.35	19.93	60	23.07	69	50-150	15	0-25	PASS	

Data Files:

TYPE	DATA FILE	DATA FILE PATH
MS	18030732	/chem1/SVOA/GC_44/180307LL/a18030732
MSD	18030733	/chem1/SVOA/GC_44/180307LL/a18030733

SURROGATE RECOVERIES FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890

BATCH ID:

LCS/MB: 180302L08

MS: 180302S08

EXTRACTION: EPA 3510C

REVIEWED BY:

D/T REVIEWED:

1 CLIENT SAMPLE NUMBER : CS-RW-01-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074018030740

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 13:00

COMMENT:

<u>COMPOUND</u>	<u>% REC</u>	<u>% REC CL</u>	<u>STATUS</u>	<u>QUALIFIERS</u>
Decachlorobiphenyl	88	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	50	50-150	PASS	

4 CLIENT SAMPLE NUMBER : IA-RW-02-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074118030741

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 13:14

COMMENT:

<u>COMPOUND</u>	<u>% REC</u>	<u>% REC CL</u>	<u>STATUS</u>	<u>QUALIFIERS</u>
Decachlorobiphenyl	93	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	50	50-150	PASS	

8 CLIENT SAMPLE NUMBER : IA-RW-03-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074218030742

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 13:28

COMMENT:

<u>COMPOUND</u>	<u>% REC</u>	<u>% REC CL</u>	<u>STATUS</u>	<u>QUALIFIERS</u>
Decachlorobiphenyl	102	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	66	50-150	PASS	

11 CLIENT SAMPLE NUMBER : IA-RW-04-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074318030743

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 13:42

COMMENT:

<u>COMPOUND</u>	<u>% REC</u>	<u>% REC CL</u>	<u>STATUS</u>	<u>QUALIFIERS</u>
Decachlorobiphenyl	96	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	55	50-150	PASS	

SURROGATE RECOVERIES FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890

BATCH ID:

LCS/MB: 180302L08

MS: 180302S08

EXTRACTION: EPA 3510C

REVIEWED BY:

D/T REVIEWED:

14 CLIENT SAMPLE NUMBER : IA-RW-05-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074418030744

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 13:57

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	89	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	55	50-150	PASS	

18 CLIENT SAMPLE NUMBER : IA-RW-06-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074518030745

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 14:11

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	69	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	53	50-150	PASS	

21 CLIENT SAMPLE NUMBER : FH-RW-07-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074618030746

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 14:25

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	97	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	56	50-150	PASS	

24 CLIENT SAMPLE NUMBER : OA-RW-08-G-S-20180227

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074718030747

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 14:39

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	92	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	54	50-150	PASS	

**SURROGATE RECOVERIES
FOR METHOD: EPA 8081A**

WORK ORDER: 18-02-1890

BATCH ID:

LCS/MB: 180302L08

MS: 180302S08

EXTRACTION: EPA 3510C

REVIEWED BY:

D/T REVIEWED:

27 **CLIENT SAMPLE NUMBER : OA-RW-09-G-S-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074818030748

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 14:54

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	80	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	61	50-150	PASS	

31 **CLIENT SAMPLE NUMBER : CM-RW-10-G-S-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803074918030749

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 15:08

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	101	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	76	50-150	PASS	

34 **CLIENT SAMPLE NUMBER : CM-RW-11-G-S-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803075018030750

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 15:57

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	89	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	70	50-150	PASS	

38 **CLIENT SAMPLE NUMBER : IB-RW-12-G-S-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803075118030751

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 16:11

COMMENT:

COMPOUND	% REC	% REC CL	STATUS	QUALIFIERS
Decachlorobiphenyl	84	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	65	50-150	PASS	

SURROGATE RECOVERIES FOR METHOD: EPA 8081A

WORK ORDER: 18-02-1890

BATCH ID:

LCS/MB: **180302L08**

MS: **180302S08**

EXTRACTION: EPA 3510C

REVIEWED BY:

D/T REVIEWED:

41 CLIENT SAMPLE NUMBER : **EB-20180227**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307DDMU/a1803075218030752

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 16:25

COMMENT:

<u>COMPOUND</u>	<u>% REC</u>	<u>% REC CL</u>	<u>STATUS</u>	<u>QUALIFIERS</u>
Decachlorobiphenyl	80	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	76	50-150	PASS	

MB CLIENT SAMPLE NUMBER : **Method Blank**

INSTRUMENT: GC 44

D/T EXTRACTED: 2018-03-02 00:00

DATA FILE: /chem1/SVOA/GC_44/180307LL/a1803073118030731

ANALYZED BY: 669

D/T ANALYZED 2018-03-07 10:22

COMMENT:

<u>COMPOUND</u>	<u>% REC</u>	<u>% REC CL</u>	<u>STATUS</u>	<u>QUALIFIERS</u>
Decachlorobiphenyl	61	50-150	PASS	
2,4,5,6-Tetrachloro-m-Xylene	53	50-150	PASS	

CONTINUING CALIBRATION VERIFICATION QUALITY CONTROL SHEET FOR METHOD: EPA 8081A

CCV WORK ORDER: 099-14-434-450-5941

BATCH ID:

INITIAL: 180305I002

CCV: 180307A030

INSTRUMENT: GC 44

ANALYZED BY: 669

D/T ANALYZED:

INITIAL: 2018-03-05 16:04

CCV: 2018-03-07 12:15

REVIEWED BY:

D/T REVIEWED:

DATA FILE: /chem1/SVOA/GC_44/180307LL/a1803073718030737

COMPOUND NAME	TYPE	CALIB MODEL	MIN RF	AVG RF	CCV RF	AMOUNT	CCV CONC	CCV %D	CCV %D CL	STATUS
Gamma-BHC	C	Avg Resp	0.00	149776896.311	158064728.150			-6	0-20	PASS
Heptachlor	C	Avg Resp	0.00	144725650.637	155627467.650			-8	0-20	PASS
Aldrin	C	Avg Resp	0.00	138824145.347	144440618.400			-4	0-20	PASS
Heptachlor Epoxide	C	Avg Resp	0.00	127038762.936	130794805.375			-3	0-20	PASS
Gamma Chlordane	C	Avg Resp	0.00	129548657.117	129196845.875			0	0-20	PASS
Alpha Chlordane	C	Avg Resp	0.00	124133493.626	123816698.450			0	0-20	PASS
4,4'-DDE	C	Avg Resp	0.00	114211387.185	123869664.675			-8	0-20	PASS
Dieldrin	C	Avg Resp	0.00	127653079.898	130002695.475			-2	0-20	PASS
Endrin	C	Avg Resp	0.00	118381560.285	118195208.850			0	0-20	PASS
4,4'-DDD	C	Avg Resp	0.00	99996965.032	103284432.475			-3	0-20	PASS
4,4'-DDT	C	Avg Resp	0.00	100105253.431	104577252.750			-4	0-20	PASS
4,4'-DDMU		Avg Resp	0.00	40180263.236	39766024.525			1	0-20	PASS
Toxaphene	C	Avg Resp	0.00	23611010.194	23639621.023			0	0-20	PASS
Oxychlordane		Avg Resp	0.00	128722227.057	106134669.175			18	0-20	PASS
2,4'-DDE		Avg Resp	0.00	97646566.327	80910219.575			17	0-20	PASS
Trans-nonachlor		Avg Resp	0.00	145556019.398	124789546.525			14	0-20	PASS
2,4'-DDD		Avg Resp	0.00	82449343.429	68174829.550			17	0-20	PASS
2,4'-DDT		Avg Resp	0.00	94068586.781	83902104.650			11	0-20	PASS
Cis-nonachlor		Avg Resp	0.00	95793089.818	82211536.350			14	0-20	PASS

MIN RF: Method Specified Minimum Response Factor



WORK ORDER NUMBER: 18-02-1890

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ANCHOR QEA, LLC

Client Project Name: GWMA - TMDL Compliance Monitoring

Attention: Andrew Martin
27201 Puerta Real
Suite 350
Mission Viejo, CA 92691-8306

A handwritten signature in black ink, appearing to read "Richard Villafania".

Approved for release on 03/14/2018 by:
Richard Villafania
Project Manager

ResultLink ▶

Email your PM ▶

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

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 Work Order Number: 18-02-1890

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 02/27/18. They were assigned to Work Order 18-02-1890.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

SM 2540D Total Suspended Solids: Due to insufficient sample quantity, the requested duplicate analysis was not performed for sample (-24) OA-RW-08-G-S-20180227.

EPA 8270C SIM PCB Congeners: Due to a laboratory error, the requested MS/MSD analysis was not performed for sample (-11) IA-RW-04-G-S-20180227.



Sample Summary

Client: ANCHOR QEA, LLC	Work Order: 18-02-1890
27201 Puerta Real, Suite 350	Project Name: GWMA - TMDL Compliance Monitoring
Mission Viejo, CA 92691-8306	PO Number:
	Date/Time Received: 02/27/18 18:40
	Number of Containers: 143

Attn: Andrew Martin

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
CS-RW-01-G-S-20180227	18-02-1890-1	02/27/18 10:30	8	Aqueous
CS-RW-01-G-M-20180227	18-02-1890-2	02/27/18 10:32	1	Aqueous
CS-RW-01-G-B-20180227	18-02-1890-3	02/27/18 10:34	1	Aqueous
IA-RW-02-G-S-20180227	18-02-1890-4	02/27/18 11:00	8	Aqueous
IA-RW-02-G-M-20180227	18-02-1890-5	02/27/18 11:10	1	Aqueous
IA-RW-02-G-B-20180227	18-02-1890-6	02/27/18 11:12	1	Aqueous
IA-RW-1002-G-S-20180227	18-02-1890-7	02/27/18 11:05	1	Aqueous
IA-RW-03-G-S-20180227	18-02-1890-8	02/27/18 11:30	8	Aqueous
IA-RW-03-G-M-20180227	18-02-1890-9	02/27/18 11:32	1	Aqueous
IA-RW-03-G-B-20180227	18-02-1890-10	02/27/18 11:34	1	Aqueous
IA-RW-04-G-S-20180227	18-02-1890-11	02/27/18 11:50	18	Aqueous
IA-RW-04-G-M-20180227	18-02-1890-12	02/27/18 12:00	1	Aqueous
IA-RW-04-G-B-20180227	18-02-1890-13	02/27/18 12:05	1	Aqueous
IA-RW-05-G-S-20180227	18-02-1890-14	02/27/18 13:30	8	Aqueous
IA-RW-05-G-M-20180227	18-02-1890-15	02/27/18 13:35	1	Aqueous
IA-RW-05-G-B-20180227	18-02-1890-16	02/27/18 13:40	1	Aqueous
IA-RW-1005-G-M-20180227	18-02-1890-17	02/27/18 13:37	1	Aqueous
IA-RW-06-G-S-20180227	18-02-1890-18	02/27/18 12:20	9	Aqueous
IA-RW-06-G-M-20180227	18-02-1890-19	02/27/18 12:22	1	Aqueous
IA-RW-06-G-B-20180227	18-02-1890-20	02/27/18 12:24	1	Aqueous
FH-RW-07-G-S-20180227	18-02-1890-21	02/27/18 13:00	8	Aqueous
FH-RW-07-G-M-20180227	18-02-1890-22	02/27/18 13:05	1	Aqueous
FH-RW-07-G-B-20180227	18-02-1890-23	02/27/18 13:10	1	Aqueous
OA-RW-08-G-S-20180227	18-02-1890-24	02/27/18 13:55	8	Aqueous
OA-RW-08-G-M-20180227	18-02-1890-25	02/27/18 14:00	1	Aqueous
OA-RW-08-G-B-20180227	18-02-1890-26	02/27/18 14:05	2	Aqueous
OA-RW-09-G-S-20180227	18-02-1890-27	02/27/18 14:25	8	Aqueous
OA-RW-09-G-M-20180227	18-02-1890-28	02/27/18 14:30	1	Aqueous
OA-RW-09-G-B-20180227	18-02-1890-29	02/27/18 14:35	1	Aqueous
OA-RW-1009-G-M-20180227	18-02-1890-30	02/27/18 14:32	1	Aqueous
CM-RW-10-G-S-20180227	18-02-1890-31	02/27/18 15:00	8	Aqueous
CM-RW-10-G-M-20180227	18-02-1890-32	02/27/18 15:05	1	Aqueous
CM-RW-10-G-B-20180227	18-02-1890-33	02/27/18 15:10	1	Aqueous
CM-RW-11-G-S-20180227	18-02-1890-34	02/27/18 15:15	8	Aqueous
CM-RW-11-G-M-20180227	18-02-1890-35	02/27/18 15:17	1	Aqueous
CM-RW-11-G-B-20180227	18-02-1890-36	02/27/18 15:22	1	Aqueous
CM-RW-1011-G-M-20180227	18-02-1890-37	02/27/18 15:20	1	Aqueous
IB-RW-12-G-S-20180227	18-02-1890-38	02/27/18 09:35	8	Aqueous
IB-RW-12-G-M-20180227	18-02-1890-39	02/27/18 09:37	1	Aqueous
IB-RW-12-G-B-20180227	18-02-1890-40	02/27/18 09:39	1	Aqueous
EB-20180227	18-02-1890-41	02/27/18 10:00	7	Aqueous

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Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180227	18-02-1890-1-H	02/27/18 10:30	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.4	1.0	0.83	1.00	

CS-RW-01-G-M-20180227	18-02-1890-2-A	02/27/18 10:32	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.2	1.0	0.83	1.00	

CS-RW-01-G-B-20180227	18-02-1890-3-A	02/27/18 10:34	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.6	1.0	0.83	1.00	

IA-RW-02-G-S-20180227	18-02-1890-4-H	02/27/18 11:00	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-02-G-M-20180227	18-02-1890-5-A	02/27/18 11:10	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.3	1.0	0.83	1.00	

IA-RW-02-G-B-20180227	18-02-1890-6-A	02/27/18 11:12	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-1002-G-S-20180227	18-02-1890-7-A	02/27/18 11:05	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-03-G-S-20180227	18-02-1890-8-H	02/27/18 11:30	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-03-G-M-20180227	18-02-1890-9-A	02/27/18 11:32	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.0	1.0	0.83	1.00	

IA-RW-03-G-B-20180227	18-02-1890-10-A	02/27/18 11:34	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.5	1.0	0.83	1.00	

IA-RW-04-G-S-20180227	18-02-1890-11-R	02/27/18 11:50	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-04-G-M-20180227	18-02-1890-12-A	02/27/18 12:00	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.0	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-B-20180227	18-02-1890-13-A	02/27/18 12:05	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-05-G-S-20180227	18-02-1890-14-H	02/27/18 13:30	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.1	1.0	0.83	1.00	

IA-RW-05-G-M-20180227	18-02-1890-15-A	02/27/18 13:35	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.0	1.0	0.83	1.00	

IA-RW-05-G-B-20180227	18-02-1890-16-A	02/27/18 13:40	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.1	1.0	0.83	1.00	

IA-RW-1005-G-M-20180227	18-02-1890-17-A	02/27/18 13:37	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-06-G-S-20180227	18-02-1890-18-H	02/27/18 12:20	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-M-20180227	18-02-1890-19-A	02/27/18 12:22	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

IA-RW-06-G-B-20180227	18-02-1890-20-A	02/27/18 12:24	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	0.90	1.0	0.83	1.00	J

FH-RW-07-G-S-20180227	18-02-1890-21-H	02/27/18 13:00	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.0	1.0	0.83	1.00	

FH-RW-07-G-M-20180227	18-02-1890-22-A	02/27/18 13:05	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	0.90	1.0	0.83	1.00	J

FH-RW-07-G-B-20180227	18-02-1890-23-A	02/27/18 13:10	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OA-RW-08-G-S-20180227	18-02-1890-24-H	02/27/18 13:55	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.8	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-M-20180227	18-02-1890-25-A	02/27/18 14:00	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.6	1.0	0.83	1.00	

OA-RW-08-G-B-20180227	18-02-1890-26-B	02/27/18 14:05	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OA-RW-09-G-S-20180227	18-02-1890-27-H	02/27/18 14:25	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OA-RW-09-G-M-20180227	18-02-1890-28-A	02/27/18 14:30	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

OA-RW-09-G-B-20180227	18-02-1890-29-A	02/27/18 14:35	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.8	1.0	0.83	1.00	

OA-RW-1009-G-M-20180227	18-02-1890-30-A	02/27/18 14:32	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.7	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20180227	18-02-1890-31-H	02/27/18 15:00	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.6	1.0	0.83	1.00	

CM-RW-10-G-M-20180227	18-02-1890-32-A	02/27/18 15:05	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.3	1.0	0.83	1.00	

CM-RW-10-G-B-20180227	18-02-1890-33-A	02/27/18 15:10	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.1	1.0	0.83	1.00	

CM-RW-11-G-S-20180227	18-02-1890-34-H	02/27/18 15:15	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.1	1.0	0.83	1.00	

CM-RW-11-G-M-20180227	18-02-1890-35-A	02/27/18 15:17	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	3.9	1.0	0.83	1.00	

CM-RW-11-G-B-20180227	18-02-1890-36-A	02/27/18 15:22	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.2	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: N/A
 Method: SM 2540 D
 Units: mg/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-1011-G-M-20180227	18-02-1890-37-A	02/27/18 15:20	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4

