SUBSURFACE INVESTIGATION REPORT

1608 SOUTH 96TH STREET

SEATTLE, WASHINGTON

Prepared For:
Prologis Inc.

Prepared By:
Ramboll US Consulting, Inc.
Irvine, California

Date
January 8, 2021

Project Number
1690019285-002

RAMBOLL

ENVIRONMENT
& HEALTH

CONTENTS

TABLES

FIGURES

APPENDICES

1. INTRODUCTION

As part of due diligence conducted in anticipation of the potential purchase of the property located at 1608 South 96th Street in Seattle, Washington (herein referred to as the "facility," or the "site), Ramboll US Consulting Inc. (Ramboll) was retained by Prologis Inc. (Prologis) to evaluate subsurface conditions at the site.

Prologis acquired the site in December 2020. Ramboll understands that future use of the site will include a lease-back to the current site occupants (Delta Marine, yacht building, repair, and refit facility) for a period of at least 5 years. Ramboll conducted a Phase I Environmental Site Investigation (ESA) in October/November 2020 (Ramboll, 2020) and identified potential environmental concerns associated with several former underground storage tanks (USTs), past site development and historical property uses (including fill material with unknown characteristics), potential migration of contamination from off-site properties, the site's proximity to the Lower Duwamish Waterway (LDW) Superfund Site, and potentially hazardous building materials.

Based on the preliminary Phase I ESA findings, Prologis requested Ramboll's assistance to evaluate the potential for "significant or widespread" contamination at the site that could result in future assessment and/or cleanup liability for Prologis. Accordingly, Ramboll was retained by Prologis to conduct a subsurface investigation at the site to address the issues identified in the Phase I ESA.

This report provides a summary of the Phase I findings, summarizes the scope of work conducted at the site, field activities, and presents the results and conclusions of on-site sampling activities. The site investigation activities were conducted between November 2nd and 4th and on December 7th, 2020.

2. BACKGROUND

2.1 Site Description

Delta Marine Industries, Inc. (Delta Marine) owns and operates a yacht building, repair, and refit facility located at 1608 South 96th Street in Seattle, Washington. The approximately 9.63-acre site is improved with seven buildings (Buildings One through Seven) constructed between 1970 and 1985, which range from approximately 1,350 square feet to 64,920 square feet in size.

The site was used as farmland from at least the 1930s until the late 1950s/early 1960s. Based on a review of historical documentation, a portion of the central part of the site was used as an orchard for part of this time, and residences and outbuildings associated with farm operations were also visible across the site. Beginning in the 1960s, the eastern approximately one-half of site was occupied by auto wrecking facilities until 1969. The western approximately one-half of the site was still used as farmland in the early 1960s and by 1968 the northwest corner was used for auto wrecking or storage. In 1969, the site (as part of a larger property that includes two parcels to the east of the site) was acquired and redeveloped by Delta Marine as a yacht building and repair facility. The site buildings were constructed by Delta Marine between 1970 and 1985. Delta Marine has occupied the site since it was developed for yacht building and repair operations.

2.2 Summary of Phase I ESA Findings

As described in the Phase I ESA, the following recognized environmental conditions (RECs) and two environmental concerns were identified at the site:

RECs

- **Potential Impacts Associated with Past Site Development and Uses.** Based on Ramboll's review of historical topographic maps and aerial photographs, it appears that the western portion of the site was a marsh area with a small stream that discharged to the Duwamish River, and the site was likely filled during the early 1900s prior to use as an orchard and farmland. The source and quality of the fill material used is unknown. Based on Ramboll's experience, fill material placed during this time period in the Seattle area often contains petroleum hydrocarbons and/or metals at concentrations the exceed current cleanup criteria established by the Washington Department of Ecology. In addition, the site was previously used for agricultural purposes, including orchards, from at least the 1930s until the late 1950s/early 1960s, which uses may have involved the application of arsenical and lead-based pesticides commonly used on orchards in the first half of the 20th century, or other organic pesticides commonly used on orchards thereafter. Beginning in the 1960s, the eastern portion of the site was occupied by three auto wrecking facilities until 1969 when the site was acquired and redeveloped by Delta for yacht building and repair. During a 1994 subsurface sampling event, two groundwater samples were collected from locations downgradient from the former orchard location and analyzed for organochlorine pesticides and polychlorinated biphenyls (PCBs) to assess potential impacts from historical orchard operations. Based on the historical uses of the site, the long-term use of chemicals and hazardous materials, presence of fill at the site, and limited sampling conducted to date, Ramboll cannot rule out the potential for subsurface impacts at the site.
- **Lower Duwamish Waterway (LDW) Superfund Site.** The LDW Superfund Site is located approximately 300 feet east of the site at its closest point. As a result, Delta Marine and tenants/owners of the neighboring properties appear to have been included in some preliminary reconnaissance work related to the LDW Superfund Site. As part of the investigations into the matter, Source Control Action Plans (SCAPs), which include summaries of existing information/data gaps, were developed for properties along the LDW. Delta Marine operations

(inclusive of the site and several other parcels adjacent to the site) were reviewed and described in the *Lower Duwamish Waterway RM 3.8 to 4.2 West (Sea King Industrial Park) Source Control Action Plan* (SCAP) dated August 2013. According to the SCAP, additional Delta Marine property-specific conditions and operational information (i.e., updated stormwater drainage system maps and soil and groundwater sampling) was needed in order to assess the potential for sediment impacts in the LDW, which include heavy metals, PCBs, and polycyclic aromatic hydrocarbons (PAHs). Although the SCAP listed the site (parcel number 562420-0021) in the description of the Delta Marine operations, the summary did not include descriptions of site-specific issues related to past/current operations. In 2008, Delta Marine received and responded to a United States Environmental Protection Agency (USEPA) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104(e) Request for Information letter specific to portions of Delta Marine operations located on parcels east and south of the site (56242000005 and 5624200006), which are adjacent to the LDW. Delta Marine subsequently received a Second General Notice of Potential Liability in November 2012. King County, Port of Seattle, City of Seattle or Boeing Corporation are working with the USEPA and Ecology to lead investigation and remediation of the LDW. As part of an effort to reduce contaminants in the LDW, total maximum daily load (TMDLs) have been applied to stormwater discharges into the LDW under the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES).

Other Findings

- **Former Underground Storage Tanks (USTs).** According to a previous Phase I ESA conducted in 1994 (1994 Phase I ESA), four USTs associated with historical site operations were reportedly installed in the 1970s and removed in the 1980s: two diesel fuel, one gasoline, and one acetone. No documentation has been provided regarding the size, construction, location, or removal of the former USTs. There is no readily available information as to whether the tanks were found to be leaking upon removal. In 1994, subsurface sampling and testing was conducted at the site to investigate potential impacts from the former USTs. No analytes were detected above reporting limits in soil samples. WTPH-d was detected in one groundwater sample at a concentration of 580 micrograms per liter (µg/L), which was below Washington Department of Ecology's (Ecology's) Model Toxics Control Act (MTCA) cleanup level (CUL) at the time of the report (1,000 µg/L); however, the samples were analyzed for petroleum hydrocarbons using older analytical methods that are not comparable to current standards, which are developed for use with current Northwest Total Petroleum Hydrocarbon analysis methods. Based on the available information, Ramboll cannot rule out the potential that historical USTs have impacted the subsurface of the site.
- **Potential Migration of Contamination from Off-Site Properties.** The site is located in the presumed downgradient direction from three off-site properties located between 0.1 and 0.2 miles of the site listed with open status on the Ecology's confirmed and suspected contaminated sites list (CSCSL) database. The off-site properties have confirmed volatile organic compounds (VOCs; including trichloroethylene [TCE]) contamination in soil and groundwater. Based on the available information, there is no indication that contamination from the off-site properties is migrating to the site. If contamination associated with off-site properties is found to have migrated onto the site, it is expected that any investigation and/or remedial activities would be the responsibility of the entities named in the listing or other designated responsible party and not the site owner. Ramboll does not consider this finding to be a REC; however, Ramboll cannot rule out the risk of a potential vapor encroachment condition (VEC) to the site from contamination at offsite properties

3. RATIONALE AND SCOPE OF WORK

The limited subsurface investigation included the collection of soil, groundwater, soil vapor, and sub-slab samples to evaluate subsurface conditions at the site.

3.1 Sampling Rationale

The sampling rationale is provided in Table 1. In general, the locations of the soil, groundwater, soil vapor, and sub-slab sample locations were selected to provide broad site coverage to screen soil, groundwater, and shallow and sub-slab soil vapor conditions throughout the site, including the former orchard and wrecking yard, while minimizing intrusive sampling within buildings. In addition to the site-wide sampling program, specific areas are also targeted including the solvent recovery still on the north east corner in Building 2, one of the former diesel underground storage tanks (UST) north of Building 4, and the former acetone UST west of Building 3.

3.2 Scope and Implementation of Field Program

Ramboll retained subcontractors for utility location services, drilling, and laboratory analysis. On November 3rd and 4th 2020, Ramboll advanced borings at 10 locations (Figure 1) to collect soil, groundwater, and soil vapor samples. Four of the boring locations were advanced in exterior asphalt-paved or gravel-surfaced areas near the western, northern, and eastern boundaries of the site (SB01, SB08, SB11, and SB12), three were advanced through concrete-surfaced exterior locations between site buildings (SB05 through SB07; SB06 was located underneath a canopy), and four were advanced through concrete-surfaced interior locations (SB02 through SB04). One surface soil sample was collected with a trowel (SS01) in the southeast corner of the site. While twelve borings were planned, one boring location (SB09) could not be installed due to the thickness of the concrete slab (approximately 15 inches) and a second boring (SB10) could not be installed for health and safety reasons (due to uncertainty of subsurface utilities in the area).

On December 7th, 2020, Ramboll remobilized to the site and installed sub-slab soil vapor probes at 9 locations to collect sub-slab soil vapor samples beneath and within the immediate vicinity of the site buildings. Four vapor probes were installed in the concrete slab of Building 2 (SSV01 through SSV04), two vapor probes were installed in the concrete slab just outside of Building 3 (SSV05 and SSV06), and three vapor probes were installed in the concrete slab of Building 4 (SSV07 through SSV09). Sample locations at Building 3 could not be collected from directly beneath the indoor building slab due to the presence of a radiant heating system installed in the flooring.

3.3 Screening Criteria

Analytical results presented in this report are compared to applicable Washington State MTCA CULs established by Ecology. Soil and groundwater results are compared to MTCA Method A CULs for unrestricted land use (or Method B CULs, for analytes with no Method A criteria established). For soil vapor and sub-slab samples, there are no established Method A CULs. Thus, soil vapor sample results are compared to MTCA Method B sub-slab soil gas CULs. MTCA criteria are health-risk based screening criteria developed by Ecology. There are no MTCA CULs for tributyltin, so this parameter was analyzed for a presence/absence determination. The specific MTCA criteria used for soil, groundwater, soil vapor and sub-slab constituents are further detailed in Tables 2 through 5.

Results of the two soil samples analyzed for TCLP for arsenic and lead were compared to USEPA Maximum Concentration of Contaminants for the Toxicity Characteristic from 40CFR §261.24 (i.e., 5.0 milligrams per liter (mg/L) for both arsenic and lead.)

Further, since the site is located near the LDW, where Ecology is working to manage source controls to the LDW, Preliminary Cleanup Levels (PCULs) for the LDW Superfund Site are also included in the tables for reference.

4. FIELD PROGRAM

4.1 Pre-field Activities

Prior to initiation of drilling and sampling activities for each mobilization, Ramboll notified Washington Utility Notification Center (UNC) to mark the locations of all major utilities near the site boundaries. In addition to the services provided by UNC, Ramboll contracted Underground Detection Services (UDS) of Seattle, Washington, a private utility locating company, to conduct a geophysical survey to mark subsurface utility lines in the vicinity of each proposed drilling location on November 2nd, 2020. Several borings were re-located from initially proposed locations based on the findings of the geophysical survey.

Ramboll also prepared a site-specific Health and Safety Plan (HASP), designed to minimize exposure of Ramboll field personnel to potentially hazardous materials and coronavirus disease 2019 (COVID-19). Field personnel involved in the project were required to implement the procedures presented in the HASP while conducting the fieldwork.

4.2 Lithology and Hydrogeology

Soils observed during previous intrusive events at the site (i.e., Subsurface Sampling and Testing report, prepared by Environmental Associates, Inc., dated May 27, 1994; the "May 1994 Subsurface Sampling and Testing report") indicate that site soils include silty sands and silty clays at depths up to approximately 10 ft bgs and fine-grained sands below the silty layers. Findings of this investigation generally were consistent with known regional geology.

According to the May 1994 Subsurface Sampling and Testing report, groundwater was encountered at the site between 11 and 14 feet (ft) below ground surface (bgs). Based on information available in Ecology's Cleanup Site Search database related to nearby off-site properties (located approximately 0.2 mile southwest of the site), groundwater is estimated to flow to the northeast. Groundwater (i.e., saturated soils) was encountered from approximately 9 to 12 feet, which is generally consistent with previous investigations.

4.3 Soil Sample Collection and Analysis

Ramboll contracted with a Washington-licensed drilling company, Steadfast Environmental Services Northwest, LLC (Steadfast) of Vancouver, Washington, to conduct drilling activities. On November 3 and 4, 2020, Steadfast, under the oversight of Ramboll advanced 10 soil borings (SB01 through SB08, SB11, and SB12) using a hand auger and direct push rig, to maximum depths ranging from 10 ft bgs to 15 ft bgs. Borings were drilled in areas to evaluate subsurface conditions across the site and in the approximate vicinity of former features of concern, as depicted on Figure 2.

Prior to drilling, all tools including the drill rig were decontaminated by pressure washing to minimize introducing contaminants into the drilling process. All borings were hand augered to approximately five ft bgs and then advanced with a direct-push rig. In several locations (SB02, SB03, SB05, SB07, SB08, and SB12), refusal with the hand auger was encountered prior to five ft bgs (between 1.5 and 2.5 ft bgs). In those locations, the borings were advanced using the direct-push drill rig from the depth of refusal. During advancement of the borings, soil was monitored for organic vapors with a photoionization detector (PID) calibrated with a 10.6 electron volt lamp. No field indications of impacts were observed in soil or groundwater with the exception of slight odor noted at SB03 and SB07 (at 5.5 ft bgs and 4.5ft bgs, respectively). Samples were collected at SB03 and SB07 at these depths for analysis. At all other locations, since indications of impacted soil were generally not observed in any of the borings during drilling and sample collection, one soil sample was collected from each of the eight borings; targeting the shallow subsurface fill material. Sample collection depths range from approximately 2.5 ft bgs to approximately 5.5 ft bgs. In addition, one sample was collected from

several feet below the initial sample at depths ranging from approximately 5 ft bgs to approximately 8.5 ft bgs, and those samples were placed on hold at the laboratory, pending the analytical results from the shallower fill material samples.

Two more samples, including a surface soil sample collected from approximately 0 to 0.5 ft bgs (SS01) and a near surface soil sample collected at 1.0 ft bgs (SB06), were collected for tributyltin analysis in shallow site soils (Figure 2).

Soil sample containers were labeled, sealed in zip-closure bags, stored on ice in an insulated cooler, and transported by Ramboll field personnel to a Washington certified fixed-base analytical laboratory (Fremont Analytical Inc.) under chain-of-custody documentation. A summary of what was analyzed at each sample location is included in Table 1. Soil samples were analyzed for one or more of the following: VOCs by United States Environmental Protection Agency (USEPA) Method 8260D, total petroleum hydrocarbons (TPH) by Northwest Methods NWTPH-Gx (gasoline-range; TPH-G), NWTPH-Dx (diesel and heavy oil-range with; TPH-D and TPH-O, respectively), Priority Pollutant metals (including antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc) by USEPA Method 6020B and 7471 (mercury), PCBs by USEPA Method 8082, and PAHs by USEPA Method 8270 Selected Ion Monitoring (SIM). Two samples were analyzed for toxicity characteristic leaching procedure (TCLP) for lead and arsenic by USEPA Method 1311 for extraction and USEPA method 200.8 for metals. In addition, the surface soil samples (i.e., the sample collected from SB06 at 1 foot bgs and the surface soil sample [SS01]) were labeled, sealed in zip-closure bags, stored on ice in an insulated cooler, and delivered to Eurofins USA by courier under chain-of-custody documentation. These soil samples were analyzed for tributyltin by Organotins, Puget Sound Estuary Program gas chromatography/mass spectrometry (PSEP [GC/MS]).

4.4 Groundwater Sample Collection and Analysis

Between November 3rd and 4th, 2020, four temporary monitoring well locations (TW01, TW07, TW08, and TW12) were co-located with soil borings installed at the locations shown on Figure 3. Each boring was hand augered to approximately five ft bgs prior to drilling, and then advanced to total depth of approximately 15 ft bgs with a direct push DPT drill rig operated by Steadfast. In three locations (TW07, TW08, and TW12), refusal with the hand auger was encountered prior to five ft bgs. In those locations, the borings were advanced using the direct-push drill rig from the depth of refusal (between 1.5 and 2.5 ft bgs). Groundwater samples were collected through dedicated, one-inch diameter polyvinyl chloride (PVC) temporary well casings, which were installed within the 2 ¼-inch DPT soil borings. The screened intervals extended from approximately 10 ft bgs to approximately 15 ft bgs at all temporary well locations. Samples were collected in laboratory-provided containers using disposable polyethylene tubing and a peristaltic pump.

Groundwater samples were labeled, sealed in zip-closure bags, stored on ice in an insulated cooler, and transported by Ramboll field personnel to a Washington certified fixed-base analytical laboratory (Fremont Analytical Inc.) under chain-of-custody documentation. Groundwater samples were analyzed for VOCs by USEPA Method 8260D, total petroleum hydrocarbons by NWTPH-Gx and NWTPH-Dx, dissolved Priority Pollutant metals (including antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc) by USEPA Method 200.8 and 245.1 (mercury), PCBs by USEPA Method 8270P, and PAHs by USEPA Method 8270 SIM, except for TW01-20201103, which due to insufficient volume could not be analyzed for PCBs. Dissolved metals samples were filtered by the laboratory prior to analysis.

4.5 Soil Vapor Sample Collection and Analysis

Temporary soil vapor probes were installed in 8 of the 10 boreholes installed across the site (SV01 to SV07 and SV11, all but SB08 and SB12) between November 3rd and 4th, 2020, and soil vapor samples were collected in general accordance with Ecology protocols for soil vapor investigations.