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

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	4.3	1.0	0.83	1.00	

IB-RW-12-G-S-20180227	18-02-1890-38-H	02/27/18 09:35	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	1.7	1.0	0.83	1.00	

IB-RW-12-G-M-20180227	18-02-1890-39-A	02/27/18 09:37	Aqueous	N/A	03/06/18	03/06/18 18:00	I0306TSSL5
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.9	1.0	0.83	1.00	

IB-RW-12-G-B-20180227	18-02-1890-40-A	02/27/18 09:39	Aqueous	N/A	03/06/18	03/06/18 18:00	I0306TSSL5
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	2.4	1.0	0.83	1.00	

Method Blank	099-09-010-8928	N/A	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

Method Blank	099-09-010-8930	N/A	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Suspended	ND	1.0	0.83	1.00	

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

Analytical Report

ANCHOR QEA, LLC	Date Received:	02/27/18
27201 Puerta Real, Suite 350	Work Order:	18-02-1890
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
	Units:	mg/L
Project: GWMA - TMDL Compliance Monitoring		Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-09-010-8926	N/A	Aqueous	N/A	03/06/18	03/06/18 18:00	I0306TSSL5

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	1.0	0.83	1.00	

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180227	18-02-1890-1-A	02/27/18 10:30	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.366	0.500	0.113	1.00	J

IA-RW-02-G-S-20180227	18-02-1890-4-A	02/27/18 11:00	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	2.22	0.500	0.113	1.00	

IA-RW-03-G-S-20180227	18-02-1890-8-A	02/27/18 11:30	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	1.06	0.500	0.113	1.00	

IA-RW-04-G-S-20180227	18-02-1890-11-A	02/27/18 11:50	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.528	0.500	0.113	1.00	

IA-RW-05-G-S-20180227	18-02-1890-14-A	02/27/18 13:30	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.694	0.500	0.113	1.00	

IA-RW-06-G-S-20180227	18-02-1890-18-A	02/27/18 12:20	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.532	0.500	0.113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180227	18-02-1890-21-A	02/27/18 13:00	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	1.83	0.500	0.113	1.00	

OA-RW-08-G-S-20180227	18-02-1890-24-A	02/27/18 13:55	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.866	0.500	0.113	1.00	

OA-RW-09-G-S-20180227	18-02-1890-27-A	02/27/18 14:25	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	1.64	0.500	0.113	1.00	

CM-RW-10-G-S-20180227	18-02-1890-31-A	02/27/18 15:00	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.475	0.500	0.113	1.00	J

CM-RW-11-G-S-20180227	18-02-1890-34-A	02/27/18 15:15	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.724	0.500	0.113	1.00	

IB-RW-12-G-S-20180227	18-02-1890-38-A	02/27/18 09:35	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	1.45	0.500	0.113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 1631E Total
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20180227	18-02-1890-41-A	02/27/18 10:00	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.299	0.500	0.113	1.00	J

Method Blank	099-15-224-215	N/A	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.500	0.113	1.00	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: Filtered
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180227	18-02-1890-1-B	02/27/18 10:30	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.135	0.500	0.113	1.00	J

IA-RW-02-G-S-20180227	18-02-1890-4-B	02/27/18 11:00	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.267	0.500	0.113	1.00	J

IA-RW-03-G-S-20180227	18-02-1890-8-B	02/27/18 11:30	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.309	0.500	0.113	1.00	J

IA-RW-04-G-S-20180227	18-02-1890-11-B	02/27/18 11:50	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.407	0.500	0.113	1.00	J

IA-RW-05-G-S-20180227	18-02-1890-14-B	02/27/18 13:30	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.120	0.500	0.113	1.00	J

IA-RW-06-G-S-20180227	18-02-1890-18-B	02/27/18 12:20	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.296	0.500	0.113	1.00	J

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: Filtered
 Method: EPA 1631E
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180227	18-02-1890-21-B	02/27/18 13:00	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

OA-RW-08-G-S-20180227	18-02-1890-24-B	02/27/18 13:55	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.405	0.500	0.113	1.00	J

OA-RW-09-G-S-20180227	18-02-1890-27-B	02/27/18 14:25	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.872	0.500	0.113	1.00	

CM-RW-10-G-S-20180227	18-02-1890-31-B	02/27/18 15:00	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.362	0.500	0.113	1.00	J

CM-RW-11-G-S-20180227	18-02-1890-34-B	02/27/18 15:15	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.500	0.113	1.00	

IB-RW-12-G-S-20180227	18-02-1890-38-B	02/27/18 09:35	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	1.04	0.500	0.113	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: Filtered
Method: EPA 1631E
Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20180227	18-02-1890-41-B	02/27/18 10:00	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F

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

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.144	0.500	0.113	1.00	J

Method Blank	099-15-226-147	N/A	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.500	0.113	1.00	

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180227	18-02-1890-1-D	02/27/18 10:30	Aqueous	ICP/MS 06	03/05/18	03/05/18 23:32	180305L03

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0848	0.0300	0.00567	1.00	
Chromium	0.553	0.500	0.164	1.00	
Copper	2.64	0.0300	0.00898	1.00	
Lead	0.502	0.0300	0.0135	1.00	B
Zinc	15.5	0.500	0.176	1.00	

IA-RW-02-G-S-20180227	18-02-1890-4-D	02/27/18 11:00	Aqueous	ICP/MS 06	03/05/18	03/05/18 23:40	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0641	0.0300	0.00567	1.00	
Chromium	0.389	0.500	0.164	1.00	J
Copper	3.47	0.0300	0.00898	1.00	
Lead	0.0753	0.0300	0.0135	1.00	B
Zinc	9.35	0.500	0.176	1.00	

IA-RW-03-G-S-20180227	18-02-1890-8-D	02/27/18 11:30	Aqueous	ICP/MS 06	03/05/18	03/05/18 23:48	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0649	0.0300	0.00567	1.00	
Chromium	0.410	0.500	0.164	1.00	J
Copper	3.62	0.0300	0.00898	1.00	
Lead	0.0647	0.0300	0.0135	1.00	B
Zinc	6.72	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20180227	18-02-1890-11-D	02/27/18 11:50	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:40	180305L03

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0603	0.0300	0.00567	1.00	
Chromium	0.504	0.500	0.164	1.00	
Copper	4.78	0.0300	0.00898	1.00	
Lead	0.0793	0.0300	0.0135	1.00	B
Zinc	4.91	0.500	0.176	1.00	

IA-RW-05-G-S-20180227	18-02-1890-14-D	02/27/18 13:30	Aqueous	ICP/MS 06	03/05/18	03/05/18 23:56	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0550	0.0300	0.00567	1.00	
Chromium	0.439	0.500	0.164	1.00	J
Copper	2.57	0.0300	0.00898	1.00	
Lead	0.0656	0.0300	0.0135	1.00	B
Zinc	2.49	0.500	0.176	1.00	

IA-RW-06-G-S-20180227	18-02-1890-18-D	02/27/18 12:20	Aqueous	ICP/MS 06	03/05/18	03/06/18 00:04	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0604	0.0300	0.00567	1.00	
Chromium	0.425	0.500	0.164	1.00	J
Copper	3.47	0.0300	0.00898	1.00	
Lead	0.0486	0.0300	0.0135	1.00	B
Zinc	4.93	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180227	18-02-1890-21-D	02/27/18 13:00	Aqueous	ICP/MS 06	03/05/18	03/06/18 00:44	180305L03

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0698	0.0300	0.00567	1.00	
Chromium	0.398	0.500	0.164	1.00	J
Copper	4.08	0.0300	0.00898	1.00	
Lead	0.140	0.0300	0.0135	1.00	B
Zinc	18.5	0.500	0.176	1.00	

OA-RW-08-G-S-20180227	18-02-1890-24-D	02/27/18 13:55	Aqueous	ICP/MS 06	03/05/18	03/06/18 00:52	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0507	0.0300	0.00567	1.00	
Chromium	0.409	0.500	0.164	1.00	J
Copper	2.35	0.0300	0.00898	1.00	
Lead	0.0330	0.0300	0.0135	1.00	B
Zinc	1.98	0.500	0.176	1.00	

OA-RW-09-G-S-20180227	18-02-1890-27-D	02/27/18 14:25	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:00	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0586	0.0300	0.00567	1.00	
Chromium	0.499	0.500	0.164	1.00	J
Copper	3.64	0.0300	0.00898	1.00	
Lead	0.0349	0.0300	0.0135	1.00	B
Zinc	3.92	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Total
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20180227	18-02-1890-31-D	02/27/18 15:00	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:08	180305L03

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0689	0.0300	0.00567	1.00	
Chromium	0.487	0.500	0.164	1.00	J
Copper	5.41	0.0300	0.00898	1.00	
Lead	0.0393	0.0300	0.0135	1.00	B
Zinc	17.7	0.500	0.176	1.00	

CM-RW-11-G-S-20180227	18-02-1890-34-D	02/27/18 15:15	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:16	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0692	0.0300	0.00567	1.00	
Chromium	0.580	0.500	0.164	1.00	
Copper	6.15	0.0300	0.00898	1.00	
Lead	0.127	0.0300	0.0135	1.00	B
Zinc	5.18	0.500	0.176	1.00	

IB-RW-12-G-S-20180227	18-02-1890-38-D	02/27/18 09:35	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:24	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0584	0.0300	0.00567	1.00	
Chromium	0.608	0.500	0.164	1.00	
Copper	1.88	0.0300	0.00898	1.00	
Lead	0.110	0.0300	0.0135	1.00	B
Zinc	6.69	0.500	0.176	1.00	

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

Analytical Report

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 3005A Total
Method: EPA 1640
Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20180227	18-02-1890-41-D	02/27/18 10:00	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:32	180305L03

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	0.966	0.0300	0.00898	1.00	
Lead	0.0149	0.0300	0.0135	1.00	B,J
Zinc	0.990	0.500	0.176	1.00	

Method Blank	099-13-067-768	N/A	Aqueous	ICP/MS 06	03/05/18	03/09/18 18:08	180305L03
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	0.0193	0.0300	0.0135	1.00	J
Zinc	ND	0.500	0.176	1.00	



Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180227	18-02-1890-1-C	02/27/18 10:30	Aqueous	ICP/MS 06	03/05/18	03/06/18 05:32	180305L04F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0716	0.0300	0.00567	1.00	
Chromium	0.377	0.500	0.164	1.00	J
Copper	1.76	0.0300	0.00898	1.00	
Lead	0.136	0.0300	0.0135	1.00	B
Zinc	12.5	0.500	0.0736	1.00	

IA-RW-02-G-S-20180227	18-02-1890-4-C	02/27/18 11:00	Aqueous	ICP/MS 06	03/05/18	03/06/18 05:41	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0606	0.0300	0.00567	1.00	
Chromium	0.397	0.500	0.164	1.00	J
Copper	2.32	0.0300	0.00898	1.00	
Lead	0.0874	0.0300	0.0135	1.00	B
Zinc	8.12	0.500	0.0736	1.00	

IA-RW-03-G-S-20180227	18-02-1890-8-C	02/27/18 11:30	Aqueous	ICP/MS 06	03/05/18	03/06/18 05:49	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0558	0.0300	0.00567	1.00	
Chromium	0.400	0.500	0.164	1.00	J
Copper	2.07	0.0300	0.00898	1.00	
Lead	0.0807	0.0300	0.0135	1.00	B
Zinc	6.00	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20180227	18-02-1890-11-C	02/27/18 11:50	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:48	180305L04F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0636	0.0300	0.00567	1.00	
Chromium	0.538	0.500	0.164	1.00	
Copper	2.35	0.0300	0.00898	1.00	
Lead	0.0730	0.0300	0.0135	1.00	B
Zinc	4.62	0.500	0.0736	1.00	

IA-RW-05-G-S-20180227	18-02-1890-14-C	02/27/18 13:30	Aqueous	ICP/MS 06	03/05/18	03/06/18 05:57	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0482	0.0300	0.00567	1.00	
Chromium	0.369	0.500	0.164	1.00	J
Copper	1.71	0.0300	0.00898	1.00	
Lead	0.0642	0.0300	0.0135	1.00	B
Zinc	1.90	0.500	0.0736	1.00	

IA-RW-06-G-S-20180227	18-02-1890-18-C	02/27/18 12:20	Aqueous	ICP/MS 06	03/05/18	03/06/18 06:05	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0552	0.0300	0.00567	1.00	
Chromium	0.391	0.500	0.164	1.00	J
Copper	1.68	0.0300	0.00898	1.00	
Lead	0.0557	0.0300	0.0135	1.00	B
Zinc	4.25	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180227	18-02-1890-21-C	02/27/18 13:00	Aqueous	ICP/MS 06	03/05/18	03/06/18 06:13	180305L04F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0631	0.0300	0.00567	1.00	
Chromium	0.381	0.500	0.164	1.00	J
Copper	3.17	0.0300	0.00898	1.00	
Lead	0.0983	0.0300	0.0135	1.00	B
Zinc	10.1	0.500	0.0736	1.00	

OA-RW-08-G-S-20180227	18-02-1890-24-C	02/27/18 13:55	Aqueous	ICP/MS 06	03/05/18	03/06/18 06:21	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0426	0.0300	0.00567	1.00	
Chromium	0.421	0.500	0.164	1.00	J
Copper	2.46	0.0300	0.00898	1.00	
Lead	0.0527	0.0300	0.0135	1.00	B
Zinc	2.37	0.500	0.0736	1.00	

OA-RW-09-G-S-20180227	18-02-1890-27-C	02/27/18 14:25	Aqueous	ICP/MS 06	03/05/18	03/06/18 06:29	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0510	0.0300	0.00567	1.00	
Chromium	0.399	0.500	0.164	1.00	J
Copper	1.89	0.0300	0.00898	1.00	
Lead	0.0522	0.0300	0.0135	1.00	B
Zinc	3.48	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20180227	18-02-1890-31-C	02/27/18 15:00	Aqueous	ICP/MS 06	03/05/18	03/06/18 06:37	180305L04F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0614	0.0300	0.00567	1.00	
Chromium	0.411	0.500	0.164	1.00	J
Copper	5.05	0.0300	0.00898	1.00	
Lead	0.0472	0.0300	0.0135	1.00	B
Zinc	18.1	0.500	0.0736	1.00	

CM-RW-11-G-S-20180227	18-02-1890-34-C	02/27/18 15:15	Aqueous	ICP/MS 06	03/05/18	03/06/18 07:17	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0605	0.0300	0.00567	1.00	
Chromium	0.400	0.500	0.164	1.00	J
Copper	1.51	0.0300	0.00898	1.00	
Lead	0.0520	0.0300	0.0135	1.00	B
Zinc	3.99	0.500	0.0736	1.00	

IB-RW-12-G-S-20180227	18-02-1890-38-C	02/27/18 09:35	Aqueous	ICP/MS 06	03/05/18	03/14/18 14:19	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	0.0728	0.0300	0.00567	1.00	
Chromium	0.299	0.500	0.164	1.00	J
Copper	1.39	0.0300	0.00898	1.00	
Lead	0.0305	0.0300	0.0135	1.00	B
Zinc	5.35	0.500	0.0736	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3005A Filt.
 Method: EPA 1640
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20180227	18-02-1890-41-C	02/27/18 10:00	Aqueous	ICP/MS 06	03/05/18	03/06/18 07:33	180305L04F

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

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	0.410	0.0300	0.00898	1.00	
Lead	0.0280	0.0300	0.0135	1.00	B,J
Zinc	ND	0.500	0.0736	1.00	

Method Blank	099-15-823-309	N/A	Aqueous	ICP/MS 06	03/05/18	03/09/18 18:16	180305L04F
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Cadmium	ND	0.0300	0.00567	1.00	
Chromium	ND	0.500	0.164	1.00	
Copper	ND	0.0300	0.00898	1.00	
Lead	0.0149	0.0300	0.0135	1.00	J
Zinc	ND	0.500	0.0736	1.00	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180227	18-02-1890-1-FG	02/27/18 10:30	Aqueous	GC 44	03/02/18	03/07/18 13:00	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	1.9	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	0.90	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	88	50-150			
2,4,5,6-Tetrachloro-m-Xylene	50	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-02-G-S-20180227	18-02-1890-4-FG	02/27/18 11:00	Aqueous	GC 44	03/02/18	03/07/18 13:14	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	2.4	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	0.79	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	50-150	
2,4,5,6-Tetrachloro-m-Xylene	50	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20180227	18-02-1890-8-FG	02/27/18 11:30	Aqueous	GC 44	03/02/18	03/07/18 13:28	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	2.1	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	102	50-150	
2,4,5,6-Tetrachloro-m-Xylene	66	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20180227	18-02-1890-11-FG	02/27/18 11:50	Aqueous	GC 44	03/02/18	03/07/18 13:42	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	1.8	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	0.87	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	96	50-150	
2,4,5,6-Tetrachloro-m-Xylene	55	50-150	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-05-G-S-20180227	18-02-1890-14-FG	02/27/18 13:30	Aqueous	GC 44	03/02/18	03/07/18 13:57	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	2.9	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	0.91	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	50-150	
2,4,5,6-Tetrachloro-m-Xylene	55	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20180227	18-02-1890-18-FG	02/27/18 12:20	Aqueous	GC 44	03/02/18	03/07/18 14:11	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	69	50-150	
2,4,5,6-Tetrachloro-m-Xylene	53	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180227	18-02-1890-21-FG	02/27/18 13:00	Aqueous	GC 44	03/02/18	03/07/18 14:25	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	1.8	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	1.7	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	97	50-150	
2,4,5,6-Tetrachloro-m-Xylene	56	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-S-20180227	18-02-1890-24-FG	02/27/18 13:55	Aqueous	GC 44	03/02/18	03/07/18 14:39	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	4.2	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	92	50-150	
2,4,5,6-Tetrachloro-m-Xylene	54	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-S-20180227	18-02-1890-27-FG	02/27/18 14:25	Aqueous	GC 44	03/02/18	03/07/18 14:54	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	1.7	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	50-150	
2,4,5,6-Tetrachloro-m-Xylene	61	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20180227	18-02-1890-31-FG	02/27/18 15:00	Aqueous	GC 44	03/02/18	03/07/18 15:08	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	2.0	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	101	50-150	
2,4,5,6-Tetrachloro-m-Xylene	76	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-11-G-S-20180227	18-02-1890-34-FG	02/27/18 15:15	Aqueous	GC 44	03/02/18	03/07/18 15:57	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	5.8	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	1.3	1.3	0.50	1.00	J
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	50-150	
2,4,5,6-Tetrachloro-m-Xylene	70	50-150	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20180227	18-02-1890-38-FG	02/27/18 09:35	Aqueous	GC 44	03/02/18	03/07/18 16:11	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	3.2	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	84	50-150	
2,4,5,6-Tetrachloro-m-Xylene	65	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20180227	18-02-1890-41-FG	02/27/18 10:00	Aqueous	GC 44	03/02/18	03/07/18 16:25	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	6.4	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	80	50-150	
2,4,5,6-Tetrachloro-m-Xylene	76	50-150	



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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8081A
 Units: ng/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-704-21	N/A	Aqueous	GC 44	03/02/18	03/07/18 10:22	180302L08

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	1.3	0.50	1.00	
2,4'-DDE	ND	1.3	0.50	1.00	
2,4'-DDT	ND	2.0	1.0	1.00	
4,4'-DDD	ND	1.3	0.50	1.00	
4,4'-DDE	ND	1.3	0.50	1.00	
4,4'-DDT	ND	1.3	0.50	1.00	
Alpha Chlordane	ND	3.3	1.7	1.00	
Cis-nonachlor	ND	3.3	1.7	1.00	
Dieldrin	ND	1.3	0.50	1.00	
Gamma Chlordane	ND	3.3	1.7	1.00	
Oxychlordane	ND	3.3	1.7	1.00	
Toxaphene	ND	50	25	1.00	
Trans-nonachlor	ND	3.3	1.7	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	61	50-150	
2,4,5,6-Tetrachloro-m-Xylene	53	50-150	



 Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CS-RW-01-G-S-20180227	18-02-1890-1-E	02/27/18 10:30	Aqueous	GC/MS HHH	03/01/18	03/02/18 13:01	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	122	50-150			
p-Terphenyl-d14	121	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-02-G-S-20180227	18-02-1890-4-E	02/27/18 11:00	Aqueous	GC/MS HHH	03/01/18	03/02/18 13:25	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00045	1.00	
PCB028	ND	0.0020	0.00052	1.00	
PCB037	ND	0.0020	0.00029	1.00	
PCB044	ND	0.0020	0.00070	1.00	
PCB049	ND	0.0020	0.00052	1.00	
PCB052	ND	0.0020	0.00055	1.00	
PCB066	ND	0.0020	0.00039	1.00	
PCB070	ND	0.0020	0.00040	1.00	
PCB074	ND	0.0020	0.00048	1.00	
PCB077	ND	0.0020	0.00061	1.00	
PCB081	ND	0.0020	0.00047	1.00	
PCB087	ND	0.0020	0.00070	1.00	
PCB099	ND	0.0020	0.00060	1.00	
PCB101	ND	0.0020	0.00049	1.00	
PCB105	ND	0.0020	0.00046	1.00	
PCB110	ND	0.0020	0.00033	1.00	
PCB114	ND	0.0020	0.00046	1.00	
PCB118	ND	0.0020	0.00049	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00082	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00042	1.00	
PCB132/153	ND	0.0039	0.00068	1.00	
PCB138/158	ND	0.0039	0.00058	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00039	1.00	
PCB157	ND	0.0020	0.00040	1.00	
PCB167	ND	0.0020	0.00079	1.00	
PCB168	ND	0.0020	0.00051	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00041	1.00	
PCB177	ND	0.0020	0.00027	1.00	
PCB180	ND	0.0020	0.00059	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00051	1.00	
PCB187	ND	0.0020	0.00042	1.00	
PCB189	ND	0.0020	0.00048	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB201	ND	0.0020	0.00046	1.00	
PCB206	ND	0.0020	0.00042	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	105	50-150	
p-Terphenyl-d14	107	50-150	

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-03-G-S-20180227	18-02-1890-8-E	02/27/18 11:30	Aqueous	GC/MS HHH	03/01/18	03/02/18 13:49	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	129	50-150	
p-Terphenyl-d14	130	50-150	

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-04-G-S-20180227	18-02-1890-11-Q	02/27/18 11:50	Aqueous	GC/MS HHH	03/01/18	03/02/18 14:12	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	82	50-150			
p-Terphenyl-d14	111	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-05-G-S-20180227	18-02-1890-14-E	02/27/18 13:30	Aqueous	GC/MS HHH	03/01/18	03/02/18 14:35	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	131	50-150			
p-Terphenyl-d14	138	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IA-RW-06-G-S-20180227	18-02-1890-18-E	02/27/18 12:20	Aqueous	GC/MS HHH	03/01/18	03/02/18 14:59	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	95	50-150			
p-Terphenyl-d14	112	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FH-RW-07-G-S-20180227	18-02-1890-21-E	02/27/18 13:00	Aqueous	GC/MS HHH	03/01/18	03/02/18 15:22	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00045	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00069	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00054	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00069	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00033	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00081	1.00	
PCB126	ND	0.0019	0.00025	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0039	0.00067	1.00	
PCB138/158	ND	0.0039	0.00058	1.00	
PCB149	ND	0.0019	0.00023	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00051	1.00	
PCB187	ND	0.0019	0.00042	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00042	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	129	50-150			
p-Terphenyl-d14	123	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-08-G-S-20180227	18-02-1890-24-E	02/27/18 13:55	Aqueous	GC/MS HHH	03/01/18	03/02/18 15:45	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	120	50-150			
p-Terphenyl-d14	120	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OA-RW-09-G-S-20180227	18-02-1890-27-E	02/27/18 14:25	Aqueous	GC/MS HHH	03/01/18	03/02/18 16:08	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	112	50-150			
p-Terphenyl-d14	120	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-10-G-S-20180227	18-02-1890-31-E	02/27/18 15:00	Aqueous	GC/MS HHH	03/01/18	03/02/18 16:32	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	117	50-150			
p-Terphenyl-d14	116	50-150			

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CM-RW-11-G-S-20180227	18-02-1890-34-E	02/27/18 15:15	Aqueous	GC/MS HHH	03/01/18	03/02/18 16:55	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	122	50-150			
p-Terphenyl-d14	122	50-150			

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IB-RW-12-G-S-20180227	18-02-1890-38-E	02/27/18 09:35	Aqueous	GC/MS HHH	03/01/18	03/02/18 19:37	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00050	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00050	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00038	1.00	
PCB070	ND	0.0019	0.00039	1.00	
PCB074	ND	0.0019	0.00046	1.00	
PCB077	ND	0.0019	0.00059	1.00	
PCB081	ND	0.0019	0.00046	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00058	1.00	
PCB101	ND	0.0019	0.00047	1.00	
PCB105	ND	0.0019	0.00044	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00044	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00016	1.00	
PCB123	ND	0.0019	0.00079	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00041	1.00	
PCB132/153	ND	0.0038	0.00066	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00038	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00077	1.00	
PCB168	ND	0.0019	0.00049	1.00	
PCB169	ND	0.0019	0.00038	1.00	
PCB170	ND	0.0019	0.00040	1.00	
PCB177	ND	0.0019	0.00026	1.00	
PCB180	ND	0.0019	0.00057	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00046	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	140	50-150			
p-Terphenyl-d14	154	50-150	1,2,7		

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20180227	18-02-1890-41-G	02/27/18 10:00	Aqueous	GC/MS HHH	03/01/18	03/02/18 20:00	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0019	0.00044	1.00	
PCB028	ND	0.0019	0.00051	1.00	
PCB037	ND	0.0019	0.00029	1.00	
PCB044	ND	0.0019	0.00068	1.00	
PCB049	ND	0.0019	0.00051	1.00	
PCB052	ND	0.0019	0.00053	1.00	
PCB066	ND	0.0019	0.00039	1.00	
PCB070	ND	0.0019	0.00040	1.00	
PCB074	ND	0.0019	0.00047	1.00	
PCB077	ND	0.0019	0.00060	1.00	
PCB081	ND	0.0019	0.00047	1.00	
PCB087	ND	0.0019	0.00068	1.00	
PCB099	ND	0.0019	0.00059	1.00	
PCB101	ND	0.0019	0.00048	1.00	
PCB105	ND	0.0019	0.00045	1.00	
PCB110	ND	0.0019	0.00032	1.00	
PCB114	ND	0.0019	0.00045	1.00	
PCB118	ND	0.0019	0.00048	1.00	
PCB119	ND	0.0019	0.00017	1.00	
PCB123	ND	0.0019	0.00080	1.00	
PCB126	ND	0.0019	0.00024	1.00	
PCB128	ND	0.0019	0.00042	1.00	
PCB132/153	ND	0.0038	0.00067	1.00	
PCB138/158	ND	0.0038	0.00057	1.00	
PCB149	ND	0.0019	0.00022	1.00	
PCB151	ND	0.0019	0.00039	1.00	
PCB156	ND	0.0019	0.00039	1.00	
PCB157	ND	0.0019	0.00039	1.00	
PCB167	ND	0.0019	0.00078	1.00	
PCB168	ND	0.0019	0.00050	1.00	
PCB169	ND	0.0019	0.00039	1.00	
PCB170	ND	0.0019	0.00041	1.00	
PCB177	ND	0.0019	0.00027	1.00	
PCB180	ND	0.0019	0.00058	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0019	0.00050	1.00	
PCB187	ND	0.0019	0.00041	1.00	
PCB189	ND	0.0019	0.00047	1.00	
PCB194	ND	0.0019	0.00024	1.00	
PCB201	ND	0.0019	0.00045	1.00	
PCB206	ND	0.0019	0.00041	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	130	50-150	
p-Terphenyl-d14	133	50-150	

Return to Contents

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-414-120	N/A	Aqueous	GC/MS HHH	03/01/18	03/02/18 11:52	180301L07

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB018	ND	0.0020	0.00046	1.00	
PCB028	ND	0.0020	0.00053	1.00	
PCB037	ND	0.0020	0.00030	1.00	
PCB044	ND	0.0020	0.00071	1.00	
PCB049	ND	0.0020	0.00053	1.00	
PCB052	ND	0.0020	0.00056	1.00	
PCB066	ND	0.0020	0.00040	1.00	
PCB070	ND	0.0020	0.00041	1.00	
PCB074	ND	0.0020	0.00049	1.00	
PCB077	ND	0.0020	0.00062	1.00	
PCB081	ND	0.0020	0.00048	1.00	
PCB087	ND	0.0020	0.00071	1.00	
PCB099	ND	0.0020	0.00061	1.00	
PCB101	ND	0.0020	0.00050	1.00	
PCB105	ND	0.0020	0.00047	1.00	
PCB110	ND	0.0020	0.00034	1.00	
PCB114	ND	0.0020	0.00047	1.00	
PCB118	ND	0.0020	0.00050	1.00	
PCB119	ND	0.0020	0.00017	1.00	
PCB123	ND	0.0020	0.00083	1.00	
PCB126	ND	0.0020	0.00025	1.00	
PCB128	ND	0.0020	0.00043	1.00	
PCB132/153	ND	0.0040	0.00069	1.00	
PCB138/158	ND	0.0040	0.00060	1.00	
PCB149	ND	0.0020	0.00023	1.00	
PCB151	ND	0.0020	0.00040	1.00	
PCB156	ND	0.0020	0.00040	1.00	
PCB157	ND	0.0020	0.00041	1.00	
PCB167	ND	0.0020	0.00081	1.00	
PCB168	ND	0.0020	0.00052	1.00	
PCB169	ND	0.0020	0.00040	1.00	
PCB170	ND	0.0020	0.00042	1.00	
PCB177	ND	0.0020	0.00028	1.00	
PCB180	ND	0.0020	0.00060	1.00	

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

Analytical Report

ANCHOR QEA, LLC
 27201 Puerta Real, Suite 350
 Mission Viejo, CA 92691-8306

Date Received: 02/27/18
 Work Order: 18-02-1890
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: GWMA - TMDL Compliance Monitoring

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB183	ND	0.0020	0.00052	1.00	
PCB187	ND	0.0020	0.00043	1.00	
PCB189	ND	0.0020	0.00049	1.00	
PCB194	ND	0.0020	0.00025	1.00	
PCB201	ND	0.0020	0.00047	1.00	
PCB206	ND	0.0020	0.00043	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	136	50-150			
p-Terphenyl-d14	138	50-150			

Return to Contents

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



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IA-RW-04-G-S-20180227	Sample	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S01
IA-RW-04-G-S-20180227	Matrix Spike	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S01
IA-RW-04-G-S-20180227	Matrix Spike Duplicate	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.5282	20.00	22.54	110	23.14	113	71-125	3	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-03-0232-1	Sample	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S01A
18-03-0232-1	Matrix Spike	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S01A
18-03-0232-1	Matrix Spike Duplicate	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S01A

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	8.493	20.00	25.72	86	27.85	97	71-125	8	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IA-RW-04-G-S-20180227	Sample	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S02
IA-RW-04-G-S-20180227	Matrix Spike	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S02
IA-RW-04-G-S-20180227	Matrix Spike Duplicate	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	20.00	20.75	104	22.38	112	71-125	8	0-24	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-03-0028-1	Sample	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S02A
18-03-0028-1	Matrix Spike	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S02A
18-03-0028-1	Matrix Spike Duplicate	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307S02A

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	2.075	20.00	23.16	105	23.87	109	71-125	3	0-24	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
IA-RW-04-G-S-20180227	Sample	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:40	180305S03				
IA-RW-04-G-S-20180227	Matrix Spike	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:28	180305S03				
IA-RW-04-G-S-20180227	Matrix Spike Duplicate	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:36	180305S03				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.06029	0.5000	0.6235	113	0.6314	114	50-150	1	0-20	
Chromium	0.5037	5.000	6.862	127	6.631	123	50-150	3	0-20	
Copper	4.779	0.5000	4.691	4X	4.790	4X	50-150	4X	0-20	Q
Lead	0.07932	0.5000	0.5573	96	0.5467	93	50-150	2	0-20	
Zinc	4.909	5.000	11.60	134	11.72	136	50-150	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
IA-RW-04-G-S-20180227	Sample	Aqueous	ICP/MS 06	03/05/18	03/06/18 01:48	180305S04
IA-RW-04-G-S-20180227	Matrix Spike	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:44	180305S04
IA-RW-04-G-S-20180227	Matrix Spike Duplicate	Aqueous	ICP/MS 06	03/05/18	03/06/18 04:52	180305S04

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.06356	0.5000	0.5850	104	0.5904	105	50-150	1	0-20	
Chromium	0.5385	5.000	6.197	113	6.209	113	50-150	0	0-20	
Copper	2.350	0.5000	2.635	4X	2.658	4X	50-150	4X	0-20	Q
Lead	0.07300	0.5000	0.5207	90	0.5033	86	50-150	3	0-20	
Zinc	4.624	5.000	10.55	119	10.69	121	50-150	1	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
IA-RW-04-G-S-20180227	Sample	Aqueous	GC 44	03/02/18	03/07/18 13:42	180302S08				
IA-RW-04-G-S-20180227	Matrix Spike	Aqueous	GC 44	03/02/18	03/07/18 10:48	180302S08				
IA-RW-04-G-S-20180227	Matrix Spike Duplicate	Aqueous	GC 44	03/02/18	03/07/18 11:02	180302S08				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	33.35	18.28	55	20.53	62	50-150	12	0-25	
4,4'-DDD	ND	33.35	21.95	66	26.31	79	50-150	18	0-25	
4,4'-DDE	ND	33.35	22.69	68	26.38	79	50-150	15	0-25	
4,4'-DDT	ND	33.35	42.53	128	30.74	92	50-150	32	0-25	4
Alpha Chlordane	ND	33.35	20.66	62	24.22	73	50-150	16	0-25	
Dieldrin	ND	33.35	20.73	62	24.13	72	50-150	15	0-25	
Gamma Chlordane	ND	33.35	19.93	60	23.07	69	50-150	15	0-25	
Endrin	ND	33.35	21.08	63	24.90	75	50-150	17	0-25	
Gamma-BHC	ND	33.35	20.70	62	23.48	70	50-150	13	0-25	
Heptachlor	ND	33.35	20.10	60	22.26	67	50-150	10	0-25	
Heptachlor Epoxide	ND	33.35	21.66	65	25.31	76	50-150	16	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-03-0281-2	Sample	Aqueous	N/A	03/06/18 00:00	03/06/18 16:00	I0306TSSD5
18-03-0281-2	Sample Duplicate	Aqueous	N/A	03/06/18 00:00	03/06/18 16:00	I0306TSSD5