At each location, a stainless-steel sintered soil vapor probe was then connected to Teflon tubing and suspended in each borehole at depths ranging from 5.5 to 6.5 ft bgs. A one-foot sand pack of clean No. 2/12 sand was emplaced around the soil vapor probe. Bentonite granules were placed in six-inch lifts and hydrated between lifts using potable water to approximately 1.0 to 3.0 ft bgs. Prior to sampling, the soil vapor probe was purged, and a leak check was conducted using shroud atmosphere of helium.

The soil vapor samples were collected in general accordance with Ecology's "Guidance for Evaluation Soil Vapor Intrusion in Washington State: Investigation and Remedial Action" document and associated implementation memos[1] in laboratory-provided one-liter Summa canisters that were individually certified as clean to the method detection limit for target analytes. Soil vapor samples were labeled and transported by Ramboll field personnel to a Washington certified fixed-base analytical laboratory (Fremont Analytical Inc.) under chain-of-custody documentation. The samples were analyzed for VOCs and Air-Phase Petroleum Hydrocarbons (APH) by EPA Method TO-15. At the conclusion of soil vapor sampling, each soil vapor probe was removed, and the surface was completed with concrete to match the existing grade.

4.6 Sub-Slab Sample Collection and Analysis

Sub-slab soil vapor sampling points were installed in nine locations beneath the concrete slab. The sub-slab soil vapor samples were collected in general accordance with Ecology's "Guidance for Evaluation Soil Vapor Intrusion in Washington State: Investigation and Remedial Action" document and associated implementation memos. To install the probe, a hammer drill was used to bore an approximately one-inch diameter core through the concrete slab and an additional approximately two-inches into the fill material beneath the slab. A stainless-steel sampling pin was installed in the hole and sealed at the floor surface using a silicone rubber vapor pin sleeve. Following installation of the sampling pin, the apparatus was left for approximately 30 minutes to allow for equilibration and the inert seal to set. Prior to sampling, the sub-slab probe was purged, and a leak check was conducted using shroud atmosphere of helium. The sub-slab soil vapor samples and a duplicate (obtained by connecting a second canister to the sampling apparatus via a splitter) were collected in individually certified as clean Summa canisters provided by the laboratory. Sub-slab soil vapor samples were labeled and transported by Ramboll field personnel to a Washington certified fixed-base analytical laboratory (Fremont Analytical Inc.) under chain-of-custody documentation. The samples were analyzed for VOCs and APH by EPA Method TO-15. At the conclusion of soil vapor sampling, each soil vapor probe was removed, and the surface was completed with concrete to match the existing grade.

[1] During sampling of soil vapor, helium was used as a leak detection tracer gas.

5. RESULTS OF INVESTIGATION

5.1 Field Observations

No field indications of impacts were observed in soil or groundwater with the exception of slight odor noted at SB03 and SB07 (at 5.5 ft bgs and 4.5ft bgs, respectively). The lithology encountered during this investigation consisted of fill material, loose brown sand or gravelly sand layer (approximately 2 to 4 feet thick) in the central and eastern portions of the site. In the western portion of the site (at SB01 and SB02), there is an approximately 8 to 11-foot-thick, fill-like material comprised of gray silty fine to very fine-grained sand underlain by gray silty clay or gray silty sand. The soils underlying the sandy fill material are presumed to be native soil and consist of gray silty clay (approximately 2 to 4 feet thick), then gray silty sand, and a dark gray fine to medium sand. Saturated soils were first encountered at depths ranging from approximately 9 to 12 ft bgs throughout the site. Soil boring logs are included in Appendix A.

5.2 Soil

Concentrations of constituents detected in soil samples collected during this sampling event are summarized below and in Table 2 (along with relevant cleanup goals), and laboratory results are provided in Appendix B. Soil boring locations are depicted in Figure 2.

A total of 16 soil samples (including one duplicate) were collected: one sample from each of the 10 borings was analyzed, except at SB01, SB02, SB07, and SB08 where two samples were collected and analyzed. At SB01 and SB02, lead and arsenic were analyzed in deeper samples (collected at 8 ft bgs and 5 ft bgs, respectively) to evaluate the vertical extent of lead and arsenic impacts identified in shallower samples. At SB07 and SB08, deeper samples (collected from 7 ft bgs and 8.5 ft bgs, respectively) were collected and analyzed to evaluate potential impacts at depth from former USTs in the area.

All of the Priority Pollutant metals were detected above laboratory reporting limits in at least one soil sample, except mercury. Of these, four metals were detected at least once at concentrations that exceed Ecology's cleanup levels (i.e., arsenic [20 milligrams per kilogram (mg/kg)], cadmium [2 mg/kg], lead [250 mg/kg] and thallium [0.8 mg/kg]) in five soil samples. The three samples with significant exceedances of Ecology cleanup levels were from SB01 (at 5 ft bgs:arsenic-492 mg/kg; cadmium 9.21 mg/kg; lead 3,660 mg/kg; and thallium-3.53 mg/kg and at 8 ft bgs: arsenic 348 mg/kg and lead 3,350 mg/kg) and SB02 (at 2.5 ft bgs: arsenic-152 mg/kg; cadmium 2.81 mg/kg; lead 768 mg/kg; and thallium-1.32 mg/kg). These three samples were collected from the gray silty fine to very fine grained sand fill-like material. Arsenic and cadmium concentrations greater than Ecology cleanup levels were also detected in three samples collected from what appeared to be native gray silty clay and sand in the southern and central portions of the site (i.e., arsenic at SB04 at 3 ft bgs [20.8 mg/kg], arsenic at SB07 at 7 ft bgs [21.3 mg/kg], and cadmium at SB08 at 8.5 ft bgs [6.91 mg/kg]). Except as noted above, all of the constituents detected in soil samples were detected at concentrations below the applicable MTCA CULs. With the exception of arsenic, copper, lead, nickel, and zinc, the metals concentrations detected in soil were either below or at similar concentrations to background metals values for the Puget Sound Region (Ecology Pub. 94-115, October 1994). Depending on the LDW pathway evaluated, several metals including arsenic, cadmium, copper, and nickel concentrations exceed at least one LDW PCUL.

Seventeen PAH constituents were detected in one soil sample collected from 3 ft bgs at SB11, in the southeastern corner of the site. Of these, only benzo(a)pyrene was detected at a concentration (4.78 mg/kg) greater than Ecology's cleanup level of 0.1 mg/kg. Depending on the LDW pathway

evaluated, all of the PAHs concentrations detected at SB11 exceed at least one LDW PCUL, with the exception of those PAHs without PCULs.

VOCs, petroleum hydrocarbons (TPH-G, D, O), and PCBs were not detected in soil samples above laboratory reporting limits, with the exception of one detection of heavy oil range total petroleum hydrocarbon (TPH-O) in one sample collected in the vicinity of the former diesel UST (at 8.5 ft bgs at SB08. The concentration (162 mg/kg) was well below Ecology's cleanup level of 2,000 mg/kg.

Tributyltin was detected at a concentration of 0.32 mg/kg in surface soil collected at SS01, located on the southeastern corner of the site, but was not detected above laboratory reporting limits in the near surface soil sample collected at 1.0 ft bgs (SB06).

5.3 Groundwater

Concentrations of constituents detected in groundwater samples collected during this sampling event are summarized below and in Table 3, and laboratory results are provided in Appendix B. Temporary well locations are depicted in Figure 3.

Groundwater samples were collected from each of four locations, and a total of five groundwater samples (including one duplicate) were analyzed. Only three TPH and VOC constituents were detected in the groundwater. TPH-O was detected in every groundwater sample collected at concentrations that ranged from 179 to 372 µg/L, which are well below Ecology's cleanup level of 500 µg/L. M, p-xylenes (1.21 µg/L) and toluene (3.76 µg/L) were detected in the sample collected from TW01 in the southwestern (presumed upgradient) portion of the site (Both were detected at concentrations well below applicable Ecology cleanup levels (total xylenes 1,000 µg/L and toluene 1,000 µg/L). Detected concentrations of these constituents did not exceed LDW PCULs.

Several dissolved metals were also detected in groundwater, but only antimony and arsenic were detected at concentrations that exceed Ecology's cleanup levels (6.4 µg/L and 5 µg/L, respectively). Antimony (17.7 µg/L) and arsenic (190 µg/L) were detected at TW01, and antimony (8.88 µg/L) was detected at TW07. Both arsenic and copper concentrations exceed at the LDW PCUL protective of surface water.

5.4 Soil Vapor

Concentrations of constituents detected in soil vapor samples collected during this sampling event are summarized below and in Table 4, and laboratory results are provided in Appendix B. Soil vapor sample locations are depicted in Figure 4.

A total of 8 soil vapor samples (SV01 to SV07 and SV11) were collected across the site from 5.5 to 6.5 ft bgs. Several constituents were detected in soil vapor samples collected from across the site, and, of these, at least one of six constituents were detected at concentrations that exceeded Ecology cleanup levels (shown below in parentheses) in six soil vapor samples including:

- 1,3-butadiene (2.8 micrograms per cubic meter [µg/m3]): at SV04 (5.78 µg/m3) and SV05 (7.16 µg/m3)
- acrolein (0.30 µg/m3): at SV02 (5.42 µg/m3); SV04 (2.36 µg/m3); SV05 (1.09µg/m3); SV06 (3.30 µg/m3); and SV11 (1.98 µg/m3)
- benzene (11 µg/m3): at SV02 (36.9 µg/m3)
- bromodichloromethane (2.3 µg/m3): at SV02 (5.47 µg/m3) and SV04 (3.10 µg/m3)
- naphthalene (2.5µg/m3): at SV02 (7.71 µg/m3); SV04 (6.05 µg/m3); SV05 (3.39 µg/m3); and SV07 (2.89 µg/m3)

- total aliphatics/aromatics (TPH generic; 4,700 µg/m3): at SV04 (8,901 µg/m3).

LDW PUCLs for soil vapor are similar to the MTCA Method B CULs and exceedances of LDW PCULs generally mimic the exceedances of CULs.

5.5 Sub-Slab Soil Vapor

Concentrations of constituents detected in sub-slab soil vapor samples collected during this sampling event are summarized below and in Table 5, and laboratory results are provided in Appendix B. Sub-slab soil vapor sample locations are depicted in Figure 5.

A total of 10 sub-slab soil vapor samples (SSV01 to SSV09, including one duplicate) were collected across the site beneath concrete slabs in Buildings 2 (SSV01 to SSV04) and Building 4 (SSV07 to SSV09) and just outside of Building 3 (SSV05 and SSV06). Several constituents were detected in sub-slab soil vapor samples collected from across the site, and, of these, at least one of six constituents were detected at concentrations that exceeded Ecology cleanup levels (shown below in parentheses) in ten soil vapor samples including:

- 1,3-butadiene (2.8 µg/m3): at SSV02 (6.14 µg/m3) and SSV07 (6.59 µg/m3);
- benzene (11 µg/m3): at SSV02 (77.8 µg/m3);
- bromodichloromethane (2.3 µg/m3): at SSV02 (9.50 µg/m3); SSV03 (8.13 µg/m3); and SSV07 (3.61 µg/m3);
- naphthalene (2.5 µg/m3): at SSV04 (5.95 µg/m3) and SSV09 (5.79 µg/m3);
- trichloroethene (11 µg/m3): at SSV03 (13.0 µg/m3); and
- total aliphatics/aromatics (TPH generic; 4,700 µg/m3): at SSV02 (16,381 µg/m3) and SSV07 (11,911 µg/m3).

LDW PUCLs for sub-slab soil vapor are similar to the MTCA Method B CULs and exceedances of LDW PCULs generally mimic the exceedances of CULs.

6. FINDINGS AND CONCLUSIONS

Based on these results of the soil, groundwater, soil vapor, and soil vapor sampling conducted at the site on behalf of Prologis, constituents of potential concern were identified within the various media sampled at concentrations greater than Ecology's MTCA CULs and/or LDW PCULs.

6.1 Soil

Overall, the constituents exceeding cleanup goals require further delineation in order to appropriately manage the risk posed by these constituents during the future occupancy of the site.

Metals impacted by soils above cleanup levels, including arsenic, cadmium, lead and thallium, were primarily detected in the western and southern portions of the site. The highest concentrations appeared to correspond to samples collected from a distinct fill-like material comprised of gray silty fine to very fine-grained sand on the western side of the site. Additional soil impacts included elevated levels of cadmium (at SB08) and benzo(a)pyrene (at SB11) in the north and southeastern corners of the site, respectively. Tributyltin was also detected at a concentration of 0.32 mg/kg in surface soil collected at SS01, located on the southeastern corner of the site.

Additionally, if site activities generate soil for off-site disposal, additional soil sampling would likely be required for waste characterization purposes and (in the event of future redevelopment) potential evaluation of vapor intrusion concerns. Data collected to date, including the concentrations of lead and arsenic at SB01 and SB02, do not exceed federal hazardous waste criteria.[2]

6.2 Groundwater

Impacts to groundwater included dissolved antimony and arsenic in the southwestern and south-central portions of the site. Based on the data collected from this investigation, concentrations of arsenic in the soil may be contributing to detected concentrations in groundwater, although additional soil and groundwater sampling would be needed to evaluate the source of the groundwater impacts, and to determine the potential for impacted groundwater to migrate off-site.

6.3 Soil Vapor

Several VOCs are present in shallow soil vapor and sub-slab soil vapor at concentrations above Ecology's MTCA CULs and LDW PCULs. Based on the current investigation, a specific source for the shallow soil vapor and sub-slab soil vapor VOCs has not been identified, but the highest VOC concentrations found in soil vapor appear to be present beneath several buildings (at least Building 2, 3 and 4) across the site. Considering Prologis' planned lease-back to Delta Marine (the current owner/operator), additional delineation of VOCs in soil vapor, sub-slab and/or indoor air is necessary to further evaluate potential vapor intrusion concerns and whether vapor mitigation is warranted for one or more of the on-site buildings.

[2] 40CFR §261.24. USEPA Maximum Concentration of Contaminants for the Toxicity Characteristic.

7. LIMITATIONS

This report has been prepared for the exclusive use of Prologis. and may not be relied upon by any other person or entity without Ramboll's prior express written permission.

This report has been prepared in conformance with generally accepted standards of practice in the fields of environmental sciences and engineering at the time the services were rendered. Ramboll makes no other warranty or representation, either expressed or implied, with respect to its services.

This investigation provided a screening level assessment of soil and groundwater conditions. The level of detail carried out during Ramboll's investigation is appropriate to meet the study objectives as defined in this report; however, there is no warranty or guarantee, expressed or implied, that this investigation has uncovered all potential latent environmental liabilities associated with the site.

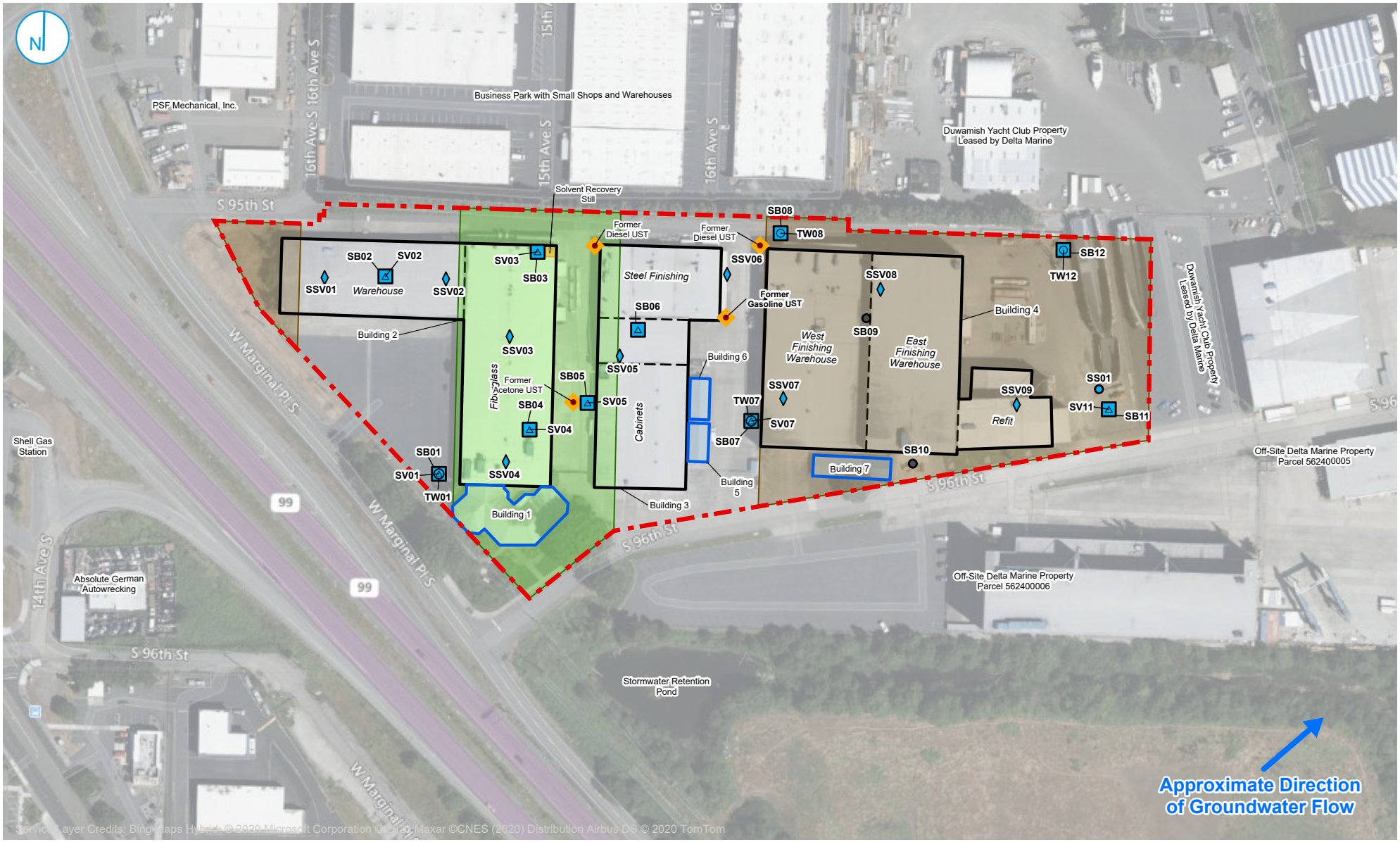
8. REFERENCES

Environmental Associates, Inc. (EAI). 1994. Subsurface Sampling and Testing, Delta Marine Industries, 1608 South 96th Street, Seattle, Washington. May 27.