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	2346	2448	4	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
IA-RW-06-G-S-20180227	Sample	Aqueous	N/A	03/06/18 00:00	03/06/18 16:00	I0306TSSD6
IA-RW-06-G-S-20180227	Sample Duplicate	Aqueous	N/A	03/06/18 00:00	03/06/18 16:00	I0306TSSD6

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	ND	N/A	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC	Date Received:	02/27/18
27201 Puerta Real, Suite 350	Work Order:	18-02-1890
Mission Viejo, CA 92691-8306	Preparation:	N/A
	Method:	SM 2540 D
Project: GWMA - TMDL Compliance Monitoring		Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
OA-RW-08-G-B-20180227	Sample	Aqueous	N/A	03/06/18 00:00	03/06/18 17:00	I0306TSSD7
OA-RW-08-G-B-20180227	Sample Duplicate	Aqueous	N/A	03/06/18 00:00	03/06/18 17:00	I0306TSSD7

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	ND	ND	N/A	0-20	

[Return to Contents](#)

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-03-0130-2	Sample	Aqueous	N/A	03/06/18 00:00	03/06/18 17:00	I0306TSSD8
18-03-0130-2	Sample Duplicate	Aqueous	N/A	03/06/18 00:00	03/06/18 17:00	I0306TSSD8

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	952.0	940.0	1	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-03-0318-4	Sample	Aqueous	N/A	03/06/18 00:00	03/06/18 18:00	I0306TSSD9
18-03-0318-4	Sample Duplicate	Aqueous	N/A	03/06/18 00:00	03/06/18 18:00	I0306TSSD9

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	2350	2360	0	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8928	LCS	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3			
099-09-010-8928	LCSD	Aqueous	N/A	03/06/18	03/06/18 16:00	I0306TSSL3			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	100.0	98.00	98	94.00	94	80-120	4	0-20	

[Return to Contents](#)

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-09-010-8930	LCS	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4			
099-09-010-8930	LCSD	Aqueous	N/A	03/06/18	03/06/18 17:00	I0306TSSL4			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Suspended	100.0	96.00	96	94.00	94	80-120	2	0-20	



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: N/A
Method: SM 2540 D

Project: GWMA - TMDL Compliance Monitoring

Page 3 of 9

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-010-8926	LCS	Aqueous	N/A	03/06/18	03/06/18 18:00	I0306TSSL5
099-09-010-8926	LCSD	Aqueous	N/A	03/06/18	03/06/18 18:00	I0306TSSL5

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Suspended	100.0	95.00	95	92.00	92	80-120	3	0-20	

[Return to Contents](#)

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 1631E Total
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-224-215	LCS	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01
099-15-224-215	LCSD	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	20.00	19.26	96	18.70	94	71-125	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: Filtered
Method: EPA 1631E

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-226-147	LCS	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F			
099-15-226-147	LCSD	Aqueous	Hg/AF 1	03/07/18	03/07/18 00:00	180307L02F			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	20.00	19.46	97	18.84	94	71-125	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 3005A Total
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-067-768	LCS	Aqueous	ICP/MS 06	03/05/18	03/05/18 21:40	180305L03
099-13-067-768	LCSD	Aqueous	ICP/MS 06	03/05/18	03/05/18 21:48	180305L03

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.5336	107	0.5489	110	70-130	3	0-20	
Chromium	5.000	4.220	84	4.238	85	70-130	0	0-20	
Copper	0.5000	0.4985	100	0.5155	103	70-130	3	0-20	
Lead	0.5000	0.5789	116	0.6008	120	70-130	4	0-20	
Zinc	5.000	4.943	99	5.133	103	70-130	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 3005A Filt.
Method: EPA 1640

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-823-309	LCS	Aqueous	ICP/MS 06	03/05/18	03/09/18 14:38	180305L04F
099-15-823-309	LCSD	Aqueous	ICP/MS 06	03/05/18	03/09/18 14:46	180305L04F

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cadmium	0.5000	0.4997	100	0.5026	101	70-130	1	0-20	
Chromium	5.000	5.128	103	5.154	103	70-130	0	0-20	
Copper	0.5000	0.5629	113	0.5733	115	70-130	2	0-20	
Lead	0.5000	0.4740	95	0.4343	87	70-130	9	0-20	
Zinc	5.000	5.292	106	5.378	108	70-130	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 3510C
Method: EPA 8081A

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-704-21	LCS	Aqueous	GC 44	03/02/18	03/07/18 16:48	180302L08
099-16-704-21	LCSD	Aqueous	GC 44	03/02/18	03/08/18 11:08	180302L08

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	33.35	28.25	85	24.95	75	50-150	33-167	12	0-25	
4,4'-DDD	33.35	34.00	102	30.62	92	50-150	33-167	10	0-25	
4,4'-DDE	33.35	35.94	108	31.42	94	50-150	33-167	13	0-25	
4,4'-DDT	33.35	37.60	113	34.37	103	50-150	33-167	9	0-25	
Alpha Chlordane	33.35	32.40	97	29.25	88	50-150	33-167	10	0-25	
Dieldrin	33.35	31.22	94	28.11	84	50-150	33-167	10	0-25	
Gamma Chlordane	33.35	31.49	94	27.84	83	50-150	33-167	12	0-25	
Endrin	33.35	31.51	94	24.83	74	50-150	33-167	24	0-25	
Gamma-BHC	33.35	32.88	99	28.70	86	50-150	33-167	14	0-25	
Heptachlor	33.35	33.60	101	28.69	86	50-150	33-167	16	0-25	
Heptachlor Epoxide	33.35	32.22	97	28.81	86	50-150	33-167	11	0-25	

Total number of LCS compounds: 11

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

ANCHOR QEA, LLC
27201 Puerta Real, Suite 350
Mission Viejo, CA 92691-8306

Date Received: 02/27/18
Work Order: 18-02-1890
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: GWMA - TMDL Compliance Monitoring

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-414-120	LCS	Aqueous	GC/MS HHH	03/01/18	03/07/18 13:18	180301L07
099-16-414-120	LCSD	Aqueous	GC/MS HHH	03/01/18	03/02/18 12:38	180301L07

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB018	0.5000	0.4736	95	0.4895	98	50-150	33-167	3	0-25	
PCB028	0.5000	0.5267	105	0.5408	108	50-150	33-167	3	0-25	
PCB044	0.5000	0.4946	99	0.5094	102	50-150	33-167	3	0-25	
PCB052	0.5000	0.4701	94	0.4908	98	50-150	33-167	4	0-25	
PCB066	0.5000	0.5854	117	0.6067	121	50-150	33-167	4	0-25	
PCB077	0.5000	0.5109	102	0.5318	106	50-150	33-167	4	0-25	
PCB101	0.5000	0.4853	97	0.5158	103	50-150	33-167	6	0-25	
PCB105	0.5000	0.5049	101	0.5464	109	50-150	33-167	8	0-25	
PCB118	0.5000	0.4979	100	0.5298	106	50-150	33-167	6	0-25	
PCB126	0.5000	0.4841	97	0.5083	102	50-150	33-167	5	0-25	
PCB128	0.5000	0.4580	92	0.4867	97	50-150	33-167	6	0-25	
PCB170	0.5000	0.4778	96	0.4915	98	50-150	33-167	3	0-25	
PCB180	0.5000	0.4961	99	0.5182	104	50-150	33-167	4	0-25	
PCB187	0.5000	0.4900	98	0.5204	104	50-150	33-167	6	0-25	
PCB195	0.5000	0.4099	82	0.4184	84	50-150	33-167	2	0-25	
PCB206	0.5000	0.4489	90	0.4518	90	50-150	33-167	1	0-25	
PCB209	0.5000	0.3407	68	0.3540	71	50-150	33-167	4	0-25	

Total number of LCS compounds: 17

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Sample Analysis Summary Report

Work Order: 18-02-1890

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 1631E	Filtered	1080	Hg/AF 1	1
EPA 1631E	EPA 1631E Total	1080	Hg/AF 1	1
EPA 1640	EPA 3005A Total	110	ICP/MS 06	1
EPA 1640	EPA 3005A Filt.	110	ICP/MS 06	1
EPA 8081A	EPA 3510C	669	GC 44	1
EPA 8270C SIM PCB Congeners	EPA 3510C	907	GC/MS HHH	1
SM 2540 D	N/A	1136	N/A	1


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

Glossary of Terms and Qualifiers

Work Order: 18-02-1890

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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

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

[illegible]

Notes:

Relinquished By:

Company: ANCHOR REA

Signature/Printed Name

Company: GO

Signature/Printed Name _____

Received By:

Company: EC

Signature/Printed Name

Company: ECI

Signature/Printed Name

Date/Time

Distribution: A copy will be made for the laboratory and client. Project file will retain the original.

Page 1 of 3

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:

Date: 2/27/18

Project Name: GWMA-TMDL Compliance Monitoring

Project Number: 141205-01.04


Project Manager: Andy Martin

Phone Number: (949) 334-9630

Shipment Method: Courier

Field Team: LA Harbor

Test Parameters



Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	TSS	Total and dissolved metals	Total and dissolved mercury	Organochlorine pesticides	PCB Congeners	MS/MSD										Comments/Preservation
1	IA-RW-1005-G-M-20180227	2/27/18 1337	Water	1	X															
2	IA-RW-06-G-S-20180227	1220	Water	9	X	X	X	X	X											Lab dup TSS
3	IA-RW-06-G-M-20180227	1222	Water	1	X															
4	IA-RW-06-G-B-20180227	1224	Water	1	X															
5	FH-RW-07-G-S-20180227	1300	Water	8	X	X	X	X	X											
6	FH-RW-07-G-M-20180227	1305	Water	1	X															
7	FH-RW-07-G-B-20180227	1310	Water	1	X															
8	OA-RW-08-G-S-20180227	1355	Water	8	X	X	X	X	X											Lab dup TSS
9	OA-RW-08-G-M-20180227	1400	Water	1	X															
10	OA-RW-08-G-B-20180227	1405	Water	2	X															
11	OA-RW-09-G-S-20180227	1405	Water	8	X	X	X	X	X											
12	OA-RW-09-G-M-20180227	1430	Water	1	X															
13	OA-RW-09-G-B-20180227	1435	Water	1	X															
14	OA-RW-1009-G-M-20180227	1432	Water	1	X															
15	CM-RW-10-G-S-20180227	1500/1425	Water	8	X	X	X	X	X											
16	CM-RW-10-G-M-20180227	1505	Water	1	X															

Notes:

Relinquished By: Clare Dolphin 2/27/18 1722

Signature/Printed Name Date/Time

Received By: RUDY HIGA 2/27/18 1722

Signature/Printed Name Date/Time

Relinquished By: RUDY HIGA 2/27/18 1840

Signature/Printed Name Date/Time

Received By: J. PATEL 2/27/18 1840


Signature/Printed Name Date/Time


Date: 2/27/18
Project Name: **GWMA-TMDL Compliance Monitoring**
Project Number: **141205-01.03**
Project Manager: **Andy Martin**
Phone Number: **(949) 334-9630**
Shipment Method: **Courier**
Field Team: **LB Harbor/Outer LA Harbor**

 ANCHOR
QEA 

1890

[illegible]

Relinquished By:  Company: Anchor REA
Signature/Printed Name Claire Dolphin Date/Time 2/27/18 1722

Received By: 	Company: <u>EC</u>
<u>RUDY HINOJOSA</u>	<u>2/27/18 1722</u>
Signature/Print Name	Date/Time

Relinquished By:	Company: <u>EC</u>
<u>RUDY HIGA</u>	<u>2/27/18 1840</u>
Signature/Printed Name	Date/Time

Received By:  J. PATEL	Company: <u>ECI</u> 2/27/18 1840
Signature/Printed Name	Date/Time

Page 96 of 107

Linda Ta

From: Andy Martin <amartin@anchorqea.com>
Sent: Thursday, March 01, 2018 3:13 PM
To: Linda Ta; Claire Dolphin
Cc: Richard Villafania; Cindy Fields
Subject: RE: GWMA - TMDL Compliance Monitoring - 18-02-1890 - Sample Receipt Confirmation & COC Document

Categories: Important

EXTERNAL EMAIL*

Linda,

Label Sample ID is correct.

If no 9th bottle, then I have a question. Can you run TSS and TSS lab dup with 1 liter? If yes, please continue. If not, then do not run lab dup.

Andy

Andrew Martin
 Managing Environmental Scientist

ANCHOR QEA, LLC

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From: Linda Ta [mailto:LindaTa@eurofinsUS.com]
Sent: Thursday, March 01, 2018 3:07 PM
To: Claire Dolphin <cdolphin@anchorqea.com>
Cc: Andy Martin <amartin@anchorqea.com>; Richard Villafania <RichardVillafania@eurofinsUS.com>
Subject: RE: GWMA - TMDL Compliance Monitoring - 18-02-1890 - Sample Receipt Confirmation & COC Document

Hi Claire,

The COC and sample labels for samples -38 through -40 does not match, see table below. Please see the updated sample anomaly form attached to reflect the correct sample label IDs for samples -38 through -40.

Lab Sample ID	COC Sample ID	Label Sample ID
18-02-1890-38	IB-RW-12-G-S-20170218	IB-RW-12-G-S-20180227
18-02-1890-39	IB-RW-12-G-M-20170218	IB-RW-12-G-M-20180227
18-02-1890-40	IB-RW-12-G-B-20170218	IB-RW-12-G-B-20180227

Also the lab only received 8 containers for sample -24, please see picture below:



Thanks!

Linda Ta
Project Manager Assistant

From: Claire Dolphin [<mailto:cdolphin@anchorqea.com>]

Sent: Thursday, March 01, 2018 10:22 AM

To: Linda Ta

Cc: Andy Martin

Subject: RE: GWMA - TMDL Compliance Monitoring - 18-02-1890 - Sample Receipt Confirmation & COC Document

EXTERNAL EMAIL*

Hi Linda,

I would like to address the anomaly form questions for GWMA (18-02-1890):

- Sample 33: the label is correct, not COC (please use "CM")
- Samples 34-37: the COC is correct, labels should be "CM-RW-11-G..."
- Samples 38-40: I don't understand the issue, can you clarify? The comment on anomaly form is unclear
- Sample 24: what you received is correct, the sample count should be 9

Thank you,

Claire

Claire Dolphin
Environmental Scientist

ANCHOR QEA, LLC
cdolphin@anchorqea.com

D 949.334.9615

C 925.768.4916

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From: Andy Martin
Sent: Thursday, March 01, 2018 10:09 AM
To: Claire Dolphin <cdolphin@anchoragea.com>
Subject: FW: GWMA - TMDL Compliance Monitoring - 18-02-1890 - Sample Receipt Confirmation & COC Document

Can you look at anomaly form?

A

Andrew Martin
 Managing Environmental Scientist

ANCHOR QEA, LLC

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From: Linda Ta [<mailto:LindaTa@eurofinsUS.com>]
Sent: Thursday, March 01, 2018 10:04 AM
To: Andy Martin <amartin@anchoragea.com>; Cindy Fields <cfields@anchoragea.com>; Lab Data Attachments <LabDataAttachments@anchoragea.com>
Cc: Richard Villafania <RichardVillafania@eurofinsUS.com>
Subject: GWMA - TMDL Compliance Monitoring - 18-02-1890 - Sample Receipt Confirmation & COC Document

Good Morning,

Please review the sample anomaly form and advise soonest of any corrections.

Thanks!

Linda Ta
 Project Manager Assistant



Calscience

Eurofins Calscience
 7440 Lincoln Way
 Garden Grove, CA 92841
 USA
 P: +1 714 895 5494
 F: +1 714 894 7501

Email: LindaTa@eurofinsus.com
 Website: www.eurofinsUS.com/Calscience

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SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 7

CLIENT: Anchor

DATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.1 °C (w/ CF): 2.3 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

	Yes	No	N/A
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sample container label(s) consistent with COC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No	N/A
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Aqueous samples for certain analyses received within 15-minute holding time

	Yes	No	N/A
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No	N/A
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved Metals

	Yes	No	N/A
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Yes	No	N/A
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

	Yes	No	N/A
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH Reviewed by: 778

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 7

CLIENT: Anchor

DATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.3 °C (w/ CF): 2.5 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 836

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/A

COC document(s) received complete ☒ Yes ☐ No ☐ N/A

☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers

☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time

Sampler's name indicated on COC ☒ Yes ☐ No ☐ N/A

Sample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/A

Sample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/A

Proper containers for analyses requested ☒ Yes ☐ No ☐ N/A

Sufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/A

Samples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/A

Proper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved Metals

Acid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/A

Container(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A

☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)

☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)

Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE: (-11)

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☒ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☒ 250CGB_s (pH__2) ☒ 250PB ☒ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 836

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 770

SAMPLE RECEIPT CHECKLIST

COOLER 3 OF 7

CLIENT: Anchor

DATE: 02/27/2018
TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.1 °C (w/ CF): 3.3 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676
CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 8m6
SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 8m6

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 778

SAMPLE RECEIPT CHECKLIST

COOLER 4 OF 7

CLIENT: Anchor

DATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.7 °C (w/ CF): 2.9 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBz₂na (pH__9)

☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z₂na = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 778

SAMPLE RECEIPT CHECKLIST

COOLER 5 OF 7

CLIENT: Anchor

DATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.9 °C (w/ CF): 3.1 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 676

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 826

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)
☐ 250AGB ☒ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB
☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 770

SAMPLE RECEIPT CHECKLIST

COOLER 6 OF 7

CLIENT: Anchor

DATE: 02/27/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)
 Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 2.0 °C (w/ CF): 2.2 °C; ☒ Blank ☐ Sample
☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)
☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling
☐ Sample(s) received at ambient temperature; placed on ice for transport by courier
 Ambient Temperature: ☐ Air ☐ Filter
 Checked by: 676

CUSTODY SEAL:
 Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A
 Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A
 Checked by: 676
 Checked by: 826

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers <input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input checked="" type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500) <input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE: (Trip Blank Lot Number: _____)
 Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)
☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB
☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____
 Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____
 Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____
 Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag
 Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826
 s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH Reviewed by: 710

SAMPLE RECEIPT CHECKLIST

COOLER 7 OF 7CLIENT: AnchorDATE: 02/27/2018

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

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.3 °C (w/ CF): 3.5 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 676

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 676Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 826

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ Yes ☐ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☒ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☐ Yes ☐ No ☒ N/AContainer(s) for certain analysis free of headspace ☐ Yes ☐ No ☒ N/A☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 125PB ☐ 125PB_{znna} (pH__9)☐ 250AGB ☒ 250CGB ☐ 250CGB_s (pH__2) ☒ 250PB ☐ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH__2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 826s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 728

SAMPLE ANOMALY REPORTDATE: **02/27/2018****SAMPLES, CONTAINERS, AND LABELS:****Comments**

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☒ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☒ Client sample label(s) do not match COC (comment)
- ☐ Project information
- ☒ Client sample ID
- ☐ Sampling date and/or time
- ☐ Number of container(s)
- ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
- ☐ Broken
- ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
- ☐ Flat
- ☐ Very low in volume
- ☐ Leaking (not transferred; duplicate bag submitted)
- ☐ Leaking (transferred into ECI Tedlar™ bags*)
- ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

MISCELLANEOUS: (Describe)**Comments****HEADSPACE:**

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: _____

Reported by: 836Reviewed by: 778

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

Appendix D

Data Validation Reports

Data Validation Report – EPA Stage 2A

October 26, 2017

Project: Gateway Water Management Authority TMDL Compliance Monitoring – 2017
Summer Dry

Project Number: 141205-01.04

This report summarizes the review of analytical results for 62 water samples, 4 field duplicate samples, 1 equipment blank sample, and 1 field blank collected on September 5, 2017. The samples were collected by Anchor QEA, LLC, and submitted to Eurofins Calscience, Inc (ECI). The following analytical parameter results were reviewed in this report:

- Chlorinated pesticides by United States Environmental Protection Agency (USEPA) method 8081A
- Polychlorinated biphenyl congeners (PCBs) by USEPA method 8270C selected ion monitoring
- Total and dissolved mercury by USEPA method 1631E
- Total and dissolved metals by USEPA 1640
- Total suspended solids (TSS) by Standard Method 2540D

ECI sample data groups (SDGs) 17-09-0158 and 17-09-0168 were reviewed in this report. Sample IDs, associated SDGs, matrices, and analyses are presented in Table 1.

Table 1
Sample IDs, Matrices, and Analyses

Sample ID	Laboratory Sample ID	Matrix	Parameter
IB-RW-13-G-S-20170905	17-09-0158-1	Water	TSS, metals, pesticides, and PCBs
IB-RW-13-G-M-20170905	17-09-0158-2	Water	TSS
IB-RW-13-G-B-20170905	17-09-0158-3	Water	TSS
IB-RW-14-G-S-20170905	17-09-0158-4	Water	TSS, metals, pesticides, and PCBs
IB-RW-14-G-M-20170905	17-09-0158-5	Water	TSS
IB-RW-14-G-B-20170905	17-09-0158-6	Water	TSS
IB-RW-15-G-S-20170905	17-09-0158-7	Water	TSS, metals, pesticides, and PCBs
IB-RW-15-G-M-20170905	17-09-0158-8	Water	TSS
IB-RW-15-G-B-20170905	17-09-0158-9	Water	TSS
OB-RW-16-G-S-20170905	17-09-0158-10	Water	TSS, metals, pesticides, and PCBs
OB-RW-16-G-M-20170905	17-09-0158-11	Water	TSS
OB-RW-16-G-B-20170905	17-09-0158-12	Water	TSS
SP-RW-18-G-S-20170905	17-09-0158-13	Water	TSS, metals, pesticides, and PCBs
SP-RW-18-G-M-20170905	17-09-0158-14	Water	TSS
SP-RW-18-G-B-20170905	17-09-0158-15	Water	TSS
LE-RW-21-G-S-20170905	17-09-0158-16	Water	TSS, metals, pesticides, and PCBs

Sample ID	Laboratory Sample ID	Matrix	Parameter
LE-RW-22-G-S-20170905	17-09-0158-17	Water	TSS, metals, pesticides, and PCBs
LE-RW-1022-G-S-20170905	17-09-0158-18	Water	TSS, metals, pesticides, and PCBs
OA-RW-08-G-S-20170905	17-09-0158-19	Water	TSS, metals, pesticides, and PCBs
OA-RW-08-G-M-20170905	17-09-0158-20	Water	TSS
OA-RW-08-G-B-20170905	17-09-0158-21	Water	TSS
OA-RW-09-G-S-20170905	17-09-0158-22	Water	TSS, metals, pesticides, and PCBs
OA-RW-09-G-M-20170905	17-09-0158-23	Water	TSS
OA-RW-09-G-B-20170905	17-09-0158-24	Water	TSS
OB-RW-17-G-S-20170905	17-09-0158-25	Water	TSS, metals, pesticides, and PCBs
OB-RW-17-G-M-20170905	17-09-0158-26	Water	TSS
OB-RW-17-G-B-20170905	17-09-0158-27	Water	TSS
SP-RW-19-G-S-20170905	17-09-0158-28	Water	TSS, metals, pesticides, and PCBs
SP-RW-19-G-M-20170905	17-09-0158-29	Water	TSS
SP-RW-19-G-B-20170905	17-09-0158-30	Water	TSS
SP-RW-20-G-S-20170905	17-09-0158-31	Water	TSS, metals, pesticides, and PCBs
SP-RW-20-G-M-20170905	17-09-0158-32	Water	TSS
SP-RW-20-G-B-20170905	17-09-0158-33	Water	TSS
FB-20170905	17-09-0158-34	Water	Metals
IA-RW-06-G-S-20170905	17-09-0168-1	Water	TSS, metals, pesticides, and PCBs
IA-RW-06-G-M-20170905	17-09-0168-2	Water	TSS
IA-RW-06-G-B-20170905	17-09-0168-3	Water	TSS
FH-RW-07-G-S-20170905	17-09-0168-4	Water	TSS, metals, pesticides, and PCBs
FH-RW-07-G-M-20170905	17-09-0168-5	Water	TSS
FH-RW-07-G-B-20170905	17-09-0168-6	Water	TSS
CM-RW-10-G-S-20170905	17-09-0168-7	Water	TSS, metals, pesticides, and PCBs
CM-RW-10-G-M-20170905	17-09-0168-8	Water	TSS
CM-RW-10-G-B-20170905	17-09-0168-9	Water	TSS
CB-RW-11-G-S-20170905	17-09-0168-10	Water	TSS, metals, pesticides, and PCBs
CB-RW-11-G-M-20170905	17-09-0168-11	Water	TSS
CB-RW-11-G-B-20170905	17-09-0168-12	Water	TSS
CB-RW-1011-G-M-20170905	17-09-0168-13	Water	TSS
IB-RW-12-G-S-20170905	17-09-0168-14	Water	TSS, metals, pesticides, and PCBs
IB-RW-12-G-M-20170905	17-09-0168-15	Water	TSS
IB-RW-12-G-B-20170905	17-09-0168-16	Water	TSS
IB-RW-1012-G-B-20170905	17-09-0168-17	Water	TSS
EB-20170905	17-09-0168-18	Water	Metals, pesticides, and PCBs
CS-RW-01-G-S-20170905	17-09-0168-19	Water	TSS, metals, pesticides, and PCBs
CS-RW-01-G-M-20170905	17-09-0168-20	Water	TSS

Sample ID	Laboratory Sample ID	Matrix	Parameter
CS-RW-01-G-B-20170905	17-09-0168-21	Water	TSS
IA-RW-02-G-S-20170905	17-09-0168-22	Water	TSS, metals, pesticides, and PCBs
IA-RW-02-G-M-20170905	17-09-0168-23	Water	TSS
IA-RW-1002-G-M-20170905	17-09-0168-24	Water	TSS
IA-RW-02-G-B-20170905	17-09-0168-25	Water	TSS
IA-RW-03-G-S-20170905	17-09-0168-26	Water	TSS, metals, pesticides, and PCBs
IA-RW-03-G-M-20170905	17-09-0168-27	Water	TSS
IA-RW-03-G-B-20170905	17-09-0168-28	Water	TSS
IA-RW-04-G-S-20170905	17-09-0168-29	Water	TSS, metals, pesticides, and PCBs
IA-RW-04-G-M-20170905	17-09-0168-30	Water	TSS
IA-RW-04-G-B-20170905	17-09-0168-31	Water	TSS
IA-RW-05-G-S-20170905	17-09-0168-32	Water	TSS, metals, pesticides, and PCBs
IA-RW-05-G-M-20170905	17-09-0168-33	Water	TSS
IA-RW-05-G-B-20170905	17-09-0168-34	Water	TSS

Data Validation and Qualifications

The following comments refer to the laboratory's performance in meeting the quality assurance/quality control (QC) guidelines outlined in the analytical procedures. Laboratory results were reviewed using the laboratory control limits and the following guidelines:

- *Water Sampling and Analysis Plan, Greater Los Angeles and Long Beach Harbor Waters (SAP; Anchor QEA 2014)*
- *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846, Third Edition; USEPA 1986)*
- *National Functional Guidelines for Organic Superfund Methods Data Review (USEPA 2017a)*
- *National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA 2017b)*

Unless noted in this report, laboratory results for the samples listed above were within QC criteria.

Field Documentation

Field documentation was checked for completeness and accuracy, and no discrepancies were found. The chain-of-custody forms were signed by ECI at the time of sample receipt. Samples were received in good condition and within the recommended temperature range.

Holding Times and Sample Preservation

Samples were appropriately preserved and analyzed within holding times, except all samples analyzed for pesticides in SDG 17-09-0158. The original analysis was not reported due to a laboratory error. Samples were re-extracted and re-analyzed to correct this error; however, the

re-extraction occurred outside of the recommended holding time. Results have been qualified "J" or "UJ" to indicate a potentially low bias.

Laboratory Method Blanks

Laboratory method blanks were analyzed at the required frequencies. All method blanks were free of target analytes, except mercury in the dissolved fraction method blank reported in SDG 17-09-058. Associated detected sample results were not significantly greater than (five times) the concentration in the method blank and have been qualified as non-detects.

Field Quality Control

Equipment Blanks and Field Blanks

One equipment rinsate blank and one field blank were collected and analyzed for all required parameters in association with this sample set. The blank results were below detection, except for some low-level metals detections. Detected results are summarized in Table 2.

Table 2
Equipment Blank and Field Blank Summary

Blank ID	Analyte	Result
EB-20170905	Dissolved copper	0.769 µg/L
	Total copper	0.857 µg/L
	Dissolved mercury	0.00045J µg/L
	Total mercury	0.00134 µg/L
	Dissolved zinc	2.4 µg/L
	Total zinc	1.81 µg/L
FB-20170905	Dissolved copper	0.264 µg/L
	Total copper	0.284 µg/L
	Dissolved zinc	0.211J µg/L
	Total zinc	0.488J µg/L

Notes:
µg/L: microgram per liter
J: estimated value

No sample results were qualified based on equipment blank or field blank results.

Field Duplicates

Four water field duplicates were collected in association with this sample set. Detected results are summarized in Table 3.

Table 3
Field Duplicate Summary

Analyte	CB-RW-11-G-M-20170905	CB-RW-1011-G-M-20170905	RPD	Difference	Reporting Limit
TSS	7.7 mg/L	7.3 mg/L	5%	--	1.0 mg/L

Analyte	IA-RW-02-G-M-20170905	IA-RW-1002-G-M-20170905	RPD	Difference	Reporting Limit
TSS	1.2 mg/L	1.2 mg/L	--	0	1.0 mg/L

Analyte	IB-RW-12-G-B-20170905	IB-RW-1012-G-B-20170905	RPD	Difference	Reporting Limit
TSS	2.4 mg/L	2.4 mg/L	--	0	1.0 mg/L

Analyte	LE-RW-22-G-S-20170905	LE-RW-1022-G-S-20170905	RPD	Difference	Reporting Limit
Total mercury	0.00244 µg/L	0.00166 µg/L	--	0.00078 µg/L	0.0005 µg/L
Dissolved cadmium	0.0262J µg/L	0.0321 µg/L	--	0.0059 µg/L	0.03 µg/L
Dissolved copper	0.928 µg/L	1.12 µg/L	19%	--	0.03 µg/L
Dissolved lead	0.0347 µg/L	0.0429 µg/L	--	0.0082 µg/L	0.03 µg/L
Dissolved zinc	10.1 µg/L	6.06 µg/L	50%	--	0.5 µg/L
Total cadmium	0.0282J µg/L	0.0357 µg/L	--	0.0075 µg/L	0.03 µg/L
Total chromium	0.24J µg/L	0.248J µg/L	--	0.008 µg/L	0.5 µg/L
Total copper	1.43 µg/L	1.73 µg/L	19%	--	0.03 µg/L
Total lead	0.383 µg/L	0.54 µg/L	34%	--	0.03 µg/L
Total zinc	11.7 µg/L	8.68 µg/L	30%	--	0.5 µg/L
TSS	4 mg/L	5.2 mg/L	--	1.2 mg/L	1 mg/L

Notes:

--: not applicable

J: estimated value

mg/L: milligram per liter

RPD: relative percent difference

Results less than five times the reporting limit (RL) were evaluated using the difference between the results with a control limit of \pm RL. Results greater than five times the RL were evaluated using the project-required control limits of $\leq 25\%$ relative percent difference (RPD) value.

Field duplicate results were within project control limits except for some results in sample LE-RW-22G-S-20170905 and the field duplicate LE-RW-1022-G-S-20170905. The required difference results for total mercury and TSS were slightly higher than the RL. The RPD values for total and dissolved zinc and total lead were above the project control limit. No data were qualified based on the field duplicate results.

Surrogate Recoveries

Surrogate recoveries were within the laboratory control limits for all samples.

Column Confirmation

All detected pesticide results were confirmed by a second column, and results were within method control limits.

Laboratory Control Samples and Laboratory Control Duplicate Samples

Laboratory control samples (LCSs) and laboratory control sample duplicates (LCSDs) were analyzed at the required frequencies. Some pesticide and PCB analytes were not spiked in the LCS/LCSD, so instrument accuracy could not be evaluated for these analytes. All LCS/LCSD recoveries and/or RPD values were within project-required control limits.

Matrix Spike and Matrix Spike Duplicate Samples

Matrix spike (MS) and matrix spike duplicate (MSD) samples were analyzed at the required frequencies. Some pesticide and PCB analytes were not spiked in the MS/MSD, so instrument accuracy could not be evaluated for these analytes. No results were qualified for MS/MSD recoveries outside of control limits when the spike concentration was greater than four times the sample concentration. All MS/MSD recoveries and/or RPD values were within project-required control limits, with the following exceptions:

- SDG 17-09-0158 Metals – Total copper recovered below the control limit in the MS, and total zinc recovered above the control limit in the MS and MSD analyzed on sample IB-RW-13-G-S-20170905. Associated total results were qualified "J" to indicate a low or high bias, respectively. Dissolved copper recovered above the control limit in the MSD, and lead recovered below the control limit in the MS analyzed on sample IB-RW-13-G-S-20170905. Associated dissolved results were qualified "J" or "UJ" to indicate a high or low bias.
- SDG 17-09-1068 Pesticides – Gamma chlordane recovered below the control limit in the MSD analyzed on sample IA-RW-04-G-S-20170905. The parent sample result was qualified "UJ" to indicate a potentially low bias. The RPD values were above the control limit for all pesticides and several PCB compounds, but no qualification was necessary because pesticides and PCBs were not detected in the sample.

See Table 4 for qualified results.

Laboratory Duplicates

Laboratory duplicates were analyzed at the required frequency or MSDs or LCSDs were analyzed in place of laboratory duplicates. All duplicate RPD results were within project-required control limits.

Method Detection Limits

Detection limits (DLs) were acceptable as reported. All values were reported using the laboratory DL. Values were reported as undiluted, or when diluted, the DL reflects the dilution factor. The following analyses resulted in DLs above the requirements listed in Table 4 of the SAP:

- TSS DLs were above the California Surface Water Ambient Monitoring Program RL requirements but were at or below target reporting limits.
- Some pesticide and PCB detection limits were above the Coordinated Compliance Monitoring and Reporting Plan RL requirements but met SWAMP and target RL requirements.