Ramboll US Consulting, Inc. 2020. Phase I Environmental Site Assessment, 1608 South 96th Street, Seattle, Washington. December 18.

Washington Administrative Code (WAC) Chapter 173-340. 2007. Model Toxics Control Act—Cleanup. October 12.

FIGURES



LEGEND

- Approximate Site Boundary
- Office-Use Buildings
- Production/Finishing/Warehouse Buildings
- Former Auto Wrecking Facilities
- Former Orchard
- Solvent Recovery Still

0 90 180 Feet

- Former Underground Storage Tank (UST)
- Sample Location
  - Soil Vapor Sample
  - Groundwater Sample
  - Soil Sample
- No Samples Collected[1]

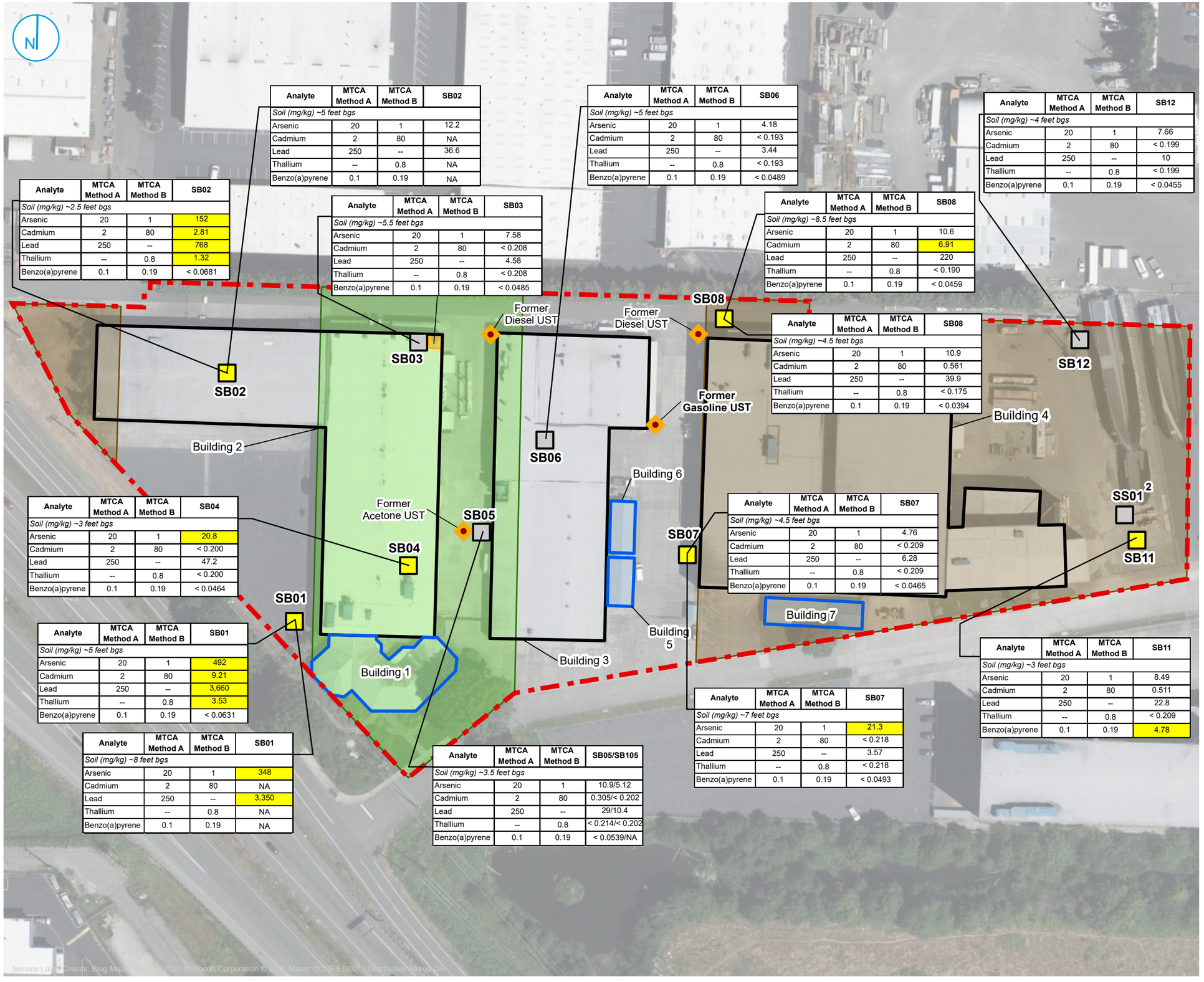
Notes:
1. SB09 could not be installed due to the thickness of the concrete slab (approximately 15 inches) and SB10 could not be installed for health and safety reasons (due to uncertainty of subsurface utilities in the area).

SITE LAYOUT AND SAMPLE LOCATIONS

Delta Marine Industries, Inc.
1608 S 96th Street
Seattle, Washington

FIGURE 1

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY



Analyte	MTCA Method A	MTCA Method B	SB02
Soil (mg/kg) ~2.5 feet bgs			
Arsenic	20	1	152
Cadmium	2	80	2.81
Lead	250	--	768
Thallium	--	0.8	1.32
Benzo(a)pyrene	0.1	0.19	< 0.0681

Analyte	MTCA Method A	MTCA Method B	SB02
Soil (mg/kg) ~5 feet bgs			
Arsenic	20	1	12.2
Cadmium	2	80	NA
Lead	250	--	36.6
Thallium	--	0.8	NA
Benzo(a)pyrene	0.1	0.19	NA

Analyte	MTCA Method A	MTCA Method B	SB03
Soil (mg/kg) ~5.5 feet bgs			
Arsenic	20	1	7.58
Cadmium	2	80	< 0.208
Lead	250	--	4.58
Thallium	--	0.8	< 0.208
Benzo(a)pyrene	0.1	0.19	< 0.0485

Analyte	MTCA Method A	MTCA Method B	SB04
Soil (mg/kg) ~3 feet bgs			
Arsenic	20	1	20.8
Cadmium	2	80	< 0.200
Lead	250	--	47.2
Thallium	--	0.8	< 0.200
Benzo(a)pyrene	0.1	0.19	< 0.0464

Analyte	MTCA Method A	MTCA Method B	SB01
Soil (mg/kg) ~5 feet bgs			
Arsenic	20	1	492
Cadmium	2	80	9.21
Lead	250	--	3,660
Thallium	--	0.8	3.53
Benzo(a)pyrene	0.1	0.19	< 0.0631

Analyte	MTCA Method A	MTCA Method B	SB01
Soil (mg/kg) ~8 feet bgs			
Arsenic	20	1	348
Cadmium	2	80	NA
Lead	250	--	3,350
Thallium	--	0.8	NA
Benzo(a)pyrene	0.1	0.19	NA

Analyte	MTCA Method A	MTCA Method B	SB05/SB105
Soil (mg/kg) ~3.5 feet bgs			
Arsenic	20	1	10.9/5.12
Cadmium	2	80	0.305/< 0.202
Lead	250	--	29/10.4
Thallium	--	0.8	< 0.214/< 0.202
Benzo(a)pyrene	0.1	0.19	< 0.0539/NA

Analyte	MTCA Method A	MTCA Method B	SB06
Soil (mg/kg) ~5 feet bgs			
Arsenic	20	1	4.18
Cadmium	2	80	< 0.193
Lead	250	--	3.44
Thallium	--	0.8	< 0.193
Benzo(a)pyrene	0.1	0.19	< 0.0489

Analyte	MTCA Method A	MTCA Method B	SB07
Soil (mg/kg) ~4.5 feet bgs			
Arsenic	20	1	4.76
Cadmium	2	80	< 0.209
Lead	250	--	6.28
Thallium	--	0.8	< 0.209
Benzo(a)pyrene	0.1	0.19	< 0.0465

Analyte	MTCA Method A	MTCA Method B	SB07
Soil (mg/kg) ~7 feet bgs			
Arsenic	20	1	21.3
Cadmium	2	80	< 0.218
Lead	250	--	3.57
Thallium	--	0.8	< 0.218
Benzo(a)pyrene	0.1	0.19	< 0.0493

Analyte	MTCA Method A	MTCA Method B	SB08
Soil (mg/kg) ~8.5 feet bgs			
Arsenic	20	1	10.6
Cadmium	2	80	6.91
Lead	250	--	220
Thallium	--	0.8	< 0.190
Benzo(a)pyrene	0.1	0.19	< 0.0459

Analyte	MTCA Method A	MTCA Method B	SB08
Soil (mg/kg) ~4.5 feet bgs			
Arsenic	20	1	10.9
Cadmium	2	80	0.561
Lead	250	--	39.9
Thallium	--	0.8	< 0.175
Benzo(a)pyrene	0.1	0.19	< 0.0394

Analyte	MTCA Method A	MTCA Method B	SB12
Soil (mg/kg) ~4 feet bgs			
Arsenic	20	1	7.66
Cadmium	2	80	< 0.199
Lead	250	--	10
Thallium	--	0.8	< 0.199
Benzo(a)pyrene	0.1	0.19	< 0.0455

Analyte	MTCA Method A	MTCA Method B	SB11
Soil (mg/kg) ~3 feet bgs			
Arsenic	20	1	8.49
Cadmium	2	80	0.511
Lead	250	--	22.8
Thallium	--	0.8	< 0.209
Benzo(a)pyrene	0.1	0.19	4.78

- Approximate Site Boundary
- Office-Use Buildings
- Production/Finishing/Warehouse Buildings
- Former Auto Wrecking Facilities
- Former Orchard
- Solvent Recovery Still
- Former USTs
- Soil Sample Location with Analytical Results Below MTCA Method A or B Cleanup Level
- Soil Sample Location with Analytical Results Above MTCA Method A or B Cleanup Level

Notes:

1. Analytical results are compared to MTCA Method A criteria for unrestricted land use or Method B criteria, for analytes with no Method A criteria established.
2. All soil detections are shown in Table 2.
3. TBT was detected at a concentration of 0.32 mg/kg in the Sample SS01, which is a surface soil sample. While there are no MTCA CULs for TBT, this analysis indicates that TBT is present in soil at the site.
4. Samples were collected from locations SS01 (0.5 feet bgs) and SB06 (1.0 feet bgs) and only analyzed for TBT.
5. Sample SB105 is a duplicate of Sample SB05.

Abbreviations:

bgs = below ground surface
mg/kg = milligrams per kilogram
MTCA = Washington Model Toxics Control Act
TBT = Tributyltin
UST = Underground Storage Tank

0 50 100 Feet

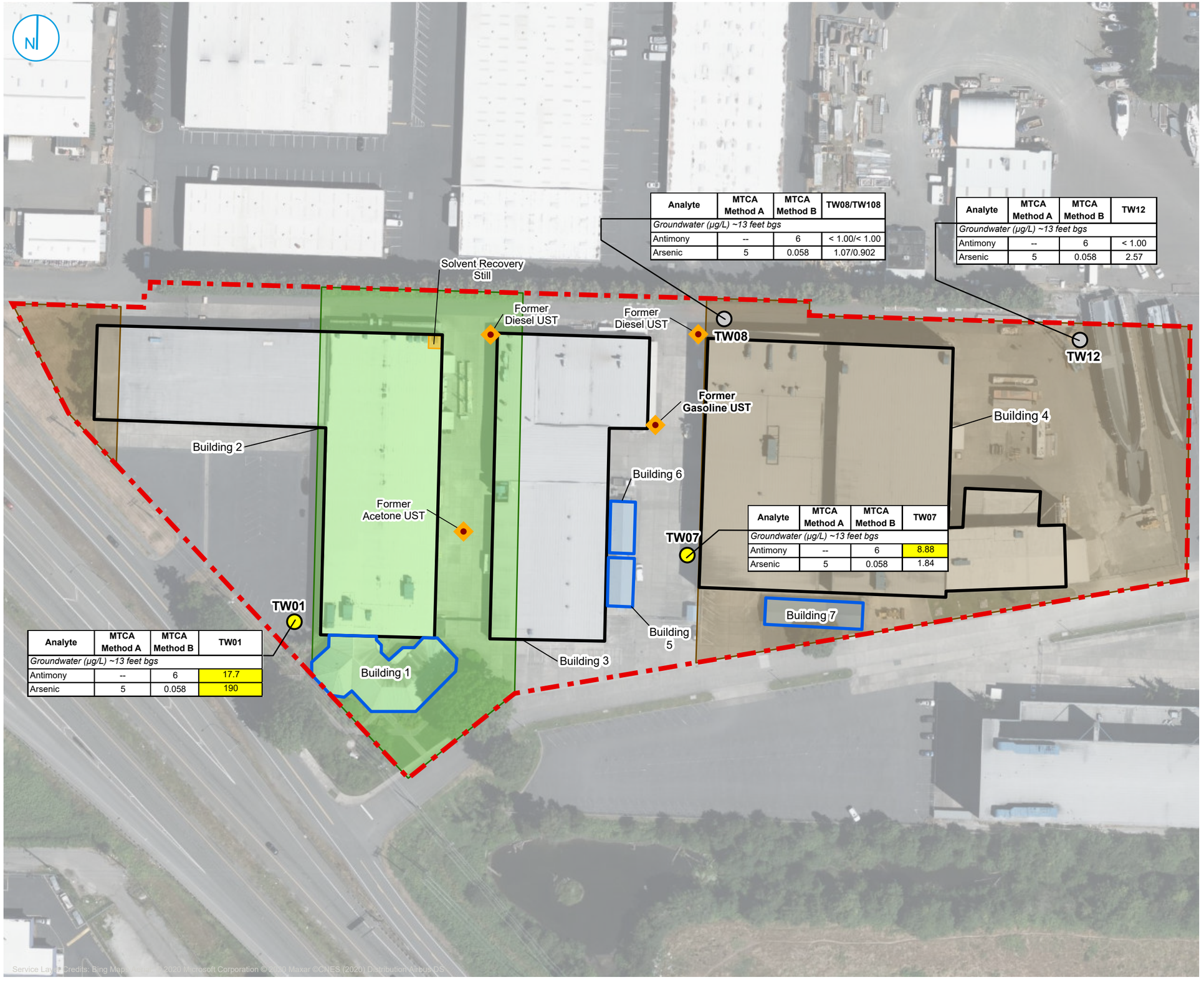
SOIL SAMPLE LOCATIONS AND EXCEEDANCES

Delta Marine Industries, Inc.
1608 S 96th Street
Seattle, Washington

FIGURE 02

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

PROJECT: 1690000XXX | DATED: 12/17/2020 | DESIGNER: SLEICK



Analyte	MTCA Method A	MTCA Method B	TW08/TW108
Groundwater (µg/L) ~13 feet bgs			
Antimony	--	6	< 1.00/< 1.00
Arsenic	5	0.058	1.07/0.902

Analyte	MTCA Method A	MTCA Method B	TW12
Groundwater (µg/L) ~13 feet bgs			
Antimony	--	6	< 1.00
Arsenic	5	0.058	2.57

Analyte	MTCA Method A	MTCA Method B	TW07
Groundwater (µg/L) ~13 feet bgs			
Antimony	--	6	8.88
Arsenic	5	0.058	1.84

Analyte	MTCA Method A	MTCA Method B	TW01
Groundwater (µg/L) ~13 feet bgs			
Antimony	--	6	17.7
Arsenic	5	0.058	190

- Approximate Site Boundary
- Office-Use Buildings
- Production/Finishing/Warehouse Buildings
- Former Auto Wrecking Facilities
- Former Orchard
- Solvent Recovery Still
- Former USTs
- Groundwater Sample Location with Analytical Results Below MTCA Method A or B Cleanup Level
- Groundwater Sample Location with Analytical Results Above MTCA Method A or B Cleanup Level

Notes:
1. Analytical results are compared to MTCA Method A criteria for unrestricted land use or Method B criteria, for analytes with no Method A criteria established.
2. All groundwater detections are shown in Table 3.
3. Sample TW108 is a duplicate of Sample TW08.