Overall Assessment

As was determined by this evaluation, the laboratory followed the specified analytical methods and all requested sample analyses were completed. Accuracy was acceptable as demonstrated by the surrogate, LCS/LCSD, and MS/MSD recovery values. Precision was acceptable as demonstrated by the LCS/LCSD, MS/MSD, and laboratory and field duplicate RPD values or difference values. Most data are acceptable as reported; all other data are acceptable as qualified. Table 4 summarizes the qualifiers applied to the sample results reviewed in this report.

Data Qualifier Definitions

- U Indicates the compound or analyte was analyzed for but not detected at or above the specified limit
- J Indicates an estimated value
- UJ Indicates the compound or analyte was analyzed for but not detected and the specified limit reported is estimated

Table 4
Data Qualification Summary

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
FB-20170905	Metals	Dissolved copper	0.264 µg/L	0.264J µg/L	MSD %R above control limit
		Dissolved lead	0.0135U µg/L	0.0135UJ µg/L	MS %R below control limit
		Total copper	0.284 µg/L	0.284J µg/L	
		Total zinc	0.488J µg/L	0.488J µg/L	MS/MSD %R above control limit
IA-RW-04-G-S-20170905	Pesticides	Chlordane, beta-(Chlordane, trans-)	1.7U ng/L	1.7UJ ng/L	MSD %R below control limit
IB-RW-13-G-S-20170905	Metals	Dissolved copper	0.769 µg/L	0.769J µg/L	MSD %R above control limit
		Dissolved lead	0.0196J µg/L	0.0196J µg/L	MS %R below control limit

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
		Total copper	1.64 µg/L	1.64J µg/L	
		Total zinc	8.39 µg/L	8.39J µg/L	MS/MSD %R above control limit
		Dissolved mercury	0.000407J µg/L	0.000407U µg/L	Method blank contamination
	Pesticides	All analytes	varies	J or UJ	Extracted past holding time expired
IB-RW-14-G-S-20170905	Metals	Dissolved copper	0.649 µg/L	0.649J µg/L	MSD %R above control limit
		Dissolved lead	0.0135U µg/L	0.0135UJ µg/L	MS %R below control limit
		Total copper	0.924 µg/L	0.924J µg/L	
		Total zinc	4.9 µg/L	4.9J µg/L	MS/MSD %R above control limit
		Dissolved mercury	0.00101B µg/L	0.00101U µg/L	Method blank contamination
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
IB-RW-15-G-S-20170905	Metals	Dissolved copper	0.634 µg/L	0.634J µg/L	MSD %R above control limit
		Dissolved lead	0.0135U µg/L	0.0135UJ µg/L	MS %R below control limit
		Total copper	0.745 µg/L	0.745J µg/L	
		Total zinc	10.7 µg/L	10.7J µg/L	MS/MSD %R above control limit
		Dissolved mercury	0.00136B µg/L	0.00136U µg/L	Method blank contamination
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
LE-RW-1022-G-S-20170905	Metals	Dissolved copper	1.12 µg/L	1.12J µg/L	MSD %R above control limit
		Dissolved lead	0.0429 µg/L	0.0429J µg/L	MS %R below control limit
		Total copper	1.73 µg/L	1.73J µg/L	
		Total zinc	8.68 µg/L	8.68J µg/L	MS/MSD %R above control limit
		Dissolved mercury	0.000248J µg/L	0.000248U µg/L	Method blank contamination
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
LE-RW-21-G-S-20170905	Metals	Dissolved copper	1.02 µg/L	1.02J µg/L	MSD %R above control limit
		Dissolved lead	0.0308 µg/L	0.0308J µg/L	MS %R below control limit
		Total copper	1.72 µg/L	1.72J µg/L	
		Total zinc	13.4 µg/L	13.4J µg/L	MS/MSD %R above control limit

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
		Dissolved mercury	0.00109B µg/L	0.00109U µg/L	Method blank contamination
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
LE-RW-22-G-S-20170905	Metals	Dissolved copper	0.928 µg/L	0.928J µg/L	MSD %R above control limit
		Dissolved lead	0.0347 µg/L	0.0347J µg/L	MS %R below control limit
		Total copper	1.43 µg/L	1.43J µg/L	
		Total zinc	11.7 µg/L	11.7J µg/L	MS/MSD %R above control limit
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
OA-RW-08-G-S-20170905	Metals	Dissolved copper	0.588 µg/L	0.588J µg/L	MSD %R above control limit
		Dissolved lead	0.0216J µg/L	0.0216J µg/L	MS %R below control limit
		Total copper	0.836 µg/L	0.836J µg/L	
		Total zinc	4.7 µg/L	4.7J µg/L	MS/MSD %R above control limit
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
OA-RW-09-G-S-20170905	Metals	Dissolved copper	2 µg/L	2J µg/L	MSD %R above control limit
		Dissolved lead	0.0182J µg/L	0.0182J µg/L	MS %R below control limit
		Total copper	2.23 µg/L	2.23J µg/L	
		Total zinc	13.5 µg/L	13.5J µg/L	MS/MSD %R above control limit
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
OB-RW-16-G-S-20170905	Metals	Dissolved copper	0.37 µg/L	0.37J µg/L	MSD %R above control limit
		Dissolved lead	0.0135U µg/L	0.0135UJ µg/L	MS %R below control limit
		Total copper	0.606 µg/L	0.606J µg/L	
		Total zinc	1.69 µg/L	1.69J µg/L	MS/MSD %R above control limit
		Dissolved mercury	0.000757B µg/L	0.000757U µg/L	Method blank contamination
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
OB-RW-17-G-S-20170905	Metals	Dissolved copper	0.478 µg/L	0.478J µg/L	MSD %R above control limit
		Dissolved lead	0.0165J µg/L	0.0165J µg/L	MS %R below control limit
		Total copper	0.469 µg/L	0.469J µg/L	

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
		Total zinc	3.02 µg/L	3.02J µg/L	MS/MSD %R above control limit
	Metals	Dissolved mercury	0.000473J µg/L	0.000473U µg/L	Method blank contamination
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
SP-RW-18-G-S-20170905	Metals	Dissolved copper	0.502 µg/L	0.502J µg/L	MSD %R above control limit
		Dissolved lead	0.031 µg/L	0.031J µg/L	MS %R below control limit
		Total copper	0.67 µg/L	0.67J µg/L	
		Total zinc	2.08 µg/L	2.08J µg/L	MS/MSD %R above control limit
		Dissolved mercury	0.0012B µg/L	0.0012U µg/L	Method blank contamination
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
SP-RW-19-G-S-20170905	Metals	Dissolved copper	0.289 µg/L	0.289J µg/L	MSD %R above control limit
		Dissolved lead	0.0165J µg/L	0.0165J µg/L	MS %R below control limit
		Total copper	0.364 µg/L	0.364J µg/L	
		Total zinc	3.98 µg/L	3.98J µg/L	MS/MSD %R above control limit
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired
SP-RW-20-G-S-20170905	Metals	Dissolved copper	0.394 µg/L	0.394J µg/L	MSD %R above control limit
		Dissolved lead	0.0142J µg/L	0.0142J µg/L	MS %R below control limit
		Total copper	0.504 µg/L	0.504J µg/L	
		Total zinc	10.2 µg/L	10.2J µg/L	MS/MSD %R above control limit
	Pesticides	All analytes	Varies	J or UJ	Extracted past holding time expired

Notes:
%R: percent recovery
ng/L: nanogram per liter

References

Anchor QEA (Anchor QEA, LLC), 2014. *Water Sampling and Analysis Plan, Greater Los Angeles and Long Beach Harbor Waters*. September 2014.

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USEPA, 2017a. *National Functional Guidelines for Organic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. EPA-540-R-2017-002. January 2017.

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Data Validation Report – EPA Stage 2A

March 21, 2018

Project: Gateway Water Management Authority TMDL Compliance Monitoring – 2017
Fall Wet

Project Number: 141205-01.04

This report summarizes the review of analytical results for 62 water samples, 4 field duplicate samples, 1 equipment blank sample, and 1 field blank collected on January 10, 2018. The samples were collected by Anchor QEA, LLC, and submitted to Eurofins Calscience, Inc (ECI). The following analytical parameter results were reviewed in this report:

- Total suspended solids (TSS) by Standard Method 2540D
- Chlorinated pesticides by United States Environmental Protection Agency (USEPA) method 8081A
- Polychlorinated biphenyl congeners (PCBs) by USEPA method 8270C selected ion monitoring
- Total and dissolved mercury by USEPA method 1631E
- Total and dissolved metals by USEPA 1640

ECI sample data groups (SDGs) 18-01-0662 and 18-01-0691 were reviewed in this report. Sample IDs, associated SDGs, matrices, and analyses are presented in Table 1.

Table 1
Sample IDs, Matrices, and Analyses

Sample ID	Laboratory Sample ID	Matrix	Parameter
CB-RW-11-G-B-20180110	18-01-0691-12	Water	TSS
CB-RW-11-G-M-20180110	18-01-0691-11	Water	TSS
CB-RW-11-G-S-20180110	18-01-0691-10	Water	TSS, metals, pesticides, and PCBs
CM-RW-1010-G-M-20180110	18-01-0691-6	Water	TSS
CM-RW-10-G-B-20180110	18-01-0691-9	Water	TSS
CM-RW-10-G-M-20180110	18-01-0691-8	Water	TSS
CM-RW-10-G-S-20180110	18-01-0691-7	Water	TSS, metals, pesticides, and PCBs
CS-RW-01-G-B-20180110	18-01-0691-18	Water	TSS
CS-RW-01-G-M-20180110	18-01-0691-17	Water	TSS
CS-RW-01-G-S-20180110	18-01-0691-16	Water	TSS, metals, pesticides, and PCBs
EB-20180110	18-01-0662-7	Water	Metals, pesticides, and PCBs
FB-20180110	18-01-0691-45	Water	Metals
FH-RW-07-G-B-20180110	18-01-0691-5	Water	TSS
FH-RW-07-G-M-20180110	18-01-0691-4	Water	TSS
FH-RW-07-G-S-20180110	18-01-0691-3	Water	TSS, metals, pesticides, and PCBs
IA-RW-02-G-B-20180110	18-01-0691-21	Water	TSS

Sample ID	Laboratory Sample ID	Matrix	Parameter
IA-RW-02-G-M-20180110	18-01-0691-20	Water	TSS
IA-RW-02-G-S-20180110	18-01-0691-19	Water	TSS, metals, pesticides, and PCBs
IA-RW-03-G-B-20180110	18-01-0691-24	Water	TSS
IA-RW-03-G-M-20180110	18-01-0691-23	Water	TSS
IA-RW-03-G-S-20180110	18-01-0691-22	Water	TSS, metals, pesticides, and PCBs
IA-RW-04-G-B-20180110	18-01-0691-27	Water	TSS
IA-RW-04-G-M-20180110	18-01-0691-26	Water	TSS
IA-RW-04-G-S-20180110	18-01-0691-25	Water	TSS, metals, pesticides, and PCBs
IA-RW-05-G-B-20180110	18-01-0691-30	Water	TSS
IA-RW-05-G-M-20180110	18-01-0691-29	Water	TSS
IA-RW-05-G-S-20180110	18-01-0691-28	Water	TSS, metals, pesticides, and PCBs
IA-RW-06-G-B-20180110	18-01-0691-2	Water	TSS
IA-RW-06-G-M-20180110	18-01-0691-1	Water	TSS
IA-RW-06-G-S-20180110	18-01-0691-31	Water	TSS, metals, pesticides, and PCBs
IB-RW-1014-G-S-20180110	18-01-0691-54	Water	TSS, metals, pesticides, and PCBs
IB-RW-13-G-B-20180110	18-01-0691-50	Water	TSS
IB-RW-13-G-M-20180110	18-01-0691-49	Water	TSS
IB-RW-13-G-S-20180110	18-01-0691-48	Water	TSS, metals, pesticides, and PCBs
IB-RW-14-G-B-20180110	18-01-0691-53	Water	TSS
IB-RW-14-G-M-20180110	18-01-0691-52	Water	TSS
IB-RW-14-G-S-20180110	18-01-0691-51	Water	TSS, metals, pesticides, and PCBs
IB-RW-12-G-B-20180110	18-01-0691-15	Water	TSS
IB-RW-12-G-M-20180110	18-01-0691-14	Water	TSS
IB-RW-12-G-S-20180110	18-01-0691-13	Water	TSS, metals, pesticides, and PCBs
IB-RW-15-G-B-20180110	18-01-0662-3	Water	TSS
IB-RW-15-G-M-20180110	18-01-0662-2	Water	TSS
IB-RW-15-G-S-20180110	18-01-0662-1	Water	TSS, metals, pesticides, and PCBs
LE-RW-21-G-S-20180110	18-01-0691-44	Water	TSS, metals, pesticides, and PCBs
LE-RW-22-G-S-20180110	18-01-0691-47	Water	TSS, metals, pesticides, and PCBs
OA-RW-08-G-B-20180110	18-01-0691-34	Water	TSS
OA-RW-08-G-M-20180110	18-01-0691-33	Water	TSS
OA-RW-08-G-S-20180110	18-01-0691-32	Water	TSS, metals, pesticides, and PCBs
OA-RW-09-G-B-20180110	18-01-0691-37	Water	TSS
OA-RW-09-G-M-20180110	18-01-0691-36	Water	TSS
OA-RW-09-G-S-20180110	18-01-0691-35	Water	TSS, metals, pesticides, and PCBs
OA-RW-1009-G-B-20180110	18-01-0691-46	Water	TSS
OB-RW-16-G-B-20180110	18-01-0691-40	Water	TSS
OB-RW-16-G-M-20180110	18-01-0691-39	Water	TSS

Sample ID	Laboratory Sample ID	Matrix	Parameter
OB-RW-16-G-S-20180110	18-01-0691-38	Water	TSS, metals, pesticides, and PCBs
OB-RW-17-G-B-20180110	18-01-0662-6	Water	TSS
OB-RW-17-G-M-20180110	18-01-0662-5	Water	TSS
OB-RW-17-G-S-20180110	18-01-0662-4	Water	TSS, metals, pesticides, and PCBs
SP-RW-18-G-B-20180110	18-01-0691-43	Water	TSS
SP-RW-18-G-M-20180110	18-01-0691-42	Water	TSS
SP-RW-18-G-S-20180110	18-01-0691-41	Water	TSS, metals, pesticides, and PCBs
SP-RW-19-G-B-20180110	18-01-0662-10	Water	TSS
SP-RW-19-G-M-20180110	18-01-0662-9	Water	TSS
SP-RW-19-G-S-20180110	18-01-0662-8	Water	TSS, metals, pesticides, and PCBs
SP-RW-20-G-B-20180110	18-01-0662-13	Water	TSS
SP-RW-20-G-M-20180110	18-01-0662-12	Water	TSS
SP-RW-20-G-S-20180110	18-01-0662-11	Water	TSS, metals, pesticides, and PCBs

Data Validation and Qualifications

The following comments refer to the laboratory's performance in meeting the quality assurance/quality control (QC) guidelines outlined in the analytical procedures. Laboratory results were reviewed using the laboratory control limits and the following guidelines:

- *Water Sampling and Analysis Plan, Greater Los Angeles and Long Beach Harbor Waters (SAP; Anchor QEA 2014)*
- *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846, Third Edition; USEPA 1986)*
- *National Functional Guidelines for Organic Superfund Methods Data Review (USEPA 2017a)*
- *National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA 2017b)*

Unless noted in this report, laboratory results for the samples listed above were within QC criteria.

Field Documentation

Field documentation was checked for completeness and accuracy. The chain-of-custody (COC) forms were signed by ECI at the time of sample receipt. Samples were received in good condition and within the recommended temperature range. There were several discrepancies between the COC forms and bottle labels, but all were addressed, and all analyses were completed, with one exception. Total and dissolved mercury was not requested on the COC for the field blank, so the laboratory did not analyze the field blank for these parameters.

Holding Times and Sample Preservation

Samples were appropriately preserved and analyzed within holding times.

Laboratory Method Blanks

Laboratory method blanks were analyzed at the required frequencies. All method blanks were free of target analytes, except total lead and dissolved zinc in SDG 18-01-0691. Associated detected sample results in the field blank were not significantly greater than (five times) the concentration in the method blank and have been qualified as non-detects.

Field Quality Control

Equipment Blanks and Field Blanks

One equipment rinsate blank and one field blank were collected and analyzed for all required parameters in association with this sample set. The blank results were below detection, except for some metals detections. Detected results are summarized in Table 2.

Table 2
Equipment Blank and Field Blank Summary

Blank ID	Analyte	Result
EB-20180110	Total copper	5.74 µg/L
	Dissolved copper	4.45 µg/L
	Total Cadmium	0.00659J µg/L
	Total Lead	0.0424 µg/L
	Total zinc	0.845 µg/L
	Dissolved zinc	0.467J µg/L
FB-20180110	Total copper	5.90 µg/L
	Dissolved copper	5.71 µg/L
	Total zinc	0.516 µg/L
	Dissolved lead	0.0229J µg/L

Notes:

µg/L: microgram per liter

J: estimated value

No data were qualified based on equipment blank or field blank results.

Field Duplicates

Three water field duplicates were collected in association with this sample set. Detected results are summarized in Table 3.