Abbreviations:
bgs = below ground surface
µg/L = micrograms per liter
MTCA = Washington Model Toxics Control Act
UST = Underground Storage Tank

0 50 100 Feet

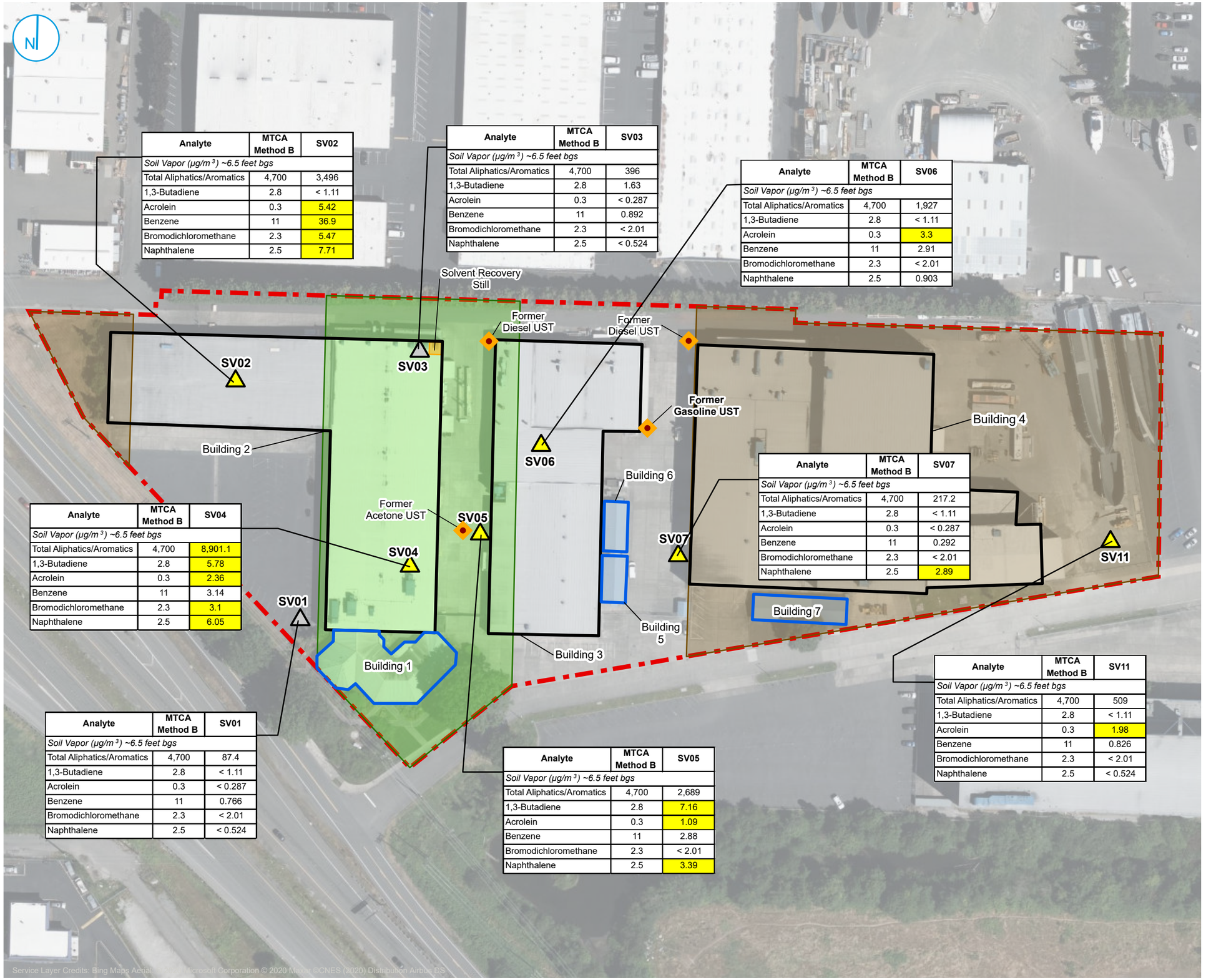
GROUNDWATER SAMPLE LOCATIONS AND EXCEEDANCES

Delta Marine Industries, Inc.
1608 S 96th Street
Seattle, Washington

FIGURE 03

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

RAMBOLL



Analyte	MTCA Method B	SV02
Soil Vapor (µg/m³) ~6.5 feet bgs		
Total Aliphatics/Aromatics	4,700	3,496
1,3-Butadiene	2.8	< 1.11
Acrolein	0.3	5.42
Benzene	11	36.9
Bromodichloromethane	2.3	5.47
Naphthalene	2.5	7.71

Analyte	MTCA Method B	SV03
Soil Vapor (µg/m³) ~6.5 feet bgs		
Total Aliphatics/Aromatics	4,700	396
1,3-Butadiene	2.8	1.63
Acrolein	0.3	< 0.287
Benzene	11	0.892
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	< 0.524

Analyte	MTCA Method B	SV06
Soil Vapor (µg/m³) ~6.5 feet bgs		
Total Aliphatics/Aromatics	4,700	1,927
1,3-Butadiene	2.8	< 1.11
Acrolein	0.3	3.3
Benzene	11	2.91
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	0.903

Analyte	MTCA Method B	SV07
Soil Vapor (µg/m³) ~6.5 feet bgs		
Total Aliphatics/Aromatics	4,700	217.2
1,3-Butadiene	2.8	< 1.11
Acrolein	0.3	< 0.287
Benzene	11	0.292
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	2.89

Analyte	MTCA Method B	SV04
Soil Vapor (µg/m³) ~6.5 feet bgs		
Total Aliphatics/Aromatics	4,700	8,901.1
1,3-Butadiene	2.8	5.78
Acrolein	0.3	2.36
Benzene	11	3.14
Bromodichloromethane	2.3	3.1
Naphthalene	2.5	6.05

Analyte	MTCA Method B	SV01
Soil Vapor (µg/m³) ~6.5 feet bgs		
Total Aliphatics/Aromatics	4,700	87.4
1,3-Butadiene	2.8	< 1.11
Acrolein	0.3	< 0.287
Benzene	11	0.766
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	< 0.524

Analyte	MTCA Method B	SV05
Soil Vapor (µg/m³) ~6.5 feet bgs		
Total Aliphatics/Aromatics	4,700	2,689
1,3-Butadiene	2.8	7.16
Acrolein	0.3	1.09
Benzene	11	2.88
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	3.39

Analyte	MTCA Method B	SV11
Soil Vapor (µg/m³) ~6.5 feet bgs		
Total Aliphatics/Aromatics	4,700	509
1,3-Butadiene	2.8	< 1.11
Acrolein	0.3	1.98
Benzene	11	0.826
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	< 0.524

- Approximate Site Boundary
- Office-Use Buildings
- Production/Finishing/Warehouse Buildings
- Former Auto Wrecking Facilities
- Former Orchard
- Solvent Recovery Still
- Former USTs
- Soil Vapor Sample Location with Analytical Results Below MTCA Method B Cleanup Level
- Soil Vapor Sample Location with Analytical Results Above MTCA Method B Cleanup Level

Notes:

1. Analytical results are compared to MTCA Method B criteria for subslab soil gas samples, which is for samples collected at depths shallower than 15 feet bgs. There is no Method A criteria established for soil vapor samples.
2. All soil vapor detections are shown in Table 4.

Abbreviations:

bgs = below ground surface
µg/m^3 = micrograms per cubic meter
MTCA = Washington Model Toxics Control Act
UST = Underground Storage Tank

0 50 100 Feet

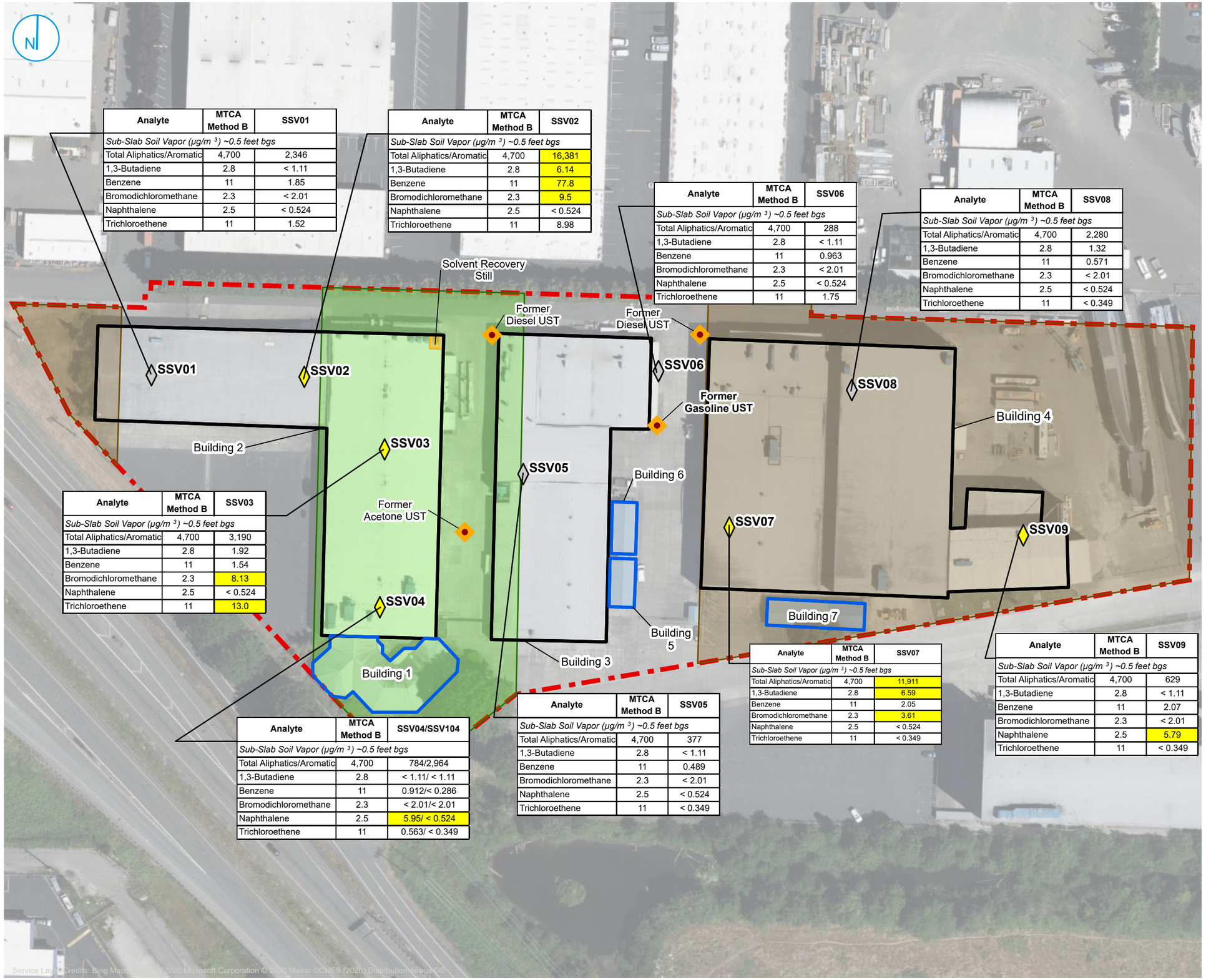
SOIL VAPOR SAMPLE LOCATIONS AND EXCEEDANCES

Delta Marine Industries, Inc.
1608 S 96th Street
Seattle, Washington

FIGURE 04

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

C:\Users\sleick\Ramboll\PNW GIS - Documents\Phase Is\Delta Marine\Phase II_Sample Results.aprx
PROJECT: 169000XXXX | DATED: 12/17/2020 | DESIGNER: SLEICK



Analyte	MTCA Method B	SSV01
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	2,346
1,3-Butadiene	2.8	< 1.11
Benzene	11	1.85
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	< 0.524
Trichloroethene	11	1.52

Analyte	MTCA Method B	SSV02
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	16,381
1,3-Butadiene	2.8	6.14
Benzene	11	77.8
Bromodichloromethane	2.3	9.5
Naphthalene	2.5	< 0.524
Trichloroethene	11	8.98

Analyte	MTCA Method B	SSV03
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	3,190
1,3-Butadiene	2.8	1.92
Benzene	11	1.54
Bromodichloromethane	2.3	8.13
Naphthalene	2.5	< 0.524
Trichloroethene	11	13.0

Analyte	MTCA Method B	SSV04/SSV104
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	784/2,964
1,3-Butadiene	2.8	< 1.11/ < 1.11
Benzene	11	0.912/< 0.286
Bromodichloromethane	2.3	< 2.01/< 2.01
Naphthalene	2.5	5.95/ < 0.524
Trichloroethene	11	0.563/ < 0.349

Analyte	MTCA Method B	SSV05
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	377
1,3-Butadiene	2.8	< 1.11
Benzene	11	0.489
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	< 0.524
Trichloroethene	11	< 0.349

Analyte	MTCA Method B	SSV06
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	288
1,3-Butadiene	2.8	< 1.11
Benzene	11	0.963
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	< 0.524
Trichloroethene	11	1.75

Analyte	MTCA Method B	SSV07
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	11,911
1,3-Butadiene	2.8	6.59
Benzene	11	2.05
Bromodichloromethane	2.3	3.61
Naphthalene	2.5	< 0.524
Trichloroethene	11	< 0.349

Analyte	MTCA Method B	SSV08
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	2,280
1,3-Butadiene	2.8	1.32
Benzene	11	0.571
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	< 0.524
Trichloroethene	11	< 0.349

Analyte	MTCA Method B	SSV09
Sub-Slab Soil Vapor (µg/m ³) ~0.5 feet bgs		
Total Aliphatics/Aromatic	4,700	629
1,3-Butadiene	2.8	< 1.11
Benzene	11	2.07
Bromodichloromethane	2.3	< 2.01
Naphthalene	2.5	5.79
Trichloroethene	11	< 0.349

- Approximate Site Boundary
- Office-Use Buildings
- Production/Finishing/Warehouse Buildings
- Former Auto Wrecking Facilities
- Former Orchard
- Solvent Recovery Still
- Former USTs
- Sub-Slab Soil Vapor Sample Location with Analytical Results Below MTCA Method B Cleanup Level
- Sub-Slab Soil Vapor Sample Location with Analytical Results Above MTCA Method B Cleanup Level

Notes:
1. Analytical results are compared to MTCA Method B criteria for subslab soil gas samples, which is for samples collected at depths shallower than 15 feet bgs. There is no Method A criteria established for soil vapor samples.
2. All soil vapor detections are shown in Table 5.

Abbreviations:
bgs = below ground surface
µg/m³ = micrograms per cubic meter
MTCA = Washington Model Toxics Control Act
UST = Underground Storage Tank

0 50 100 Feet

SUB-SLAB SOIL VAPOR SAMPLE LOCATIONS AND EXCEEDANCES

Delta Marine Industries, Inc.
1608 S 96th Street
Seattle, Washington

FIGURE 05

RAMBOLL US CONSULTING, INC.
A RAMBOLL COMPANY

C:\Users\sleick\Ramboll\PNW GIS - Documents\Phase Is\Delta Marine\Phase II_Sample Results.aprx
PROJECT: 169000XXXX | DATED: 12/17/2020 | DESIGNER: SLEICK

TABLES

Table 1: Sampling Rationale
1608 South 96th Street
Seattle, Washington

Analytical Method								Priority Pollutant Metals				
Sample Name	Sample Rationale	Sample Depth	VOCs and Air-Phase Petroluem Hydrocarbons (TO-15)	TCLP for Lead and Arsenic (E200.8)	Diesel and Heavy Oil Range Petroleum Hydrocarbons (NWTPH-Dx)	Gasoline Range Petroleum Hydrocarbons (NWTPH-Gx)	Tributyltin (Organotins)	Metals (SW6020B)	Mercury (SW7471B)	PCBs (SW8082)	VOCs (SW8260D)	PAHs (SW8270ESIM)
Soil Samples												
SB01-5-20201103	Site-wide Conditions – soil	5		X	X	X		X	X	X	X	X
SB01-8-20201103	Site-wide Conditions – soil	8						X[1]				
SB02-2.5-20201104	Site-wide Conditions – soil	2.5		X	X	X		X	X	X	X	X
SB02-5-20201104	Site-wide Conditions – soil	5						X[1]				
SB03-5.5-20201104	Solvent Recovery Still	5.5			X	X		X	X	X	X	X
SB04-3-20201104	Site-wide Conditions – soil	3			X	X		X	X	X	X	X
SB04-6-20201104	Site-wide Conditions – soil	Not Analyzed										
SB05-3.5-20201104	Site-wide Conditions – soil	3.5			X	X		X	X	X	X	X
SB0105-3.5-20201104	Former Acetone UST West of Building 3	3.5			X	X		X	X	X	X	X
SB05-6-20201104	Former Acetone UST West of Building 3	Not Analyzed										
SB06-1.0-20201104	Site-wide Conditions – soil	1					X					
SB06-5.0-20201104	Site-wide Conditions – soil	5			X	X		X	X	X	X	X
SB06-7.5-20201104	Site-wide Conditions – soil	Not Analyzed										
SB07-4.5-20201103	Site-wide Conditions – soil	4.5			X	X		X	X	X	X	X
SB07-7-20201103	Site-wide Conditions – soil	7			X	X		X	X	X	X	X
SB08-4.5-20201103	Former Diesel UST north of Building 4	4.5			X	X		X	X	X	X	X
SB08-8.5-20201103	Former Diesel UST north of Building 4	8.5			X	X		X	X	X	X	X
SB11-3-20201103	Site-wide Conditions – soil	3			X	X		X	X	X	X	X
SB11-6.5-20201103	Site-wide Conditions – soil	Not Analyzed										
SB12-4-20201104	Site-wide Conditions – soil	4			X	X		X	X	X	X	X
SB12-6-20201104	Site-wide Conditions – soil	Not Analyzed										
SS01-0.5-20201104	Site-wide Conditions – soil	0.5					X					
Grab Groundwater Samples[2, 3]												
TW01-20201103	Site-wide Conditions – groundwater	13			X	X		X	X		X	X
TW07-20201103		13			X	X		X	X	X	X	X
TW08-20201104		13			X	X		X	X	X	X	X
TW108-20201104		13			X	X		X	X	X	X	X
TW12-20201104		13			X	X		X	X	X	X	X
Soil Vapor Samples												
SV01-20201103	Site-wide Conditions – soil vapor	6.5	X									
SV02-20201104		6.5	X									
SV03-20201104		6.5	X									
SV04-20201104		6.5	X									
SV05-20201104		6.5	X									
SV06-20201104		6.5	X									
SV07-20201104		6.5	X									
SV11-20201103		6.5	X									
Sub-Slab Soil Vapor Samples												
SSV-01-20201207	Sub-slab Soil Vapor Sampling to Evaluate Soil Vapor Intrusion Risk	0.5	X									
SSV-02-20201207		0.5	X									
SSV-03-20201207		0.5	X									
SSV-04-20201207		0.5	X									
SSV-104-20201207		0.5	X									
SSV-05-20201207		0.5	X									
SSV-06-20201207		0.5	X									
SSV-07-20201207		0.5	X									
SSV-08-20201207		0.5	X									
SSV-09-20201207		0.5	X									

Notes:
[1] Only arsenic and lead were analyzed in these samples.
[2] Groundwater samples were analyzed for dissolved metals (lab filtered).
[3] Due to insufficient volume TW01-20201103 could not be analyzed for PCBs.