Table 3
Field Duplicate Summary

Analyte	CM-RW-10-G-M-20180110	CM-RW-1010-G-M-20180110	RPD	Difference	Reporting Limit
TSS	1.7 mg/L	2.1 mg/L	--	0.4 mg/L	1.0 mg/L

Analyte	OA-RW-09-G-B-20180110	OA-RW-1009-G-B-20180110	RPD	Difference	Reporting Limit
TSS	0.83U mg/L	1.7 mg/L	--	0.2 mg/L	1.0 mg/L

Analyte	IB-RW-14-G-S-20180110	IB-RW-1014-G-S-20180110	RPD	Difference	Reporting Limit
Dissolved Cadmium	0.0454 µg/L	0.0459 µg/L	--	0.0005 µg/L	0.03 µg/L
Total cadmium	0.0457 µg/L	0.0475 µg/L	--	0.0018 µg/L	0.03 µg/L
Dissolved chromium	0.355J µg/L	0.341J µg/L	--	0.014 µg/L	0.5 µg/L
Total chromium	0.398J µg/L	0.401J µg/L	--	0.003 µg/L	0.5 µg/L
Dissolved copper	1.2 µg/L	1.27 µg/L	6%	--	0.03 µg/L
Total copper	1.42 µg/L	1.5 µg/L	5%	--	0.03 µg/L
Dissolved lead	0.111 µg/L	0.106 µg/L	--	0.005 µg/L	0.03 µg/L
Total lead	0.146 µg/L	0.155 µg/L	--	0.009 µg/L	0.03 µg/L
Total mercury	0.000113U µg/L	0.00142 µg/L	--	0.00131 µg/L	0.0005 µg/L
TSS	1.8 mg/L	2.4 mg/L	--	0.6 mg/L	1.0 mg/L
Dissolved zinc	6.74 µg/L	6.51 µg/L	3%	--	0.5 µg/L
Total zinc	8.05 µg/L	7.49 µg/L	8%	--	0.5 µg/L

Notes:

--: not applicable

J: estimated value

mg/L: milligram per liter

RPD: relative percent difference

Results less than five times the reporting limit (RL) were evaluated using the difference between the results with a control limit of \pm RL. Results greater than five times the RL were evaluated using the project-required control limits of $\leq 25\%$ relative percent difference (RPD) value.

Field duplicate results were within project control limits except for total mercury in sample IB-RW-14-G-S-20180110 and the duplicate. The required difference results for total mercury were slightly higher than the RL. No data were qualified based on the field duplicate results.

Surrogate Recoveries

Surrogate recoveries were within the laboratory control limits for all samples.

Column Confirmation

All detected pesticide results were confirmed by a second column, and results were within method control limits.

Laboratory Control Samples and Laboratory Control Duplicate Samples

Laboratory control samples (LCSs) and laboratory control sample duplicates (LCSDs) were analyzed at the required frequencies. Some pesticide and PCB analytes were not spiked in the LCS/LCSD, so instrument accuracy could not be evaluated for these analytes. All LCS/LCSD recoveries and/or RPD values were within project-required control limits.

Matrix Spike and Matrix Spike Duplicate Samples

Matrix spike (MS) and matrix spike duplicate (MSD) samples were analyzed at the required frequencies, except for pesticides and PCBs. No volume was submitted to the laboratory for MS/MSD analysis with SDG 18-01-0662. Some pesticide and PCB analytes were not spiked in the MS/MSD, so sample matrix accuracy could not be evaluated for these analytes. No results were qualified for MS/MSD recoveries outside of control limits when the spike concentration was greater than four times the sample concentration. All MS/MSD recoveries and/or RPD values were within project-required control limits, with the following exceptions:

- SDG 18-01-0691 Metals – Dissolved chromium recovered above the control limit in the MS analyzed on sample CS-RW-01-G-S-20180110. Associated detected dissolved results were qualified "J" to indicate a potentially high bias. Dissolved lead recovered below the control limit in the MS and MSD. Associated dissolved results were qualified "J" to indicate a potentially low bias.
- SDG 18-01-0691 Pesticides – 4,4'-DDD recovered above the control limit in the MS analyzed on sample CS-RW-01-G-S-20180110, but no qualification was necessary because this compound was not detected in the sample.

See Table 4 for qualified results.

Laboratory Duplicates

Laboratory duplicates were analyzed at the required frequency or MSDs or LCSDs were analyzed in place of laboratory duplicates. All duplicate RPD results were within project-required control limits.

Method Detection Limits

Detection limits (DLs) were acceptable as reported. All values were reported using the laboratory DL. Values were reported as undiluted, or when diluted, the DL reflects the dilution factor. The following analyses resulted in DLs above the requirements listed in Table 4 of the SAP:

- TSS DLs were above the California Surface Water Ambient Monitoring Program RL requirements but were at or below target reporting limits.

- Some pesticide and PCB detection limits were above the Coordinated Compliance Monitoring and Reporting Plan RL requirements but met SWAMP and/or target RL requirements.

Overall Assessment

As was determined by this evaluation, the laboratory followed the specified analytical methods and all requested sample analyses were completed. Accuracy was acceptable as demonstrated by the surrogate, LCS/LCSD, and MS/MSD recovery values. Precision was acceptable as demonstrated by the LCS/LCSD, MS/MSD, and laboratory and field duplicate RPD values or difference values. Most data are acceptable as reported; all other data are acceptable as qualified. Table 4 summarizes the qualifiers applied to the sample results reviewed in this report.

Data Qualifier Definitions

U Indicates the compound or analyte was analyzed for but not detected at or above the specified limit

J Indicates an estimated value

Table 4
Data Qualification Summary

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
CB-RW-11-G-S-20180110	Metals	Dissolved chromium	0.561 µg/L	0.561J µg/L	MS %R above control limit
		Dissolved lead	0.194 µg/L	0.194J µg/L	MS/MSD %R below control limit
CM-RW-10-G-S-20180110	Metals	Dissolved chromium	0.496J µg/L	0.496J µg/L	MS %R above control limit
		Dissolved lead	0.17µg/L	0.17J µg/L	MS/MSD %R below control limit
CS-RW-01-G-S-20180110	Metals	Dissolved chromium	1.27 µg/L	1.27J µg/L	MS %R above control limit
		Dissolved lead	1.54 µg/L	1.54J µg/L	MS/MSD %R below control limit
FB-20180110	Metals	Dissolved zinc	0.15J µg/L	0.15U µg/L	Method blank contamination
		Dissolved lead	0.0229J µg/L	0.0229J µg/L	MS/MSD %R below control limit
		Total lead	0.0194J µg/L	0.0194U µg/L	Method blank contamination
FH-RW-07-G-S-20180110	Metals	Dissolved chromium	0.522 µg/L	0.522J µg/L	MS %R above control limit
		Dissolved lead	0.148 µg/L	0.148J µg/L	MS/MSD %R below control limit

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
IA-RW-02-G-S-20180110	Metals	Dissolved chromium	0.718 µg/L	0.718J µg/L	MS %R above control limit
		Dissolved lead	0.485 µg/L	0.485J µg/L	MS/MSD %R below control limit
IA-RW-03-G-S-20180110	Metals	Dissolved chromium	0.578 µg/L	0.578J µg/L	MS %R above control limit
		Dissolved lead	0.319 µg/L	0.319J µg/L	MS/MSD %R below control limit
IA-RW-04-G-S-20180110	Metals	Dissolved chromium	0.681 µg/L	0.681J µg/L	MS %R above control limit
		Dissolved lead	0.372 µg/L	0.372J µg/L	MS/MSD %R below control limit
IA-RW-05-G-S-20180110	Metals	Dissolved chromium	0.493J µg/L	0.493J µg/L	MS %R above control limit
		Dissolved lead	0.118 µg/L	0.118J µg/L	MS/MSD %R below control limit
IA-RW-06-G-S-20180110	Metals	Dissolved chromium	0.561 µg/L	0.561J µg/L	MS %R above control limit
		Dissolved lead	0.189 µg/L	0.189J µg/L	MS/MSD %R below control limit
IB-RW-1014-G-S-20180110	Metals	Dissolved chromium	0.341J µg/L	0.341J µg/L	MS %R above control limit
		Dissolved lead	0.106 µg/L	0.106J µg/L	MS/MSD %R below control limit
IB-RW-12-G-S-20180110	Metals	Dissolved chromium	0.505 µg/L	0.505J µg/L	MS %R above control limit
		Dissolved lead	0.201 µg/L	0.201J µg/L	MS/MSD %R below control limit
IB-RW-13-G-S-20180110	Metals	Dissolved chromium	0.353J µg/L	0.353J µg/L	MS %R above control limit
		Dissolved lead	0.184 µg/L	0.184J µg/L	MS/MSD %R below control limit
IB-RW-14-G-S-20180110	Metals	Dissolved chromium	0.355J µg/L	0.355J µg/L	MS %R above control limit
		Dissolved lead	0.111 µg/L	0.111J µg/L	MS/MSD %R below control limit
LE-RW-21-G-S-20180110	Metals	Dissolved chromium	0.692 µg/L	0.692J µg/L	MS %R above control limit
		Dissolved lead	0.301 µg/L	0.301J µg/L	MS/MSD %R below control limit
LE-RW-22-G-S-20180110	Metals	Dissolved chromium	0.682 µg/L	0.682J µg/L	MS %R above control limit
		Dissolved lead	0.569 µg/L	0.569J µg/L	MS/MSD %R below control limit

Sample ID	Parameter	Analyte	Reported Result	Qualified Result	Reason
OA-RW-08-G-S-20180110	Metals	Dissolved chromium	0.602 µg/L	0.602J µg/L	MS %R above control limit
		Dissolved lead	0.27 µg/L	0.27J µg/L	MS/MSD %R below control limit
OA-RW-09-G-S-20180110	Metals	Dissolved chromium	0.561 µg/L	0.561J µg/L	MS %R above control limit
		Dissolved lead	0.194 µg/L	0.194J µg/L	MS/MSD %R below control limit
OB-RW-16-G-S-20180110	Metals	Dissolved chromium	0.604 µg/L	0.604J µg/L	MS %R above control limit
		Dissolved lead	0.3 µg/L	0.3J µg/L	MS/MSD %R below control limit
SP-RW-18-G-S-20180110	Metals	Dissolved chromium	0.734 µg/L	0.734J µg/L	MS %R above control limit
		Dissolved lead	0.402 µg/L	0.402J µg/L	MS/MSD %R below control limit

Note:

%R: percent recovery

References

Anchor QEA (Anchor QEA, LLC), 2014. *Water Sampling and Analysis Plan, Greater Los Angeles and Long Beach Harbor Waters*. September 2014.

USEPA (U.S. Environmental Protection Agency), 1986. *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*. Office of Solid Waste and Emergency Response. EPA-530/SW-846.

USEPA, 2017a. *National Functional Guidelines for Organic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. EPA-540-R-2017-002. January 2017.

USEPA, 2017b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. EPA-540-R-2017-001. January 2017.

Data Validation Report – EPA Stage 2A

April 10, 2018

Project: Gateway Water Management Authority TMDL Compliance Monitoring – 2018
Winter Wet

Project Number: 141205-01.04

This report summarizes the review of analytical results for 62 water samples, 5 field duplicate samples, 1 equipment blank sample, and 1 field blank collected on February 27, 2018. The samples were collected by Anchor QEA, LLC, and submitted to Eurofins Calscience, Inc (ECI). The following analytical parameter results were reviewed in this report:

- Total suspended solids (TSS) by Standard Method 2540D
- Chlorinated pesticides by United States Environmental Protection Agency (USEPA) method 8081A
- Polychlorinated biphenyl congeners (PCBs) by USEPA method 8270C selected ion monitoring
- Total and dissolved mercury by USEPA method 1631E
- Total and dissolved metals by USEPA 1640

ECI sample data groups (SDGs) 18-02-1868 and 18-02-1890 were reviewed in this report. Sample IDs, associated SDGs, matrices, and analyses are presented in Table 1.

Table 1
Sample IDs, Matrices, and Analyses

Sample ID	Laboratory Sample ID	Matrix	Parameter
CB-RW-1011-G-M-20180227	18-02-1890-37	Water	TSS
CB-RW-11-G-B-20180227	18-02-1890-36	Water	TSS
CB-RW-11-G-M-20180227	18-02-1890-35	Water	TSS
CB-RW-11-G-S-20180227	18-02-1890-34	Water	TSS, metals, pesticides, and PCBs
CM-RW-10-G-B-20180227	18-02-1890-33	Water	TSS
CM-RW-10-G-M-20180227	18-02-1890-32	Water	TSS
CM-RW-10-G-S-20180227	18-02-1890-31	Water	TSS, metals, pesticides, and PCBs
CS-RW-01-G-B-20180227	18-02-1890-3	Water	TSS
CS-RW-01-G-M-20180227	18-02-1890-2	Water	TSS
CS-RW-01-G-S-20180227	18-02-1890-1	Water	TSS, metals, pesticides, and PCBs
EB-20180227	18-02-1890-41	Water	Metals, pesticides, and PCBs
FB-20180227	18-02-1868-28	Water	Metals
FH-RW-07-G-B-20180227	18-02-1890-23	Water	TSS
FH-RW-07-G-M-20180227	18-02-1890-22	Water	TSS
FH-RW-07-G-S-20180227	18-02-1890-21	Water	TSS, metals, pesticides, and PCBs
IA-RW-02-G-B-20180227	18-02-1890-6	Water	TSS
IA-RW-02-G-M-20180227	18-02-1890-5	Water	TSS

Sample ID	Laboratory Sample ID	Matrix	Parameter
IA-RW-02-G-S-20180227	18-02-1890-4	Water	TSS, metals, pesticides, and PCBs
IA-RW-03-G-B-20180227	18-02-1890-10	Water	TSS
IA-RW-03-G-M-20180227	18-02-1890-9	Water	TSS
IA-RW-03-G-S-20180227	18-02-1890-8	Water	TSS, metals, pesticides, and PCBs
IA-RW-04-G-B-20180227	18-02-1890-13	Water	TSS
IA-RW-04-G-M-20180227	18-02-1890-12	Water	TSS
IA-RW-04-G-S-20180227	18-02-1890-11	Water	TSS, metals, pesticides, and PCBs
IA-RW-05-G-B-20180227	18-02-1890-16	Water	TSS
IA-RW-05-G-M-20180227	18-02-1890-15	Water	TSS
IA-RW-05-G-S-20180227	18-02-1890-14	Water	TSS, metals, pesticides, and PCBs
IA-RW-06-G-B-20180227	18-02-1890-20	Water	TSS
IA-RW-06-G-M-20180227	18-02-1890-19	Water	TSS
IA-RW-06-G-S-20180227	18-02-1890-18	Water	TSS, metals, pesticides, and PCBs
IA-RW-1002-G-S-20180227	18-02-1890-7	Water	TSS
IA-RW-1005-G-M-20180227	18-02-1890-17	Water	TSS
IB-RW-1014-G-S-20180227	18-02-1868-7	Water	TSS, metals, pesticides, and PCBs
IB-RW-12-G-B-20180227	18-02-1890-40	Water	TSS
IB-RW-12-G-M-20180227	18-02-1890-39	Water	TSS
IB-RW-12-G-S-20180227	18-02-1890-38	Water	TSS, metals, pesticides, and PCBs
IB-RW-13-G-B-20180227	18-02-1868-3	Water	TSS
IB-RW-13-G-M-20180227	18-02-1868-2	Water	TSS
IB-RW-13-G-S-20180227	18-02-1868-1	Water	TSS, metals, pesticides, and PCBs
IB-RW-14-G-B-20180227	18-02-1868-6	Water	TSS
IB-RW-14-G-M-20180227	18-02-1868-5	Water	TSS
IB-RW-14-G-S-20180227	18-02-1868-4	Water	TSS, metals, pesticides, and PCBs
IB-RW-15-G-B-20180227	18-02-1868-10	Water	TSS
IB-RW-15-G-M-20180227	18-02-1868-9	Water	TSS
IB-RW-15-G-S-20180227	18-02-1868-8	Water	TSS, metals, pesticides, and PCBs
LE-RW-21-G-S-20180227	18-02-1868-26	Water	TSS, metals, pesticides, and PCBs
LE-RW-22-G-S-20180227	18-02-1868-27	Water	TSS, metals, pesticides, and PCBs
OA-RW-08-G-B-20180227	18-02-1890-26	Water	TSS
OA-RW-08-G-M-20180227	18-02-1890-25	Water	TSS
OA-RW-08-G-S-20180227	18-02-1890-24	Water	TSS, metals, pesticides, and PCBs
OA-RW-09-G-B-20180227	18-02-1890-29	Water	TSS
OA-RW-09-G-M-20180227	18-02-1890-28	Water	TSS
OA-RW-09-G-S-20180227	18-02-1890-27	Water	TSS, metals, pesticides, and PCBs
OA-RW-1009-G-M-20180227	18-02-1890-30	Water	TSS
OB-RW-16-G-B-20180227	18-02-1868-13	Water	TSS
OB-RW-16-G-M-20180227	18-02-1868-12	Water	TSS

Sample ID	Laboratory Sample ID	Matrix	Parameter
OB-RW-16-G-S-20180227	18-02-1868-11	Water	TSS, metals, pesticides, and PCBs
OB-RW-17-G-B-20180227	18-02-1868-16	Water	TSS
OB-RW-17-G-M-20180227	18-02-1868-15	Water	TSS
OB-RW-17-G-S-20180227	18-02-1868-14	Water	TSS, metals, pesticides, and PCBs
SP-RW-18-G-B-20180227	18-02-1868-19	Water	TSS
SP-RW-18-G-M-20180227	18-02-1868-18	Water	TSS
SP-RW-18-G-S-20180227	18-02-1868-17	Water	TSS, metals, pesticides, and PCBs
SP-RW-19-G-B-20180227	18-02-1868-22	Water	TSS
SP-RW-19-G-M-20180227	18-02-1868-21	Water	TSS
SP-RW-19-G-S-20180227	18-02-1868-20	Water	TSS, metals, pesticides, and PCBs
SP-RW-20-G-B-20180227	18-02-1868-25	Water	TSS
SP-RW-20-G-M-20180227	18-02-1868-24	Water	TSS
SP-RW-20-G-S-20180227	18-02-1868-23	Water	TSS, metals, pesticides, and PCBs

Data Validation and Qualifications

The following comments refer to the laboratory's performance in meeting the quality assurance/quality control (QC) guidelines outlined in the analytical procedures. Laboratory results were reviewed using the laboratory control limits and the following guidelines:

- *Water Sampling and Analysis Plan, Greater Los Angeles and Long Beach Harbor Waters (SAP; Anchor QEA 2014)*
- *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846, Third Edition; USEPA 1986)*
- *National Functional Guidelines for Organic Superfund Methods Data Review (USEPA 2017a)*
- *National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA 2017b)*

Unless noted in this report, laboratory results for the samples listed above were within QC criteria.