NWTPH-Dx = Northwest Total Petroleum Hydrocarbons - Diesel Range
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons - Gasoline Range
PAHs = Polycyclic Aromatic Hydrocarbons
PCBs = Polychlorinated Biphenyls
TCLP = Toxicity characteristic leaching procedure
VOCs = Volatile Organic Compounds

Table 2: Summary of Detected Soil Sample Analytical Results
1608 South 96th Street
Seattle, Washington

	Sample Location	MTCA Method A CUL	MTCA Method B CUL	Background Metals[4]	LDW PCUL - Direct Contact Unrestricted	LDW PCUL - Protect Sediment via Groundwater Vadose Zone	LDW PCUL - Protect Surface Water via Groundwater Vadose Zone	LDW PCUL Protect Sediment via Erosion	SS01-0.5-20201104	SB01-5-20201103	SB01-8-20201103	SB02-2.5-20201104	SB02-5-20201104	SB03-5.5-20201104
	Sample Depth (feet bgs)								0.5	5	8	2.5	5	5.5
	Sample Date								11/4/2020	11/3/2020	11/3/2020	11/4/2020	11/4/2020	11/4/2020
Analytical Results (mg/kg)[3]	**NWTPH-Dx/Gx**													
	Oil Range Organics	2,000	--	--	--	--	--	--	NA	<78.0	NA	<85.1	NA	< 58.4
	Priority Pollutant Metals													
	Antimony	--	32	--	32	81.36	--	97.33	NA	31.4	NA	6.52	NA	< 0.208
	Arsenic	20	0.67	7.3	0.67	0.082	129.36	7	NA	492	348	152	12.2	7.58
	Beryllium	--	160	0.61	160	1,194.36	76.91	486.67	NA	< 0.278	NA	< 0.281	NA	0.283
	Cadmium	2	80	0.77	80	1.09	0.16	5.1	NA	9.21	NA	2.81	NA	< 0.208
	Chromium (total)[2]	2,000	120,000	48.15	120,000	--	--	260	NA	16.6	NA	13.5	NA	24
	Copper	--	3,200	36.36	3,200	1	6	390	NA	181	NA	67	NA	33.1
	Lead	250	--	16.83	250	1,620.03	3,867.62	450	NA	3,660	3,350	768	36.6	4.58
	Nickel	--	1,600	21.04	1,600	11	3,339	4,867	NA	6.46	NA	5.9	NA	9.91
	Selenium	--	400	--	400	7.38	45,143.06	1,216.67	NA	6.56	NA	2.62	NA	1.18
	Silver	--	400	--	400	0.32	9.38	6.1	NA	8.03	NA	2.26	NA	< 0.104
	Thallium	--	0.8	--	0.8	0.088	35.87	2.43	NA	3.53	NA	1.32	NA	< 0.208
	Zinc	--	24,000	85.06	24,000	101	961	410	NA	2,530	NA	571	NA	22.2
	PAHs													
	1-Methylnaphthalene	--	34	--	34.5	--	--	--	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	2-Methylnaphthalene	--	--	--	320	--	--	--	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Acenaphthene	--	--	--	4,800	3.06	0.54	0.5	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Anthracene	--	--	--	24,000	47.40	1.02	0.96	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Benzo(a)anthracene	--	--	--	--	--	1.37	1.3	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Benzo(a)pyrene	0.1	0.19	--	0.188	--	1.68	1.6	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Benzo(b)fluoranthene	--	--	--	--	--	--	--	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Benzo(g,h,i)perylene	--	--	--	--	--	--	0.67	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Benzo(k)fluoranthene	--	--	--	--	--	--	--	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Chrysene	--	--	--	--	--	1.47	1.4	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Dibenz(a,h)anthracene	--	--	--	--	--	0.24	0.23	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Fluoranthene	--	--	--	3,200	5.92	1.8	1.7	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Fluorene	--	--	--	3,200	1.58	0.58	0.54	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Indeno(1,2,3-cd)pyrene	--	--	--	--	--	0.63	0.6	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Naphthalene	5	--	--	1,600	0.04	2.52	2.1	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Phenanthrene	--	--	--	--	--	--	1.5	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Pyrene	--	--	--	2,400	10.91	2.74	2.6	NA	< 0.0631	NA	< 0.0681	NA	< 0.0485
	Miscellaneous													
	Tributyltin[1]	--	--	--	--	--	--	0.0021[1]	0.32	NA	NA	NA	NA	NA

Notes:

= Analytical results are compared to MTCA Method A criteria for unrestricted land use or Method B criteria, for analytes with no Method A criteria established.

< = concentration is less than the lab reporting limit

-- = No CUL for analyte

bgs = below ground surface

CUL = Cleanup Level

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

LDW PCUL = Lower Duwamish Waterway Preliminary Cleanup Level, established by Washington Department of Ecology

NA = Not analyzed

NWTPH-Dx = Northwest Total Petroleum Hydrocarbons - Diesel Range

NWTPH-Gx = Northwest Total Petroleum Hydrocarbons - Gasoline Range

PAHs = Polycyclic Aromatic Hydrocarbons

PCBs = Polychlorinated Biphenyls

VOCs = Volatile Organic Compounds

[1] LDW PCUL shown is for Tributyltin oxide

[2] MTCA and PCUL values shown are for trivalent chromium (chromium III).

[3] Samples were analyzed for Priority Pollutant metals, organotins, TPH (diesel and gasoline-ranged), PCBs, VOCs, and PAHs

[4] Background metals values from: "Table 1 Statewide & Regional 90th Percentile Values" in Ecology Pub. 94-115 "Natural Background Soil Metals Concentrations in WA State" October 1994

[5] Sample SB105 is a duplicate of Sample SB05

[6] LDW PCULs are provided for reference only.

Table 2: Summary of Detected Soil Sample Analytical Results
1608 South 96th Street
Seattle, Washington

	Sample Location	MTCA Method A CUL	MTCA Method B CUL	Background Metals[4]	LDW PCUL - Direct Contact Unrestricted	LDW PCUL - Protect Sediment via Groundwater Vadose Zone	LDW PCUL - Protect Surface Water via Groundwater Vadose Zone	LDW PCUL Protect Sediment via Erosion	SB04-3-20201104	SB05-3.5-20201104	SB0105-3.5-20201104[5]	SB06-1.0-20201104	SB06-5.0-20201104
	Sample Depth (feet bgs)								3	3.5	3.5	1	5
	Sample Date								11/4/2020	11/4/2020	11/4/2020	11/4/2020	11/4/2020
Analytical Results (mg/kg)[3]	**NWTPH-Dx/Gx**												
	Oil Range Organics	2,000	--	--	--	--	--	--	< 61.4	< 65.2	< 56.6	NA	< 56.5
	Priority Pollutant Metals												
	Antimony	--	32	--	32	81.36	--	97.33	< 0.200	< 0.214	< 0.202	NA	< 0.193
	Arsenic	20	0.67	7.3	0.67	0.082	129.36	7	20.8	10.9	5.12	NA	4.18
	Beryllium	--	160	0.61	160	1,194.36	76.91	486.67	0.321	0.523	0.49	NA	0.328
	Cadmium	2	80	0.77	80	1.09	0.16	5.1	< 0.200	0.305	< 0.202	NA	< 0.193
	Chromium (total)[2]	2,000	120,000	48.15	120,000	--	--	260	18.8	25.7	21.8	NA	20.1
	Copper	--	3,200	36.36	3,200	1	6	390	16.8	34.2	26.6	NA	28.2
	Lead	250	--	16.83	250	1,620.03	3,867.62	450	47.2	29	10.4	NA	3.44
	Nickel	--	1,600	21.04	1,600	11	3,339	4,867	11.3	17.6	14	NA	10
	Selenium	--	400	--	400	7.38	45,143.06	1,216.67	1.08	1.68	1.31	NA	0.918
	Silver	--	400	--	400	0.32	9.38	6.1	< 0.100	0.116	< 0.101	NA	< 0.0967
	Thallium	--	0.8	--	0.8	0.088	35.87	2.43	< 0.200	< 0.214	< 0.202	NA	< 0.193
	Zinc	--	24,000	85.06	24,000	101	961	410	37.4	81.9	44.2	NA	28.8
	PAHs												
	1-Methylnaphthalene	--	34	--	34.5	--	--	--	< 0.0464	< 0.0539	NA	NA	< 0.0489
	2-Methylnaphthalene	--	--	--	320	--	--	--	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Acenaphthene	--	--	--	4,800	3.06	0.54	0.5	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Anthracene	--	--	--	24,000	47.40	1.02	0.96	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Benzo(a)anthracene	--	--	--	--	--	1.37	1.3	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Benzo(a)pyrene	0.1	0.19	--	0.188	--	1.68	1.6	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Benzo(b)fluoranthene	--	--	--	--	--	--	--	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Benzo(g,h,i)perylene	--	--	--	--	--	--	0.67	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Benzo(k)fluoranthene	--	--	--	--	--	--	--	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Chrysene	--	--	--	--	--	1.47	1.4	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Dibenz(a,h)anthracene	--	--	--	--	--	0.24	0.23	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Fluoranthene	--	--	--	3,200	5.92	1.8	1.7	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Fluorene	--	--	--	3,200	1.58	0.58	0.54	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Indeno(1,2,3-cd)pyrene	--	--	--	--	--	0.63	0.6	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Naphthalene	5	--	--	1,600	0.04	2.52	2.1	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Phenanthrene	--	--	--	--	--	--	1.5	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Pyrene	--	--	--	2,400	10.91	2.74	2.6	< 0.0464	< 0.0539	NA	NA	< 0.0489
	Miscellaneous												
	Tributyltin[1]	--	--	--	--	--	--	0.0021[1]	NA	NA	NA	< 0.077	NA

Notes:

= Analytical results are compared to MTCA Method A criteria for unrestricted land use or Method B criteria, for analytes with no Method A criteria established.
< = concentration is less than the lab reporting limit
-- = No CUL for analyte
bgs = below ground surface
CUL = Cleanup Level
mg/kg = milligrams per kilogram
MTCA = Washington State Model Toxics Control Act
LDW PCUL = Lower Duwamish Waterway Preliminary Cleanup Level, established by Washington Department of Ecology

NA = Not analyzed
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons - D
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons - G
PAHs = Polycyclic Aromatic Hydrocarbons
PCBs = Polychlorinated Biphenyls
VOCs = Volatile Organic Compounds

[1] LDW PCUL shown is for Tributyltin oxide

[2] MTCA and PCUL values shown are for trivalent chromium (chromium III).

[3] Samples were analyzed for Priority Pollutant metals, organotins, TPH (diesel and gasoline-ranged), PCBs, VOCs, and PAHs

[4] Background metals values from: "Table 1 Statewide & Regional 90th Percentile Values" in Ecology Pub. 94-115 "Natural Background Soil Metals Concentrations in WA State" October 1994

[5] Sample SB105 is a duplicate of Sample SB05

[6] LDW PCULs are provided for reference only.

Table 2: Summary of Detected Soil Sample Analytical Results
1608 South 96th Street
Seattle, Washington

	Sample Location	MTCA Method A CUL	MTCA Method B CUL	Background Metals[4]	LDW PCUL - Direct Contact Unrestricted	LDW PCUL - Protect Sediment via Groundwater Vadose Zone	LDW PCUL - Protect Surface Water via Groundwater Vadose Zone	LDW PCUL Protect Sediment via Erosion	SB07-4.5-20201103	SB07-7-20201103	SB08-4.5-20201103	SB08-8.5-20201103	SB11-3-20201103	SB12-4-20201104
	Sample Depth (feet bgs)								4.5	7	4.5	8.5	3	4
	Sample Date								11/3/2020	11/3/2020	11/3/2020	11/3/2020	11/3/2020	11/4/2020
Analytical Results (mg/kg)[3]	**NWTPH-Dx/Gx**													
	Oil Range Organics	2,000	--	--	--	--	--	--	< 67.9	< 61.5	< 48.9	162	< 66.6	< 61.1
	Priority Pollutant Metals													
	Antimony	--	32	--	32	81.36	--	97.33	< 0.209	< 0.218	0.335	0.302	< 0.209	< 0.199
	Arsenic	20	0.67	7.3	0.67	0.082	129.36	7	4.76	21.3	10.9	10.6	8.49	7.66
	Beryllium	--	160	0.61	160	1,194.36	76.91	486.67	0.389	0.289	0.256	0.269	0.502	0.499
	Cadmium	2	80	0.77	80	1.09	0.16	5.1	< 0.209	< 0.218	0.561	6.91	0.511	< 0.199
	Chromium (total)[2]	2,000	120,000	48.15	120,000	--	--	260	24.2	22.2	35.1	72.4	29.1	27.6
	Copper	--	3,200	36.36	3,200	1	6	390	19.2	35.1	87.2	237	38.8	36.1
	Lead	250	--	16.83	250	1,620.03	3,867.62	450	6.28	3.57	39.9	220	22.8	10
	Nickel	--	1,600	21.04	1,600	11	3,339	4,867	13.8	24.7	42	124	22	21.7
	Selenium	--	400	--	400	7.38	45,143.06	1,216.67	0.975	2.51	0.826	1.12	1.34	1.55
	Silver	--	400	--	400	0.32	9.38	6.1	< 0.104	< 0.109	0.117	0.201	0.244	0.1
	Thallium	--	0.8	--	0.8	0.088	35.87	2.43	< 0.209	< 0.218	< 0.175	< 0.190	< 0.209	< 0.199
	Zinc	--	24,000	85.06	24,000	101	961	410	43.7	73.1	243	1,930	90.6	89.7
	PAHs													
	1-Methylnaphthalene	--	34	--	34.5	--	--	--	< 0.0465	< 0.0493	< 0.0394	< 0.0459	0.422	< 0.0455
	2-Methylnaphthalene	--	--	--	320	--	--	--	< 0.0465	< 0.0493	< 0.0394	< 0.0459	0.523	< 0.0455
	Acenaphthene	--	--	--	4,800	3.06	0.54	0.5	< 0.0465	< 0.0493	< 0.0394	< 0.0459	2.14	< 0.0455
	Anthracene	--	--	--	24,000	47.40	1.02	0.96	< 0.0465	< 0.0493	< 0.0394	< 0.0459	3.71	< 0.0455
	Benzo(a)anthracene	--	--	--	--	--	1.37	1.3	< 0.0465	< 0.0493	< 0.0394	< 0.0459	4.9	< 0.0455
	Benzo(a)pyrene	0.1	0.19	--	0.188	--	1.68	1.6	< 0.0465	< 0.0493	< 0.0394	< 0.0459	4.78	< 0.0455
	Benzo(b)fluoranthene	--	--	--	--	--	--	--	< 0.0465	< 0.0493	< 0.0394	< 0.0459	3.39	< 0.0455
	Benzo(g,h,i)perylene	--	--	--	--	--	--	0.67	< 0.0465	< 0.0493	< 0.0394	0.0804	1.81	< 0.0455
	Benzo(k)fluoranthene	--	--	--	--	--	--	--	< 0.0465	< 0.0493	< 0.0394	< 0.0459	3.34	< 0.0455
	Chrysene	--	--	--	--	--	1.47	1.4	< 0.0465	< 0.0493	< 0.0394	< 0.0459	4	< 0.0455
	Dibenz(a,h)anthracene	--	--	--	--	--	0.24	0.23	< 0.0465	< 0.0493	< 0.0394	< 0.0459	0.997	< 0.0455
	Fluoranthene	--	--	--	3,200	5.92	1.8	1.7	< 0.0465	< 0.0493	< 0.0394	< 0.0459	14.2	< 0.0455
	Fluorene	--	--	--	3,200	1.58	0.58	0.54	< 0.0465	< 0.0493	< 0.0394	< 0.0459	2.24	< 0.0455
	Indeno(1,2,3-cd)pyrene	--	--	--	--	--	0.63	0.6	< 0.0465	< 0.0493	< 0.0394	< 0.0459	1.89	< 0.0455
	Naphthalene	5	--	--	1,600	0.04	2.52	2.1	< 0.0465	< 0.0493	< 0.0394	< 0.0459	0.738	< 0.0455
	Phenanthrene	--	--	--	--	--	--	1.5	< 0.0465	< 0.0493	< 0.0394	< 0.0459	13.8	< 0.0455
	Pyrene	--	--	--	2,400	10.91	2.74	2.6	< 0.0465	< 0.0493	< 0.0394	< 0.0459	11.1	< 0.0455
	Miscellaneous													
	Tributyltin[1]	--	--	--	--	--	--	0.0021[1]	NA	NA	NA	NA	NA	NA

Notes:

= Analytical results are compared to MTCA Method A criteria for unrestricted land use or Method B criteria, for analytes with no Method A criteria established.

< = concentration is less than the lab reporting limit

-- = No CUL for analyte

bgs = below ground surface

CUL = Cleanup Level

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

LDW PCUL = Lower Duwamish Waterway Preliminary Cleanup Level, established by Washington Department of Ecology

NA = Not analyzed

NWTPH-Dx = Northwest Total Petroleum Hydrocarbons - D

NWTPH-Gx = Northwest Total Petroleum Hydrocarbons - G

PAHs = Polycyclic Aromatic Hydrocarbons

PCBs = Polychlorinated Biphenyls

VOCs = Volatile Organic Compounds

[1] LDW PCUL shown is for Tributyltin oxide

[2] MTCA and PCUL values shown are for trivalent chromium (chromium III).

[3] Samples were analyzed for Priority Pollutant metals, organotins, TPH (diesel and gasoline-ranged), PCBs, VOCs, and PAHs

[4] Background metals values from: "Table 1 Statewide & Regional 90th Percentile Values" in Ecology Pub. 94-115 "Natural Background Soil Metals Concentrations in WA State" October 1994

[5] Sample SB105 is a duplicate of Sample SB05

[6] LDW PCULs are provided for reference only.

Table 3: Summary of Detected Groundwater Sample Analytical Results
1608 South 96th Street
Seattle, Washington

Sample Name		MTCA Method A CUL	MTCA Method B CUL	LDW PCUL Protect Surface Water	LDW PCUL Protect Sediment	TW01-20201103	TW07-20201103	TW08-20201104	TW108-20201104[3]	TW12-20201104
Sample Depth (feet bgs)						13	13	13	13	13
Sample Date						11/3/2020	11/3/2020	11/4/2020	11/4/2020	11/4/2020
Concentration (µg/L)[2]	**NWTPH-Dx**									
	Oil Range Organics	500	--	500	--	372	357	185	190	179
	VOCs									
	m,p-xylene	--	--	--	--	1.21	< 1.00	< 1.00	< 1.00	< 1.00
	Toluene	1000	640	130	5,965,987.62	3.76	< 1.00	< 1.00	< 1.00	< 1.00
	PAHs									
	Acenaphthene	--	960	30	5.34	< 0.128	< 0.0988	< 0.100	< 0.0975	1.26
	Priority Pollutant Metals (Dissolved)									
	Antimony	--	6.40	90	--	17.7	8.88	< 1.00	< 1.00	< 1.00
	Arsenic	5.00	0.0580	0.14	221.5	190	1.84	1.07	0.902	2.57
	Cadmium	5.00	8.00	7.9	1.19	0.377	< 0.200	< 0.200	< 0.200	< 0.200
	Chromium (total)[1]	50.0	--	27.4	84.88	2.68	< 1.00	1.95	1.77	6.58
	Copper	--	640	3.1	13.69	10.2	3.55	2.17	1.77	9.88
	Lead	15.0	--	8.1	19.34	6.53	< 0.500	< 0.500	< 0.500	< 0.500
	Nickel	--	320	8.2	2,560.6	9.14	< 2.50	< 2.50	< 2.50	< 2.50
	Zinc	--	4,800	81	773	4.98	5.95	8.84	13.3	6.07

Notes:

= Analytical results are compared to MTCA Method A criteria for unrestricted land use or Method B criteria, for analytes with no Method A criteria established.

< = concentration is less than the lab reporting limit

bgs = below ground surface

CUL = Cleanup Level

µg/L = micrograms per liter

LDW PCUL = Lower Duwamish Waterway Preliminary Cleanup Level, established by Washington Department of Ecology

MTCA = Washington State Model Toxics Control Act

NA = Not available/not applicable

NWTPH-Dx = Northwest Total Petroleum Hydrocarbons - Diesel Range

PAHs = Polycyclic Aromatic Hydrocarbons

VOCs = Volatile Organic Compounds

[1] LDW PCUL values shown are for trivalent chromium (chromium III).

[2] Samples were analyzed for metals, TPH, PCBs, PAHs, and VOCs

[3] Sample TW108 is a duplicate of Sample TW08.

[4] LDW PCULs are provided for reference only.

Table 4: Summary of Detected Soil Vapor Sample Analytical Results
1608 South 96th Street
Seattle, Washington

	Sample Location	MTCA Method B Shallow Soil Vapor CUL	LDW PCUL Sub-Slab Soil Gas SL Protect Indoor Air	SV01-20201103	SV02-20201104	SV03-20201104	SV04-20201104	SV05-20201104	SV06-20201104	SV07-20201104	SV11-20201103
	Sample Depth (feet bgs)			6.5'	6.5'	6.5'	6.5'	6.5'	6.5'	6.5'	6.5'
	Sample Date			11/3/2020	11/4/2020	11/4/2020	11/4/2020	11/4/2020	11/4/2020	11/4/2020	11/3/2020
Concentration (µg/m^3)	**NWTPH-Gx**										
	C5-C8 Aliphatics	--	--	39.4	2,370	227	7,370	609	707	129	509
	C9-C10 Aromatics	--	--	< 31.4	560	< 31.4	71.1	< 31.4	< 31.4	< 31.4	< 31.4
	C9-C12 Aliphatics	--	--	48.0	566	169	1,460	2,080	1,220	88.2	< 44.2
	Total Aliphatics/Aromatics	4,700	--	87.4	3,496	396	8,901.1	2,689	1,927	217.2	509
	VOCs										
	1,2,3-Trimethylbenzene	--	--	< 1.98	45.3	< 1.98	5.32	< 1.98	< 1.98	< 1.98	< 1.98
	1,2,4-Trichlorobenzene	30	30.45	< 2.23	3.76	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23
	1,2,4-Trimethylbenzene	910	914.3	< 1.47	69.9	< 1.47	11.3	3.10	6.90	< 1.47	< 1.47
	1,2-Dichloroethane	3.2	3.2	< 0.809	0.832	< 0.809	< 0.809	< 0.809	< 0.809	< 0.809	< 0.809
	1,3,5-Trimethylbenzene	--	--	< 1.47	36.9	< 1.47	3.06	< 1.47	1.93	< 1.47	< 1.47
	1,3-Butadiene	2.8	--	< 1.11	< 1.11	1.63	5.78	7.16	< 1.11	< 1.11	< 1.11
	1-Ethyl-3-methyl-benzene	--	--	< 1.09	65.4	1.18	8.37	1.95	3.05	< 1.09	< 1.09
	2,3-Dimethylheptane	--	--	< 2.24	2.64	< 2.24	< 2.24	< 2.24	< 2.24	< 2.24	< 2.24
	2,3-Dimethylpentane	--	--	< 2.93	31.8	< 2.93	53.0	< 2.93	< 2.93	< 2.93	< 2.93
	2-Butanone	76,000	76,266.67	< 2.95	56.1	< 2.95	48.4	8.94	6.43	< 2.95	3.81
	4-Ethyltoluene	--	--	< 1.97	20.4	< 1.97	3.09	< 1.97	< 1.97	< 1.97	< 1.97
	4-Methyl-2-pentanone	46,000	--	< 4.10	< 4.10	< 4.10	4.28	< 4.10	< 4.10	< 4.10	< 4.10
	Acetic acid, ethyl ester	--	--	< 3.60	43.8	< 3.60	30.2	< 3.60	< 3.60	< 3.60	5.40
	Acetone	--	--	7.70	344	97.2	4,500	62.4	42.6	19.3	56.2
	Acrolein	0.30	0.3	< 0.287	5.42	< 0.287	2.36	1.09	3.30	< 0.287	1.98
	Benzene	11	10.7	0.766	36.9	0.892	3.14	2.88	2.91	0.292	0.826
	Bromodichloromethane	2.3	2.2	< 2.01	5.47	< 2.01	3.10	< 2.01	< 2.01	< 2.01	< 2.01
	BUTANE, 2-METHYL-	--	--	9.68	378	121	< 2.10	79.7	28.6	24.4	71.1
	Carbon Disulfide	11,000	10,666.67	< 4.67	54.6	8.75	24.5	56.0	13.2	8.60	< 4.67
	Carbon Tetrachloride	14	13.9	0.476	0.585	0.450	0.522	< 0.413	0.503	0.472	< 0.413
	Chloroform	3.6	3.6	< 0.977	< 0.977	< 0.977	2.15	< 0.977	1.26	< 0.977	< 0.977
	Chloromethane	1,400	1,370.67	1.20	6.01	1.15	1.54	5.54	1.09	1.41	4.11
	Cumene	6,100	6,080	< 1.72	2.89	< 1.72	< 1.72	< 1.72	< 1.72	< 1.72	< 1.72
	Cyclohexane	--	--	< 1.38	63.0	17.5	3,350	10.3	6.40	1.42	< 1.38
	Cyclohexane, -butyl	--	--	< 3.12	3.48	< 3.12	11.8	9.77	5.98	< 3.12	< 3.12
	Dichlorodifluoromethane	1,500	1,525.3	2.61	2.48	2.50	2.47	< 1.98	2.37	2.39	2.90
	Dodecane	--	--	< 7.65	62.5	< 7.65	96.2	81.0	41.5	< 7.65	< 7.65
	Ethyl Benzene	15,000	15,253.3	< 1.74	30.2	< 1.74	9.02	1.87	4.80	< 1.74	< 1.74
	Isopropanol	--	--	< 2.46	5.30	< 2.46	11.3	< 2.46	3.59	< 2.46	< 2.46
	Naphthalene	2.5	2.5	< 0.524	7.71	< 0.524	6.05	3.39	0.903	2.89	< 0.524
	n-Heptane	--	--	< 1.61	22.9	3.20	223	3.90	6.09	< 1.61	< 1.61
	n-Hexane	11,000	10,666.67	< 1.41	56.9	< 1.41	16.0	7.08	9.37	< 1.41	< 1.41
	n-Octane	--	--	< 2.35	50.6	2.74	13.6	14.2	25.6	< 2.35	< 2.35
	NoNAne	--	--	< 2.55	7.97	< 2.55	16.0	2.98	2.80	< 2.55	< 2.55
	p-Cymene	--	--	< 2.45	7.84	< 2.45	7.68	< 2.45	< 2.45	< 2.45	< 2.45
	Propylene	--	--	8.20	145	98.7	1,970	121	22.9	16.0	3.09
	Styrene	15,000	15,253.30	< 1.70	39.4	3.09	293	4.07	2.39	< 1.70	< 1.70
	Tetrachloroethene	320	320.5	< 1.36	< 1.36	< 1.36	2.84	< 1.36	< 1.36	1.46	< 1.36
	Tetrahydrofuran	--	--	< 1.18	7.79	< 1.18	< 1.18	< 1.18	1.47	< 1.18	< 1.18
	Toluene	76,000	76,266.67	38.5	119	13.0	128	8.31	23.9	6.98	2.83
	Trichloroethene	11	11.0	< 0.349	< 0.349	< 0.349	< 0.349	< 0.349	< 0.349	0.579	< 0.349
	Trichlorofluoromethane	11,000	10,666.67	< 2.25	11.3	2.52	2.68	< 2.25	55.1	< 2.25	< 2.25
	Undecane	--	--	< 5.04	36.7	< 5.04	36.8	31.1	16.1	< 5.04	< 5.04
	Vinyl Acetate	3,000	3,045.30	< 3.52	63.2	17.0	1,290	13.2	< 3.52	< 3.52	< 3.52
	Vinyl Chloride	9.5	28.0	< 0.274	0.953	< 0.274	< 0.274	< 0.274	< 0.274	< 0.274	< 0.274
	m,p-xylene	--	--	< 3.47	166	< 3.47	29.7	4.16	15.7	< 3.47	< 3.47
	ortho-xylene	--	--	< 1.74	64.2	< 1.74	13.4	1.97	6.35	< 1.74	< 1.74
	Total Xylenes	1,500	--	NA	230.2	NA	43.1	6.13	22.05	NA	NA

Notes:

= Analytical results are compared to Method B criteria for subslab soil gas samples, which is for samples collected at depths shallower than 15 feet bgs. There is no Method A criteria established for soil vapor samples.

< =concentration is less than the lab reporting limit

bgs = below ground surface

CUL = Cleanup Level

LDW PCUL = Lower Duwamish Waterway Preliminary Cleanup Level, established by Washington Department of Ecology

MTCA = Washington State Model Toxics Control Act

µg/m^3 = micrograms per cubic meter

NA = not applicable

[1] LDW PCULs are provided for reference only.

Table 5: Summary of Detected Sub-slab Soil Vapor Sample Analytical Results
1608 South 96th Street
Seattle, Washington

	Sample Location	MTCA Method B Shallow Soil Vapor CUL ($\mu g/m^3$)	LDW PCUL Sub-Slab Soil Gas SL Protect Indoor Air ($\mu g/m^3$)	MTCA Method B - Indoor Air CUL ($\mu g/m^3$)	SSV-01-20201207	SSV-02-20201207	SSV-03-20201207	SSV-04-20201207	SSV-104-20201207[1]
	Sample Depth (feet bgs)				0.5	0.5	0.5	0.5	0.5
	Sample Date				12/7/2020	12/7/2020	12/7/2020	12/7/2020	12/7/2020
Concentration ($\mu g/m^3$)	**NWTPH-Gx**								
	C5-C8 Aliphatics	--	--	--	1,620	8,570	3,190	593	555
	C9-C10 Aromatics	--	--	--	< 31.4	241	< 31.4	< 31.4	1,240
	C9-C12 Aliphatics	--	--	--	726	7,570	< 44.2	191	1,550
	Total Aliphatics/Aromatics	4,700	--	--	2,346	16,381	3,190	784	3,345
	VOCs								
	1,1,1-Trichloroethane	76,000	76,266.67	2,290	< 2.18	5.82	2.33	< 2.18	< 2.18
	1,1-Dichloroethene	3,000	3,045.30	--	< 1.59	6.27	< 1.59	< 1.59	< 1.59
	1,2,3-Trimethylbenzene	--	--	--	2.05	25.3	< 1.98	< 1.98	< 1.98
	1,2,4-Trimethylbenzene	910	914.3	27.40	2.32	12.6	2.28	2.39	< 1.47
	1,2-Dichloroethane	3.2	3.2	0.096	< 0.809	0.998	0.829	< 0.809	< 0.809
	1,3-Butadiene	2.8	--	0.083	< 1.11	6.14	1.92	< 1.11	< 1.11
	1-Ethyl-3-methyl-benzene	--	--	--	1.92	17.4	1.62	1.89	< 1.09
	2,3-Dimethylheptane	--	--	--	< 2.24	59.4	< 2.24	< 2.24	< 2.24
	2,3-Dimethylpentane	--	--	--	9.54	59.4	220	< 2.93	< 2.93
	2-Butanone	76,000	76,266.67	2,285.71	< 2.95	18.5	< 2.95	6.04	< 2.95
	4-Ethyltoluene	--	--	--	< 1.97	6.15	< 1.97	< 1.97	< 1.97
	Acetic acid, ethyl ester	--	--	--	< 3.60	131	54.0	< 3.60	< 3.60
	Acetone	--	--	--	26.3	223	378	1,910	1,040
	Benzene	11	10.68	0.32	1.85	77.8	1.54	0.912	< 0.286
	Bromodichloromethane	2.3	2.2	--	< 2.01	9.50	8.13	< 2.01	< 2.01
	Butane, 2-Methyl-	--	--	--	39.7	321	72.0	167	172
	Chlorobenzene	760	762.67	22.86	< 0.921	2.12	< 0.921	< 0.921	< 0.921
	Chloromethane	1,400	1,370.67	41.14	15.8	157	< 1.03	< 1.03	< 1.03
	Cumene	6,100	6,080	182.86	< 1.72	4.36	< 1.72	< 1.72	< 1.72
	Cyclohexane	--	--	--	3.19	52.8	33.0	46.3	2.32
	Cyclohexane, -butyl	--	--	--	5.10	38.7	< 3.12	< 3.12	6.38
	Decane	--	--	--	14.0	30.9	3.31	6.75	< 2.42
	Dichlorodifluoromethane	1,500	1,525.3	45.71	2.58	2.59	2.68	2.74	2.82
	Dodecane	--	--	--	< 7.65	27.4	16.6	19.9	16.8
	Ethyl Benzene	15,000	15,253.3	457.14	< 1.74	22.3	2.97	2.07	< 1.74
	Isopropanol	--	--	--	< 2.46	3.01	6.16	3.89	< 2.46
	m,p-xylene	--	--	--	< 3.47	43.2	7.94	7.41	< 3.47
	Methylene Chloride	2,200	2,200	65.79	39.7	< 6.95	< 6.95	< 6.95	< 6.95
	Naphthalene	2.5	2.45	0.074	< 0.524	< 0.524	< 0.524	5.95	< 0.524
	n-Heptane	--	--	--	3.67	203	37.8	4.15	< 1.61
	n-Hexane	11,000	10,666.67	320	5.78	413	167	< 1.41	< 1.41
	n-Octane	--	--	--	2.36	104	6.66	8.36	< 2.35
	Nonane	--	--	--	3.41	26.9	< 2.55	< 2.55	< 2.55
	ortho-xylene	--	--	--	< 1.74	29.5	2.53	2.38	< 1.74
	p-Cymene	--	--	--	< 2.45	11.7	< 2.45	< 2.45	6.59
	Propylene	--	--	--	17.5	425	8.48	23.5	2.51
	Styrene	15,000	15,253.30	457.14	< 1.70	12.2	10.2	33.5	7.49
	Tetrachloroethene	320	320.51	9.62	4.70	78.0	1.99	2.16	2.23
	Toluene	76,000	76,266.67	2,285.71	4.86	111	120	17.1	2.86
	Trichloroethene	11	11	0.33	1.52	8.98	13.0	0.563	< 0.349
	Trichlorofluoromethane	11,000	10,666.67	320	< 2.25	47.2	2.46	3.11	2.95
	Undecane	--	--	--	7.41	38.2	7.19	< 5.04	< 5.04
	Vinyl Acetate	3,000	3,045.30	91.43	6.44	239	223	30.6	< 3.52

Notes:

= Analytical results are compared to Method B criteria for subslab soil gas samples, which is for samples collected at depths shallower than 15 feet bgs. There is no Method A criteria established for soil vapor samples.

< =concentration is less than the lab
bgs = below ground surface
CUL = Cleanup Level
$\mu g/m^3$ = micrograms per cubic meter
LDW PCUL = Lower Duwamish Waterway Preliminary Cleanup Level, established by Washington Department of Ecology

MTCA = Washington State Model Toxics Control Act
NA = not applicable
[1] Sample SSV104 is a duplicate of Sample SSV04
[2] LDW PCULs are provided for reference only.