Field Documentation

Field documentation was checked for completeness and accuracy, and no discrepancies were found. The chain-of-custody (COC) forms were signed by ECI at the time of sample receipt. Samples were received in good condition and within the recommended temperature range. There were some discrepancies between the COC forms and bottle labels, but all were addressed, and all analyses were completed, with one exception. A TSS laboratory duplicate was requested for sample OA-RW-08-G-S-20180227, but a separate bottle was not submitted so the laboratory could not analyze the duplicate.

Holding Times and Sample Preservation

Samples were appropriately preserved and analyzed within holding times.

Laboratory Method Blanks

Laboratory method blanks were analyzed at the required frequencies. All method blanks were free of target analytes, except total and dissolved lead in both SDGs. Associated sample results that were not significantly greater than (five times) the concentration in the method blank have been qualified as non-detects.

Field Quality Control

Equipment Blanks and Field Blanks

One equipment rinsate blank and one field blank were collected and analyzed in association with this sample set. Detected results are summarized in Table 2.

Table 2
Equipment Blank and Field Blank Summary

Blank ID	Analyte	Result
EB-20180227	2,4'-DDE	6.4 µg/L
	Dissolved copper	0.41 µg/L
	Total copper	0.966 µg/L
	Dissolved mercury	0.144J µg/L
	Total mercury	0.299J µg/L
	Total zinc	0.99 µg/L
FB-20180227	Dissolved copper	0.0269J µg/L
	Total copper	0.0145J µg/L

Notes:

µg/L: microgram per liter

J: estimated value

No data were qualified based on equipment blank or field blank results.

Field Duplicates

Five water field duplicates were collected in association with this sample set. Detected results are summarized in Table 3.

Table 3
Field Duplicate Summary

Analyte	CB-RW-11-G-M-20180227	CB-RW-1011-G-M-20180227	RPD	Difference	Reporting Limit
TSS	3.9 mg/L	4.3 mg/L	--	0.4 mg/L	1 mg/L

Analyte	IA-RW-05-G-M-20180227	IA-RW-1005-G-M-20180227	RPD	Difference	Reporting Limit
TSS	1 mg/L	0.83U mg/L	--	0.17 mg/L	1 mg/L

Analyte	IB-RW-14-G-S-20180227	IB-RW-1014-G-S-20180227	RPD	Difference	Reporting Limit
Dissolved mercury	0.113U ng/L	0.466J ng/L	--	0.353 ng/L	0.5 ng/L
Total mercury	0.113U ng/L	0.636 ng/L	--	0.523 ng/L	0.5 ng/L
Total cadmium	0.0404 µg/L	0.0409 µg/L	--	0.0005 µg/L	0.03 µg/L
Dissolved cadmium	0.0396 µg/L	0.0482 µg/L	--	0.0086 µg/L	0.03 µg/L
Total chromium	0.427J µg/L	0.484J µg/L	--	0.057 µg/L	0.5 µg/L
Dissolved chromium	0.372J µg/L	0.286J µg/L	--	0.086 µg/L	0.5 µg/L
Total copper	1.17 µg/L	1.03 µg/L	13%	--	--
Dissolved copper	0.875 µg/L	0.868 µg/L	1%	--	--
Total lead	0.163 µg/L	0.148 µg/L	--	0.015 µg/L	0.03 µg/L
Dissolved lead	0.0929B µg/L	0.0772B µg/L	--	0.0157 µg/L	0.03 µg/L
Total zinc	2.99 µg/L	2.41 µg/L	--	0.58 µg/L	0.5 µg/L
Dissolved zinc	2.94 µg/L	2.4 µg/L	--	0.54 µg/L	0.5 µg/L

Analyte	OA-RW-09-G-M-20180227	OA-RW-1009-G-M-20180227	RPD	Difference	Reporting Limit
TSS	0.83U mg/L	1.7 mg/L	--	0.87 mg/L	1 mg/L

Notes:

--: not applicable

J: estimated value

mg/L: milligram per liter

ng/L: nanograms per liter

RPD: relative percent difference

Results less than five times the reporting limit (RL) were evaluated using the difference between the results with a control limit of \pm RL. Results greater than five times the RL were evaluated using the project-required control limits of \leq 25% relative percent difference (RPD) value.

Field duplicate results were within project control limits except for total mercury, total zinc, and dissolved zinc in sample IB-RW-14-G-S-20180227 and the duplicate. The required difference results were slightly higher than the RL. No data were qualified based on the field duplicate results.

Surrogate Recoveries

Surrogate recoveries were within the laboratory control limits for all samples, except the PCB surrogate p-terphenyl-d14 in the analysis of sample IB-RW-12-G-S-20180227, which recovered above the control limit. PCBs were not detected in this sample, so no data were qualified.

Column Confirmation

All detected pesticide results were confirmed by a second column, and results were within method control limits.

Laboratory Control Samples and Laboratory Control Duplicate Samples

Laboratory control samples (LCSs) and laboratory control sample duplicates (LCSDs) were analyzed at the required frequencies. Some pesticide and PCB analytes were not spiked in the LCS/LCSD, so instrument accuracy could not be evaluated for these analytes. All LCS/LCSD recoveries and/or RPD values were within project-required control limits.

Matrix Spike and Matrix Spike Duplicate Samples

Matrix spike (MS) and matrix spike duplicate (MSD) samples were analyzed at the required frequencies, except for pesticides and PCBs. No volume was submitted to the laboratory for pesticide or PCB MS/MSD analysis with SDG 18-02-1868. An MS/MSD for PCBs was not analyzed in SDG 18-02-1890 due to laboratory error. Some pesticide analytes were not spiked in the MS/MSD, so sample matrix accuracy could not be evaluated for these analytes. No results were qualified for MS/MSD recoveries outside of control limits when the spike concentration was greater than four times the sample concentration. All MS/MSD recoveries and/or RPD values were within project-required control limits, with the following exceptions:

- SDG 18-02-1868 Metals – Total chromium, copper, and zinc recovered above the control limit in the MS and/or MSD analyzed on sample SP-RW-20-G-S-20180227. Associated detected total results have been qualified "J" to indicate a potentially high bias.
- SDG 18-02-1890 Metals – Total chromium and zinc recovered above the control limit in the MS and/or MSD analyzed on sample IA-RW-04-G-S-20180227. Associated detected total results have been qualified "J" to indicate a potentially high bias.
- SDG 18-02-1890 Pesticides – The 4,4'-DDT MS/MSD RPD was above the project control limit for sample IA-RW-04-G-S-20180227. The associated sample result was non-detect, so no data were qualified.

See Table 4 for qualified results.

Laboratory Duplicates

Laboratory duplicates were analyzed at the required frequency or MSDs or LCSDs were analyzed in place of laboratory duplicates. All duplicate RPD results were within project-required control limits.

Method Detection Limits

Detection limits (DLs) were acceptable as reported. All values were reported using the laboratory DL. Values were reported as undiluted, or when diluted, the DL reflects the dilution factor. The following analyses resulted in DLs above the requirements listed in Table 4 of the SAP:

- TSS DLs were above the California Surface Water Ambient Monitoring Program RL requirements but were at or below target reporting limits.
- Some pesticide and PCB detection limits were above the Coordinated Compliance Monitoring and Reporting Plan RL requirements but met SWAMP and/or target RL requirements.

Overall Assessment

As was determined by this evaluation, the laboratory followed the specified analytical methods and all requested sample analyses were completed. Accuracy was acceptable as demonstrated by the surrogate, LCS/LCSD, and MS/MSD recovery values. Precision was acceptable as demonstrated by the LCS/LCSD, MS/MSD, and laboratory and field duplicate RPD values or difference values. Most data are acceptable as reported; all other data are acceptable as qualified. Table 4 summarizes the qualifiers applied to the sample results reviewed in this report.

Data Qualifier Definitions

U Indicates the compound or analyte was analyzed for but not detected at or above the specified limit

J Indicates an estimated value

Table 4
Data Qualification Summary

Sample ID	Fraction	Analyte	Reported Result	Qualified Result	Reason
CB-RW-11-G-S-20180227	Dissolved	Lead	0.052 µg/L	0.052U µg/L	Method blank contamination
	Total	Chromium	0.58 µg/L	0.58J µg/L	MS %R above control limit
		Zinc	5.18 µg/L	5.18J µg/L	MS/MSD above control limit
CM-RW-10-G-S-20180227	Total	Lead	0.0393 µg/L	0.0393U µg/L	Method blank contamination
	Dissolved	Lead	0.0472 µg/L	0.0472U µg/L	
	Total	Chromium	0.487J µg/L	0.487J µg/L	MS %R above control limit
		Zinc	17.7 µg/L	17.7J µg/L	MS/MSD above control limit
CS-RW-01-G-S-20180227	Total	Chromium	0.553 µg/L	0.553J µg/L	MS %R above control limit
		Zinc	15.5 µg/L	15.5J µg/L	MS/MSD above control limit
EB-20180227	Total	Lead	0.0149J µg/L	0.0149U µg/L	Method blank contamination
	Dissolved		0.028J µg/L	0.028U µg/L	
	Total	Zinc	0.99 µg/L	0.99J µg/L	MS/MSD above control limit

Sample ID	Fraction	Analyte	Reported Result	Qualified Result	Reason
FB-20180227	Dissolved	Lead	0.0362 µg/L	0.0362U µg/L	Method blank contamination
	Total		0.0367 µg/L	0.0367U µg/L	
		Copper	0.0145J µg/L	0.0145J µg/L	MS %R above control limit
FH-RW-07-G-S-20180227	Total	Chromium	0.398J µg/L	0.398J µg/L	MS %R above control limit
		Zinc	18.5 µg/L	18.5J µg/L	MS/MSD above control limit
IA-RW-02-G-S-20180227	Total	Lead	0.0753 µg/L	0.0753U µg/L	Method blank contamination
		Chromium	0.389J µg/L	0.389J µg/L	MS %R above control limit
		Zinc	9.35 µg/L	9.35J µg/L	MS/MSD above control limit
IA-RW-03-G-S-20180227	Total	Lead	0.0647 µg/L	0.0647U µg/L	Method blank contamination
		Chromium	0.41J µg/L	0.41J µg/L	MS %R above control limit
		Zinc	6.72 µg/L	6.72J µg/L	MS/MSD above control limit
IA-RW-04-G-S-20180227	Total	Lead	0.0793 µg/L	0.0793U µg/L	Method blank contamination
	Dissolved		0.073 µg/L	0.073U µg/L	
	Total	Chromium	0.504 µg/L	0.504J µg/L	MS %R above control limit
		Zinc	4.91 µg/L	4.91J µg/L	MS/MSD above control limit
IA-RW-05-G-S-20180227	Total	Lead	0.0656 µg/L	0.0656U µg/L	Method blank contamination
	Dissolved		0.0642 µg/L	0.0642U µg/L	
	Total	Chromium	0.439J µg/L	0.439J µg/L	MS %R above control limit
		Zinc	2.49 µg/L	2.49J µg/L	MS/MSD above control limit
IA-RW-06-G-S-20180227	Total	Lead	0.0486 µg/L	0.0486U µg/L	Method blank contamination
	Dissolved		0.0557 µg/L	0.0557U µg/L	
	Total	Chromium	0.425J µg/L	0.425J µg/L	MS %R above control limit
		Zinc	4.93 µg/L	4.93J µg/L	MS/MSD above control limit
IB-RW-1014-G-S-20180227	Total	Copper	1.03 µg/L	1.03J µg/L	MS %R above control limit
		Chromium	0.484J µg/L	0.484J µg/L	MS/MSD %R above control limit
		Zinc	2.41 µg/L	2.41J µg/L	
IB-RW-12-G-S-20180227	Dissolved	Lead	0.0305 µg/L	0.0305U µg/L	Method blank contamination
	Total	Chromium	0.608 µg/L	0.608J µg/L	MS %R above control limit
		Zinc	6.69 µg/L	6.69J µg/L	MS/MSD above control limit
IB-RW-13-G-S-20180227	Total	Copper	1.27 µg/L	1.27J µg/L	MS %R above control limit
		Chromium	0.4J µg/L	0.4J µg/L	MS/MSD %R above control limit
		Zinc	6.71 µg/L	6.71J µg/L	MS/MSD %R above control limit
IB-RW-14-G-S-20180227	Total	Copper	1.17 µg/L	1.17J µg/L	MS %R above control limit
		Chromium	0.427J µg/L	0.427J µg/L	MS/MSD %R above control limit
		Zinc	2.99 µg/L	2.99J µg/L	
IB-RW-15-G-S-20180227	Dissolved	Lead	0.0531 µg/L	0.0531U µg/L	Method blank contamination
	Total	Copper	0.963 µg/L	0.963J µg/L	MS %R above control limit
		Chromium	0.48J µg/L	0.48J µg/L	MS/MSD %R above control limit
		Zinc	2.58 µg/L	2.58J µg/L	

Sample ID	Fraction	Analyte	Reported Result	Qualified Result	Reason
LE-RW-21-G-S-20180227	Total	Copper	10.9 µg/L	10.9J µg/L	MS %R above control limit
		Chromium	1.09 µg/L	1.09J µg/L	MS/MSD %R above control limit
		Zinc	57.7 µg/L	57.7J µg/L	
LE-RW-22-G-S-20180227	Total	Copper	11.7 µg/L	11.7J µg/L	MS %R above control limit
		Chromium	1.02 µg/L	1.02J µg/L	MS/MSD %R above control limit
		Zinc	63.2 µg/L	63.2J µg/L	
OA-RW-08-G-S-20180227	Total	Lead	0.033 µg/L	0.033U µg/L	Method blank contamination
	Dissolved		0.0527 µg/L	0.0527U µg/L	
	Total	Chromium	0.409J µg/L	0.409J µg/L	MS %R above control limit
		Zinc	1.98 µg/L	1.98J µg/L	MS/MSD above control limit
OA-RW-09-G-S-20180227	Total	Lead	0.0349 µg/L	0.0349U µg/L	Method blank contamination
	Dissolved		0.0522 µg/L	0.0522U µg/L	
	Total	Chromium	0.499J µg/L	0.499J µg/L	MS %R above control limit
	Total	Zinc	3.92 µg/L	3.92J µg/L	MS/MSD above control limit
OB-RW-16-G-S-20180227	Dissolved	Lead	0.0559 µg/L	0.0559U µg/L	Method blank contamination
	Total	Copper	0.723 µg/L	0.723J µg/L	MS %R above control limit
		Chromium	0.438J µg/L	0.438J µg/L	MS/MSD %R above control limit
		Zinc	1.4 µg/L	1.4J µg/L	
OB-RW-17-G-S-20180227	Total	Lead	0.0691 µg/L	0.0691U µg/L	Method blank contamination
	Dissolved		0.0647 µg/L	0.0647U µg/L	
	Total	Copper	0.565 µg/L	0.565J µg/L	MS %R above control limit
		Chromium	0.399J µg/L	0.399J µg/L	MS/MSD %R above control limit
		Zinc	1.02 µg/L	1.02J µg/L	
SP-RW-18-G-S-20180227	Total	Copper	2.64 µg/L	2.64J µg/L	MS %R above control limit
		Chromium	0.575 µg/L	0.575J µg/L	MS/MSD %R above control limit
		Zinc	13.1 µg/L	13.1J µg/L	
SP-RW-19-G-S-20180227	Total	Copper	1.08 µg/L	1.08J µg/L	MS %R above control limit
		Chromium	0.44J µg/L	0.44J µg/L	MS/MSD %R above control limit
		Zinc	2.28 µg/L	2.28J µg/L	
SP-RW-20-G-S-20180227	Total	Copper	0.629 µg/L	0.629J µg/L	MS %R above control limit
		Chromium	0.442J µg/L	0.442J µg/L	MS/MSD %R above control limit
		Zinc	1.23 µg/L	1.23J µg/L	

Note:
%R: percent recovery

References

Anchor QEA (Anchor QEA, LLC), 2014. *Water Sampling and Analysis Plan, Greater Los Angeles and Long Beach Harbor Waters*. September 2014.

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