Table 5: Summary of Detected Sub-slab Soil Vapor Sample Analytical Results
1608 South 96th Street
Seattle, Washington

	Sample Location	MTCA Method B Shallow Soil Vapor CUL ($\mu g/m^3$)	LDW PCUL Sub-Slab Soil Gas SL Protect Indoor Air ($\mu g/m^3$)	MTCA Method B - Indoor Air CUL ($\mu g/m^3$)	SSV-05-20201207	SSV-06-20201207	SSV-07-20201207	SSV-08-20201207	SSV-09-20201207
	Sample Depth (feet bgs)				0.5	0.5	0.5	0.5	0.5
	Sample Date				12/7/2020	12/7/2020	12/7/2020	12/7/2020	12/7/2020
Concentration ($\mu g/m^3$)	**NWTPH-Gx**								
	C5-C8 Aliphatics	--	--	--	321	288	11,700	2,150	428
	C9-C10 Aromatics	--	--	--	< 31.4	< 31.4	< 31.4	< 31.4	< 31.4
	C9-C12 Aliphatics	--	--	--	56	< 44.2	211	130	201
	Total Aliphatics/Aromatics	4,700	--	--	377	288	11,911	2,280	629
	VOCs								
	1,1,1-Trichloroethane	76,000	76,266.67	2,290	< 2.18	3.75	< 2.18	3.07	< 2.18
	1,1-Dichloroethene	3,000	3,045.30	--	< 1.59	< 1.59	< 1.59	< 1.59	< 1.59
	1,2,3-Trimethylbenzene	--	--	--	< 1.98	< 1.98	< 1.98	< 1.98	< 1.98
	1,2,4-Trimethylbenzene	910	914.3	27.40	2.06	2.14	2.62	2.84	2.60
	1,2-Dichloroethane	3.2	3.2	0.096	< 0.809	< 0.809	< 0.809	< 0.809	< 0.809
	1,3-Butadiene	2.8	--	0.083	< 1.11	< 1.11	6.59	1.32	< 1.11
	1-Ethyl-3-methyl-benzene	--	--	--	1.51	1.56	2.28	2.63	2.09
	2,3-Dimethylheptane	--	--	--	< 2.24	< 2.24	2.51	< 2.24	< 2.24
	2,3-Dimethylpentane	--	--	--	< 2.93	< 2.93	412	3.90	< 2.93
	2-Butanone	76,000	76,266.67	2,285.71	< 2.95	4.95	11.4	4.53	7.14
	4-Ethyltoluene	--	--	--	< 1.97	< 1.97	< 1.97	< 1.97	< 1.97
	Acetic acid, ethyl ester	--	--	--	< 3.60	< 3.60	7.22	< 3.60	< 3.60
	Acetone	--	--	--	56.9	68.0	129	764	431
	Benzene	11	10.68	0.32	0.489	0.963	2.05	0.571	2.07
	Bromodichloromethane	2.3	2.2	--	< 2.01	< 2.01	3.61	< 2.01	< 2.01
	Butane, 2-Methyl-	--	--	--	31.4	21.0	196	90.8	45.6
	Chlorobenzene	760	762.67	22.86	< 0.921	< 0.921	< 0.921	< 0.921	1.07
	Chloromethane	1,400	1,370.67	41.14	< 1.03	< 1.03	< 1.03	2.22	< 1.03
	Cumene	6,100	6,080	182.86	< 1.72	< 1.72	< 1.72	< 1.72	< 1.72
	Cyclohexane	--	--	--	5.22	11.1	56.1	11.9	8.63
	Cyclohexane, -butyl	--	--	--	< 3.12	< 3.12	< 3.12	< 3.12	< 3.12
	Decane	--	--	--	< 2.42	2.74	5.21	3.08	3.49
	Dichlorodifluoromethane	1,500	1,525.3	45.71	2.99	2.45	2.68	3.49	2.56
	Dodecane	--	--	--	21.4	< 7.65	15.9	18.4	17.8
	Ethyl Benzene	15,000	15,253.3	457.14	< 1.74	1.89	3.12	2.10	2.10
	Isopropanol	--	--	--	4.04	< 2.46	5.39	13.2	9.35
	m,p-xylene	--	--	--	5.45	7.10	8.66	8.57	7.55
	Methylene Chloride	2,200	2,200	65.79	< 6.95	< 6.95	< 6.95	< 6.95	< 6.95
	Naphthalene	2.5	2.45	0.074	< 0.524	< 0.524	< 0.524	< 0.524	5.79
	n-Heptane	--	--	--	< 1.61	2.21	7.26	6.24	3.50
	n-Hexane	11,000	10,666.67	320	1.71	< 1.41	17.5	< 1.41	2.53
	n-Octane	--	--	--	< 2.35	6.49	25.3	8.70	6.65
	Nonane	--	--	--	< 2.55	< 2.55	< 2.55	< 2.55	< 2.55
	ortho-xylene	--	--	--	< 1.74	1.95	3.44	2.61	2.54
	p-Cymene	--	--	--	< 2.45	< 2.45	< 2.45	< 2.45	< 2.45
	Propylene	--	--	--	14.1	49.6	190	5.71	10.9
	Styrene	15,000	15,253.30	457.14	4.68	12.1	26.0	39.6	28.1
	Tetrachloroethene	320	320.51	9.62	< 1.36	3.10	< 1.36	3.20	2.13
	Toluene	76,000	76,266.67	2,285.71	7.18	11.8	63.2	30.4	16.0
	Trichloroethene	11	11	0.33	< 0.349	1.75	< 0.349	< 0.349	< 0.349
	Trichlorofluoromethane	11,000	10,666.67	320	27.2	14.8	< 2.25	175	2.33
	Undecane	--	--	--	< 5.04	5.49	5.60	7.44	7.56
	Vinyl Acetate	3,000	3,045.30	91.43	3.87	5.14	115	3.67	4.88

Notes:

= Analytical results are compared to Method B criteria for subslab soil gas samples, which is for samples collected at depths shallower than 15 feet bgs. There is no Method A criteria established for soil vapor samples.

< =concentration is less than the lab
bgs = below ground surface
CUL = Cleanup Level
$\mu g/m^3$ = micrograms per cubic meter
LDW PCUL = Lower Duwamish Waterway Prelim established by Washington Departme

MTCA = Washington State Model Toxics Control Act
NA = not applicable
[1] Sample SSV104 is a duplicate of Sample SSV04
[2] LDW PCULs are provided for reference only.

Table 6: Summary of Soil TCLP Analytical Results
1608 South 96th Street
Seattle, Washington

Sample Location		Maximum Concentration of Contaminants for the Toxicity Characteristic (mg/L)	SB01-5-20201103	SB02-2.5-20201104
Sample Depth (feet bgs)			5	2.5
Sample Date			11/3/2020	11/4/2020
Concentration (mg/L)	Arsenic	5.0	< 0.100	< 0.100
	Lead	5.0	0.534	0.206

Notes:

<	= concentration is less than the lab reporting limit
bgs	= below ground surface
mg/L	= milligrams per liter
TCLP	= Toxicity characteristic leaching procedure

APPENDIX A
SOIL BORING LOGS

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB01**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/3/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes: Temporary groundwater well installed and screened from 10.0 to 15.0 feet below ground surface (ft bgs).		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **15.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.) / Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
0			0.0				Asphalt.
1–3						SP	**SAND with gravel (SP),** loose, dry.
3–5						SM	**Fill Material as SILTY SAND (SM), GRAY (10YR 6/1)**; fine grained sand.
5			0.0				
6–8							
8			0.0				
9–10							Asphalt Slough.
10			0.0			SM	**Fill Material as SILTY SAND (SM), GRAY (10YR 6/1)**; fine grained sand.
11–12						CL	**SILTY CLAY (CL), GRAY (10YR 6/1)**; color darkens with depth to VERY DARK GRAY (10YR 3/1), wet.
13–14						SM	**SILTY SAND (SM), DARK GRAYISH BROWN (10YR 4/2)**; loose, wet.
15							Boring completed to a depth of 15 feet on 11/3/2020.

Sample/ Recovery Key

Soil Recovery Chemical Sample ▽

Report: 11/20/2020; PROLOGIS; File: PROLOGIS BORING LOGS.GPJ; 11/20/20

RAMBOLL

5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB02**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/4/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes:		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **15.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.)	Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
	0			0.0				Concrete Slab.
							SP	**Fill Material as SAND (SP), LIGHT GRAY (10YR 7/1)**; very fine grained to fine grained sand, trace medium gravel.
				0.0				
	5			0.0				
	10			0.0				
▽							SM	**SILTY SAND (SM)**
								From 12.0 to 12.5 feet: becomes saturated.
	15							Boring completed to 15.0 feet on 11/4/2020.
	20							
	25							

Sample/ Recovery Key

Soil Recovery Chemical Sample ▽

Report: 11/20/2020; PROLOGIS; File: PROLOGIS BORING LOGS.GPJ; 11/20/20

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB03**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/4/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes:		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **6.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.)	Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
				0.0				Concrete Slab..
	1						SP	**Fill Material as SAND (SP), LIGHT BROWN** medium grained sand, loose, dry.
	2							
	3							
	4							
	5						SM	**SILTY SAND (SM), DARK BROWN (10YR 3/3)**; dense, moist.
	6			0.0			CL	**SILTY CLAY (CL), DARK GRAY (10YR 4/1)**; slight odor, no PID.
								Boring completed to a depth of 6.5 feet.

Sample/ Recovery Key

Soil Recovery Chemical Sample

Report: 11/20/2020; PROLOGIS; File: PROLOGIS BORING LOGS.GPJ; 11/20/20

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB04**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/4/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes:		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **15.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.)	Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
	0			0.0				Concrete Slab..
	1						SP	**SAND with gravel (SP), BROWN (10YR 4/3)**; fine grained to medium grained sand, loose, dry.
	2							From 1.0 feet: color becomes LIGHT BROWNISH GRAY (10YR 4/3).
	3			0.0			SM	**SILTY SAND (SM), BROWN (10YR 4/3)**; with YELLOWISH BROWN (10YR 5/4).
	4			0.0				
	5							
	6			0.0				
	7							
	8			0.0			CL	**SILTY CLAY (CL)**
	9							
▽	10						SP	**SAND (SP), VERY DARK GRAY (10YR 3/1)**; fine grained to medium grained sand, loose, wet.
	11							
	12							
	13			0.0				
	14							
	15							Boring completed to a depth of 15 feet on 11/4/2020.

Sample/ Recovery Key

Soil Recovery Chemical Sample ▽

Report: 11/20/2020; PROLOGIS; File: PROLOGIS BORING LOGS.GPJ; 11/20/20

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB05**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/4/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes:		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **10.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.) / Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
0			0.0				Concrete Slab..
						SP	**SAND with gravel (SP), VERY DARK GRAY (10YR 3/1)**; medium grained sand, loose, dry.
1						SP	**SAND (SP), VERY DARK BROWN (10YR 2/2)**; fine grained to medium grained sand.
2						CL	**SILTY CLAY (CL), DARK GRAY (10YR 4/1)**; dense, damp.
3							
4			0.0				From 3.5 feet: color becomes GRAYISH BROWN (10YR 5/2).
5			0.0				From 5.0 feet: color becomes DARK GRAY (10YR 4/1).
6			0.0			SM	**SILTY SAND (SM),** fine grained to medium grained sand, damp.
7							
8						SP	**SAND (SP), VERY DARK GRAY (10YR 3/1)**; fine grained to medium grained sand, loose.
▽ 9						SM	**SILTY SAND (SM), DARK GRAY (10YR 4/1)**; fine grained to medium grained sand, damp. From 9.0 feet: becomes saturated.
						SP	**SAND (SP), VERY DARK GRAY (10YR 3/1)**; fine grained to medium grained sand, loose, wet.
10							Boring completed to a depth of 10.0 feet on 11/4/2020.

Sample/ Recovery Key

Soil Recovery Chemical Sample ▽

Report: 11/20/2020; PROLOGIS; File: PROLOGIS BORING LOGS.GPJ; 11/20/20

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB06**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/4/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes:		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **10.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.) / Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
0			0.0				Concrete Slab..
1						SP	**SAND (SP), BROWN (10YR 4/3)**; medium grained to coarse grained sand, trace gravel, loose, dry.
2							
3							
4							
5			0.0			CL	**SILTY CLAY (CL), GRAY (10YR 5/1)**; medium dense, moist.
6							
7							
8			0.0			SM	**SILTY SAND (SM), DARK GRAY (10YR 4/1)**; fine grained to medium grained sand.
9						SP	**SAND (SP), GRAY (10YR 4/1)**; fine grained to medium grained sand, trace coarse sand.
▽							
10							

Sample/ Recovery Key

Soil Recovery Chemical Sample ▽

Report: 11/20/2020; PROLOGIS; File: PROLOGIS BORING LOGS.GPJ; 11/20/20

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB07**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/3/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes: Temporary groundwater well installed and screened from 10.0 to 15.0 feet below ground surface (ft bgs).		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **15.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.) / Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
0			0.0				Concrete Slab.
1						SP	**SAND with gravel (SP),** loose.
2						SP/GP	**SAND with gravel/ GRAVEL with sand (SP/GP), GRAY (10YR 6/1)**; fine grained to medium grained sand, coarse gravel, loose (50% gravel, 50% sand, % fines).
3							From 3.5 feet: color becomes BROWN (10YR 6/1).
						SP	**SAND (SP), GRAY (10YR 4/1)**; fine grained to medium grained sand.
4						GP	**GRAVEL (GP)**
5			0.0			CL	**SILTY CLAY (CL), DARK GRAY (10YR 5/1)**; slight organic odor, no PID, damp.
			0.0				From 5.0 feet: color becomes GRAY (10YR 5/1), medium dense, damp.
6							
7			0.0				
8							
9						SM	**SILTY SAND (SM), VERY DARK GRAY (10YR 4/1)**; loose, damp.
10			0.0			SP	**SAND (SP), VERY DARK GRAY (10YR 3/1)**; fine grained to medium grained sand, loose, damp.
▽ 11							At 11 feet: becomes saturated.
12							
13							
14							
15							Boring completed to a depth of 15.0 feet on 11/3/2020.

Sample/ Recovery Key

Soil Recovery Chemical Sample ▽

Report: 11/20/2020: PROLOGIS: File: PROLOGIS BORING LOGS.GPJ: 11/20/20

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB08**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/3/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes: Temporary groundwater well installed and screened from 10.0 to 15.0 feet below ground surface (ft bgs). Accurated recording of saturated soil depth was not possible due to heavy rain.		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **15.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.) / Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
0			0.0				Asphalt..
1						SP	**SAND with gravel (SP),** trace cobbles, loose, dry.
2							
3						SP	**SAND (SP), BROWN (10YR 3/3)**; medium grained sand, trace cobbles.
4							
5			0.0				
			0.0				From 8.5 feet: scattered brick fragments.
6							
7							
8							
9			0.0			CL	**SILTY CLAY (CL), VERY DARK GRAY (10YR 3/1)**; medium dense, wet.
▽ 10			0.0				At 9.5 feet: roots observed.
11						SP	**SAND (SP), VERY DARK GRAY (10YR 3/1)**; fine grained to medium grained sand, loose, wet.
12							
13							
14							
15							Boring completed to a depth of 15.0 feet on 11/3/2020.

Sample/ Recovery Key

Soil Recovery Chemical Sample ▽

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB11**			
Project Name: **Prologis: 1608 S 96th St Phase II Investigation**			
Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/3/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes:		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **15.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.) / Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
0–1			0.0			SP	**SAND with gravel (SP), VERY DARK BROWN (10YR 2/2)**; loose, dry.
1–2			0.0			SM	**SILTY SAND (SM), VERY DARK BROWN (10YR 2/2)**; loose, moist.
2–3			0.0				
3–4						CL	**SILTY CLAY (CL)**
4–5			0.0				From 5.0 feet: color becomes GRAY (10YR 5/1), medium dense, scattered pockets of BROWN (10YR 5/4), moist.
5–6			0.0				
6–7						SM	**SILTY SAND (SM), GRAY (10YR 6/1)**; medium dense, moist.
7–8			0.0			SP	**SAND (SP), DARK GRAY** fine grained sand, loose.
8–9							
9–10							From 10.0 feet: color becomes VERY DARK GRAY (10YR 3/1), fine grained to medium grained sand, loose, moist.
10–11							From 11.0 to 12.0 feet: becomes saturated.
11–12							
12–13							
13–14							
14–15							
15							Boring completed to a depth of 15.0 feet on 11/3/2020.

Sample/ Recovery Key

Soil Recovery Chemical Sample ▽

Report: 11/20/2020; PROLOGIS; File: PROLOGIS BORING LOGS.GPJ; 11/20/20

RAMBOLL
5 Park Plaza #500, Irvine, CA 92614

Boring Number: **SB12**

Project Name: **Prologis: 1608 S 96th St Phase II Investigation**

Contractor: **Steadfast Drilling**	Driller: **G. Metzger**	Location: **Seattle, Washington**	Project Number: **1690019285-002**
Drilling Method: **GeoProbe**		Date(s): **11/4/2020**	
Rig Type: **7720DT**		Logged By: **S.Leick**	Checked By: **A. Kephart**
Sampling Method: **Grab Sample**		GS Elevation: **Not Available**	TOC Elevation: **Not Available**
Notes: Temporary groundwater well installed and screened from 10.0 to 15.0 feet below ground surface (ft bgs).		Northing: **Not Available**	Easting: **Not Available**
		Total Depth: **15.0 feet**	Borehole Dia.: **2.25 inches**

Elevation (ft.) / Depth (ft)	Soil Drive Interval	Soil Sample Interval	PID (ppm)	Unit/ Formation	Graphic Log	USCS Code	Material Description
0			0.0				Asphalt..
1						SP	**SAND with gravel (SP), DARK BROWN (10YR 3/2)**; loose, moist.
2							
3						SP	**SAND (SP), BLACK (10YR 5/1)**; medium grained sand, trace gravel and organics.
						GP	**GRAVEL with sand (GP)**
						SP	**SAND (SP), VERY DARK GRAY (10YR 3/1)**; medium grained to coarse grained sand.
4			0.0			CL	**SILTY CLAY (CL), GRAY (10YR 6/1)**; medium dense, moist.
5			0.0				
6							
7							
8						SM	**SILTY SAND (SM), GRAY (10YR 6/1)**; fine grained sand.
9							At 9.0 feet: LIGHT GRAY (10YR 7/1) striations.
10			0.0			SP	**SAND (SP), VERY DARK GRAY (10YR 3/1)**; fine grained to medium grained sand, loose,.
11							
12							
13							
14							
15							Boring completed to a depth of 15.0 feet on 11/4/2020.

Sample/ Recovery Key

Soil Recovery Chemical Sample

APPENDIX B
LABORATORY ANALYTICAL RESULTS

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Ramboll Environ
Amy Kephart
901 5th Ave., Ste. 2820
Seattle, WA 98164

RE: Delta Marine
Work Order Number: 2011044

December 02, 2020

Attention Amy Kephart:

Fremont Analytical, Inc. received 6 sample(s) on 11/3/2020 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Dissolved Mercury by EPA Method 245.1
Dissolved Metals by EPA Method 200.8
Gasoline by NWTPH-Gx
Mercury by EPA Method 7471
Metals (EPA 200.8) with TCLP Extraction (EPA 1311)
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)
Polychlorinated Biphenyls (PCB) by EPA 8082
Sample Moisture (Percent Moisture)
Total Metals by EPA Method 6020B
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

CC:
Sam Leick

Date: *12/02/2020*

CLIENT: Ramboll Environ
Project: Delta Marine
Work Order: 2011044

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2011044-001	SB11-3-20201103	11/03/2020 8:50 AM	11/03/2020 2:21 PM
2011044-002	SB11-6.5-20201103	11/03/2020 9:02 AM	11/03/2020 2:21 PM
2011044-003	SB01-5-20201103	11/03/2020 10:45 AM	11/03/2020 2:21 PM
2011044-004	SB01-8-20201103	11/03/2020 10:55 AM	11/03/2020 2:21 PM
2011044-005	TW01-20201103	11/03/2020 11:02 AM	11/03/2020 2:21 PM
2011044-006	TB-20201103	11/03/2020 1:45 PM	11/03/2020 2:21 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2011044**
Date: **12/2/2020**

CLIENT: Ramboll Environ
Project: Delta Marine

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2011044**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Collection Date: 11/3/2020 8:50:00 AM
Project: Delta Marine
Lab ID: 2011044-001
Matrix: Sediment
Client Sample ID: SB11-3-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Aroclor 1221	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Aroclor 1232	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Aroclor 1242	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Aroclor 1248	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Aroclor 1254	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Aroclor 1260	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Aroclor 1262	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Aroclor 1268	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Total PCBs	ND	0.143		mg/Kg-dry	1	11/19/2020 7:01:30 PM
Surr: Decachlorobiphenyl	75.6	6.8 - 211		%Rec	1	11/19/2020 7:01:30 PM
Surr: Tetrachloro-m-xylene	112	7.85 - 182		%Rec	1	11/19/2020 7:01:30 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30277		Analyst: DW
Diesel (Fuel Oil)	ND	26.7		mg/Kg-dry	1	11/4/2020 7:47:11 PM
Heavy Oil	ND	66.6		mg/Kg-dry	1	11/4/2020 7:47:11 PM
Surr: 2-Fluorobiphenyl	85.0	50 - 150		%Rec	1	11/4/2020 7:47:11 PM
Surr: o-Terphenyl	84.2	50 - 150		%Rec	1	11/4/2020 7:47:11 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	738	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
2-Methylnaphthalene	523	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
1-Methylnaphthalene	422	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Acenaphthylene	ND	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Acenaphthene	2,140	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Fluorene	2,240	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Phenanthrene	13,800	510	D	µg/Kg-dry	10	11/18/2020 8:28:35 AM
Anthracene	3,710	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Fluoranthene	14,200	510	D	µg/Kg-dry	10	11/18/2020 8:28:35 AM
Pyrene	11,100	510	D	µg/Kg-dry	10	11/18/2020 8:28:35 AM
Benz(a)anthracene	4,900	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Chrysene	4,000	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Benzo(b)fluoranthene	3,390	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Benzo(k)fluoranthene	3,340	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Benzo(a)pyrene	4,780	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Indeno(1,2,3-cd)pyrene	1,890	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Dibenz(a,h)anthracene	997	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 8:50:00 AM
Project: Delta Marine
Lab ID: 2011044-001
Matrix: Sediment
Client Sample ID: SB11-3-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	1,810	51.0		µg/Kg-dry	1	11/17/2020 8:26:36 PM
Surr: 2-Fluorobiphenyl	66.3	16.9 - 122		%Rec	1	11/17/2020 8:26:36 PM
Surr: Terphenyl-d14 (surr)	100	38.4 - 153		%Rec	1	11/17/2020 8:26:36 PM
Gasoline by NWTPH-Gx				Batch ID: 30274		Analyst: KT
Gasoline	ND	6.50		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Surr: Toluene-d8	101	65 - 135		%Rec	1	11/5/2020 11:28:24 AM
Surr: 4-Bromofluorobenzene	102	65 - 135		%Rec	1	11/5/2020 11:28:24 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30274		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0260	Q	mg/Kg-dry	1	11/5/2020 11:28:24 AM
Chloromethane	ND	0.0650		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Vinyl chloride	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Bromomethane	ND	0.0650		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Trichlorofluoromethane (CFC-11)	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Chloroethane	ND	0.0650		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,1-Dichloroethene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Methylene chloride	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
trans-1,2-Dichloroethene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Methyl tert-butyl ether (MTBE)	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,1-Dichloroethane	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
cis-1,2-Dichloroethene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Chloroform	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,1,1-Trichloroethane (TCA)	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,1-Dichloropropene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Carbon tetrachloride	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,2-Dichloroethane (EDC)	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Benzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Trichloroethene (TCE)	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,2-Dichloropropane	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Bromodichloromethane	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Dibromomethane	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
cis-1,3-Dichloropropene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Toluene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
trans-1,3-Dichloropropylene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,1,2-Trichloroethane	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,3-Dichloropropane	ND	0.0325		mg/Kg-dry	1	11/5/2020 11:28:24 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 8:50:00 AM
Project: Delta Marine
Lab ID: 2011044-001
Matrix: Sediment
Client Sample ID: SB11-3-20201103

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30274 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Dibromochloromethane	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,2-Dibromoethane (EDB)	ND	0.00650		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Chlorobenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,1,1,2-Tetrachloroethane	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Ethylbenzene	ND	0.0325		mg/Kg-dry	1	11/5/2020 11:28:24 AM
m,p-Xylene	ND	0.0650		mg/Kg-dry	1	11/5/2020 11:28:24 AM
o-Xylene	ND	0.0325		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Styrene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Isopropylbenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Bromoform	ND	0.0650		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,1,2,2-Tetrachloroethane	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
n-Propylbenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Bromobenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,3,5-Trimethylbenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
2-Chlorotoluene	ND	0.0325		mg/Kg-dry	1	11/5/2020 11:28:24 AM
4-Chlorotoluene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
tert-Butylbenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,2,3-Trichloropropane	ND	0.0325		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,2,4-Trichlorobenzene	ND	0.0260	Q	mg/Kg-dry	1	11/5/2020 11:28:24 AM
sec-Butylbenzene	ND	0.0325		mg/Kg-dry	1	11/5/2020 11:28:24 AM
4-Isopropyltoluene	ND	0.0325		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,3-Dichlorobenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,4-Dichlorobenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
n-Butylbenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,2-Dichlorobenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,2-Dibromo-3-chloropropane	ND	0.650	Q	mg/Kg-dry	1	11/5/2020 11:28:24 AM
1,2,4-Trimethylbenzene	ND	0.0260		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Hexachloro-1,3-butadiene	ND	0.0325		mg/Kg-dry	1	11/5/2020 11:28:24 AM
Naphthalene	ND	0.0650		mg/Kg-dry	1	11/7/2020 7:26:51 AM
1,2,3-Trichlorobenzene	ND	0.0260	Q	mg/Kg-dry	1	11/5/2020 11:28:24 AM
Surr: Dibromofluoromethane	87.9	85.2 - 113		%Rec	1	11/7/2020 7:26:51 AM
Surr: Dibromofluoromethane	97.3	85.2 - 113		%Rec	1	11/5/2020 11:28:24 AM
Surr: Toluene-d8	101	88.5 - 110		%Rec	1	11/5/2020 11:28:24 AM
Surr: Toluene-d8	96.3	88.5 - 110		%Rec	1	11/7/2020 7:26:51 AM
Surr: 1-Bromo-4-fluorobenzene	96.9	88.6 - 109		%Rec	1	11/5/2020 11:28:24 AM
Surr: 1-Bromo-4-fluorobenzene	98.4	88.6 - 109		%Rec	1	11/7/2020 7:26:51 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011044**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Collection Date: 11/3/2020 8:50:00 AM
Project: Delta Marine
Lab ID: 2011044-001
Matrix: Sediment
Client Sample ID: SB11-3-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Mercury by EPA Method 7471				Batch ID: 30284		Analyst: WF
Mercury	ND	0.365		mg/Kg-dry	1	11/4/2020 2:04:44 PM
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	ND	0.209		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Arsenic	8.49	0.261		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Beryllium	0.502	0.209		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Cadmium	0.511	0.209		mg/Kg-dry	1	11/10/2020 1:41:01 PM
Chromium	29.1	0.104		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Copper	38.8	0.209		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Lead	22.8	0.209		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Nickel	22.0	0.522		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Selenium	1.34	0.522		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Silver	0.244	0.104		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Thallium	ND	0.209		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Zinc	90.6	0.522		mg/Kg-dry	1	11/9/2020 4:37:46 PM
Sample Moisture (Percent Moisture)				Batch ID: R63112		Analyst: CJ
Percent Moisture	31.5	0.500		wt%	1	11/4/2020 8:11:58 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 10:45:00 AM
Project: Delta Marine
Lab ID: 2011044-003
Matrix: Sediment
Client Sample ID: SB01-5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Aroclor 1221	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Aroclor 1232	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Aroclor 1242	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Aroclor 1248	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Aroclor 1254	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Aroclor 1260	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Aroclor 1262	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Aroclor 1268	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Total PCBs	ND	0.169		mg/Kg-dry	1	11/19/2020 7:11:12 PM
Surr: Decachlorobiphenyl	78.5	6.8 - 211		%Rec	1	11/19/2020 7:11:12 PM
Surr: Tetrachloro-m-xylene	60.8	7.85 - 182		%Rec	1	11/19/2020 7:11:12 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30277		Analyst: DW
Diesel (Fuel Oil)	ND	31.2		mg/Kg-dry	1	11/4/2020 9:16:00 PM
Heavy Oil	ND	78.0		mg/Kg-dry	1	11/4/2020 9:16:00 PM
Surr: 2-Fluorobiphenyl	78.4	50 - 150		%Rec	1	11/4/2020 9:16:00 PM
Surr: o-Terphenyl	80.8	50 - 150		%Rec	1	11/4/2020 9:16:00 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
2-Methylnaphthalene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
1-Methylnaphthalene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Acenaphthylene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Acenaphthene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Fluorene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Phenanthrene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Anthracene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Fluoranthene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Pyrene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Benz(a)anthracene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Chrysene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Benzo(b)fluoranthene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Benzo(k)fluoranthene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Benzo(a)pyrene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Indeno(1,2,3-cd)pyrene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Dibenz(a,h)anthracene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011044-003
Client Sample ID: **SB01-5-20201103**

Collection Date: 11/3/2020 10:45:00 AM
Matrix: Sediment

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	63.1		µg/Kg-dry	1	11/17/2020 8:47:53 PM
Surr: 2-Fluorobiphenyl	55.5	16.9 - 122		%Rec	1	11/17/2020 8:47:53 PM
Surr: Terphenyl-d14 (surr)	85.5	38.4 - 153		%Rec	1	11/17/2020 8:47:53 PM
Gasoline by NWTPH-Gx				Batch ID: 30274		Analyst: KT
Gasoline	ND	10.4		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Surr: Toluene-d8	101	65 - 135		%Rec	1	11/5/2020 11:58:46 AM
Surr: 4-Bromofluorobenzene	103	65 - 135		%Rec	1	11/5/2020 11:58:46 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30274		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0418	Q	mg/Kg-dry	1	11/5/2020 11:58:46 AM
Chloromethane	ND	0.104		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Vinyl chloride	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Bromomethane	ND	0.104		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Trichlorofluoromethane (CFC-11)	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Chloroethane	ND	0.104		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,1-Dichloroethene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Methylene chloride	ND	0.00340	MDL	mg/Kg-dry	1	11/5/2020 11:58:46 AM
trans-1,2-Dichloroethene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Methyl tert-butyl ether (MTBE)	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,1-Dichloroethane	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
cis-1,2-Dichloroethene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Chloroform	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,1,1-Trichloroethane (TCA)	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,1-Dichloropropene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Carbon tetrachloride	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,2-Dichloroethane (EDC)	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Benzene	ND	0.0146	MDL	mg/Kg-dry	1	11/5/2020 11:58:46 AM
Trichloroethene (TCE)	ND	0.00454	MDL	mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,2-Dichloropropane	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Bromodichloromethane	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Dibromomethane	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
cis-1,3-Dichloropropene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Toluene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
trans-1,3-Dichloropropylene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,1,2-Trichloroethane	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,3-Dichloropropane	ND	0.0522		mg/Kg-dry	1	11/5/2020 11:58:46 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 10:45:00 AM
Project: Delta Marine
Lab ID: 2011044-003
Matrix: Sediment
Client Sample ID: SB01-5-20201103

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30274 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Dibromochloromethane	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,2-Dibromoethane (EDB)	ND	0.0104		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Chlorobenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,1,1,2-Tetrachloroethane	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Ethylbenzene	ND	0.0522		mg/Kg-dry	1	11/5/2020 11:58:46 AM
m,p-Xylene	ND	0.104		mg/Kg-dry	1	11/5/2020 11:58:46 AM
o-Xylene	ND	0.0522		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Styrene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Isopropylbenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Bromoform	ND	0.104		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,1,2,2-Tetrachloroethane	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
n-Propylbenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Bromobenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,3,5-Trimethylbenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
2-Chlorotoluene	ND	0.0522		mg/Kg-dry	1	11/5/2020 11:58:46 AM
4-Chlorotoluene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
tert-Butylbenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,2,3-Trichloropropane	ND	0.0522		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,2,4-Trichlorobenzene	ND	0.0418	Q	mg/Kg-dry	1	11/5/2020 11:58:46 AM
sec-Butylbenzene	ND	0.0522		mg/Kg-dry	1	11/5/2020 11:58:46 AM
4-Isopropyltoluene	ND	0.0522		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,3-Dichlorobenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,4-Dichlorobenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
n-Butylbenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,2-Dichlorobenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,2-Dibromo-3-chloropropane	ND	1.04	Q	mg/Kg-dry	1	11/5/2020 11:58:46 AM
1,2,4-Trimethylbenzene	ND	0.0418		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Hexachloro-1,3-butadiene	ND	0.0522		mg/Kg-dry	1	11/5/2020 11:58:46 AM
Naphthalene	ND	0.104		mg/Kg-dry	1	11/7/2020 7:57:02 AM
1,2,3-Trichlorobenzene	ND	0.0418	Q	mg/Kg-dry	1	11/5/2020 11:58:46 AM
Surr: Dibromofluoromethane	90.0	85.2 - 113		%Rec	1	11/5/2020 11:58:46 AM
Surr: Dibromofluoromethane	84.8	85.2 - 113	S	%Rec	1	11/7/2020 7:57:02 AM
Surr: Toluene-d8	99.7	88.5 - 110		%Rec	1	11/5/2020 11:58:46 AM
Surr: Toluene-d8	97.4	88.5 - 110		%Rec	1	11/7/2020 7:57:02 AM
Surr: 1-Bromo-4-fluorobenzene	99.1	88.6 - 109		%Rec	1	11/7/2020 7:57:02 AM
Surr: 1-Bromo-4-fluorobenzene	98.2	88.6 - 109		%Rec	1	11/5/2020 11:58:46 AM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011044-003
Client Sample ID: **SB01-5-20201103**

Collection Date: 11/3/2020 10:45:00 AM
Matrix: Sediment

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30274		Analyst: KT

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria
MDL - Analyte reported to Method Detection Limit (MDL)
S - Outlying surrogate recovery(ies) observed.

Mercury by EPA Method 7471				Batch ID: 30284		Analyst: WF
Mercury	ND	0.438		mg/Kg-dry	1	11/4/2020 2:06:20 PM
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	31.4	1.39	D	mg/Kg-dry	5	11/10/2020 1:46:35 PM
Arsenic	492	1.74	D	mg/Kg-dry	5	11/10/2020 1:46:35 PM
Beryllium	ND	0.278		mg/Kg-dry	1	11/9/2020 4:43:19 PM
Cadmium	9.21	1.39	D	mg/Kg-dry	5	11/10/2020 1:46:35 PM
Chromium	16.6	0.695	D	mg/Kg-dry	5	11/10/2020 1:46:35 PM
Copper	181	1.39	D	mg/Kg-dry	5	11/10/2020 1:46:35 PM
Lead	3,660	27.8	D	mg/Kg-dry	100	11/10/2020 1:52:09 PM
Nickel	6.46	3.48	D	mg/Kg-dry	5	11/10/2020 1:46:35 PM
Selenium	6.56	0.695		mg/Kg-dry	1	11/9/2020 4:43:19 PM
Silver	8.03	0.139		mg/Kg-dry	1	11/9/2020 4:43:19 PM
Thallium	3.53	0.278		mg/Kg-dry	1	11/9/2020 4:43:19 PM
Zinc	2,530	69.5	D	mg/Kg-dry	100	11/10/2020 1:52:09 PM
Metals (EPA 200.8) with TCLP Extraction (EPA 1311)				Batch ID: 30544		Analyst: CO
Arsenic	ND	0.100		mg/L	1	11/30/2020 8:15:52 PM
Lead	0.534	0.200		mg/L	1	11/30/2020 8:15:52 PM
Sample Moisture (Percent Moisture)				Batch ID: R63112		Analyst: CJ
Percent Moisture	45.1	0.500		wt%	1	11/4/2020 8:11:58 AM

Analytical Report

Work Order: **2011044**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011044-004
Client Sample ID: **SB01-8-20201103**

Collection Date: 11/3/2020 10:55:00 AM
Matrix: Sediment

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 30551		Analyst: CO
Arsenic	348	35.6	D	mg/Kg-dry	100	12/2/2020 11:55:05 AM
Lead	3,350	28.5	D	mg/Kg-dry	100	12/2/2020 11:55:05 AM
Sample Moisture (Percent Moisture)				Batch ID: R63680		Analyst: OK
Percent Moisture	47.6	0.500		wt%	1	11/30/2020 9:23:24 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 11:02:00 AM
Project: Delta Marine
Lab ID: 2011044-005
Matrix: Groundwater
Client Sample ID: TW01-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30288		Analyst: DW
Diesel (Fuel Oil)	ND	51.7		µg/L	1	11/5/2020 5:52:02 PM
Heavy Oil	ND	103		µg/L	1	11/5/2020 5:52:02 PM
Heavy Fuel Oil	372	103		µg/L	1	11/5/2020 5:52:02 PM
Surr: 2-Fluorobiphenyl	25.0	50 - 150	S	%Rec	1	11/5/2020 5:52:02 PM
Surr: o-Terphenyl	10.8	50 - 150	S	%Rec	1	11/5/2020 5:52:02 PM

NOTES:
S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.
Heavy Fuel Oil - Indicates the presence of unresolved compounds in both the Diesel and Lube+ Oil ranges.

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Naphthalene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
2-Methylnaphthalene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
1-Methylnaphthalene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Acenaphthylene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Acenaphthene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Fluorene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Phenanthrene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Anthracene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Fluoranthene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Pyrene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Benz(a)anthracene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Chrysene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Benzo(b)fluoranthene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Benzo(k)fluoranthene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Benzo(a)pyrene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Indeno(1,2,3-cd)pyrene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Dibenz(a,h)anthracene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Benzo(g,h,i)perylene	ND	0.128		µg/L	1	11/16/2020 11:35:51 AM
Surr: 2-Fluorobiphenyl	6.20	50.8 - 146	S	%Rec	1	11/16/2020 11:35:51 AM
Surr: Terphenyl-d14	21.5	26.1 - 145	S	%Rec	1	11/16/2020 11:35:51 AM

NOTES:
S - Low surrogate recovery caused by emulsions during extraction procedure.

Gasoline by NWTPH-Gx				Batch ID: 30295		Analyst: CR
Gasoline	ND	50.0		µg/L	1	11/6/2020 12:24:49 AM
Surr: Toluene-d8	96.8	65 - 135		%Rec	1	11/6/2020 12:24:49 AM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011044-005
Client Sample ID: **TW01-20201103**

Collection Date: 11/3/2020 11:02:00 AM
Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Gasoline by NWTPH-Gx				Batch ID: 30295		Analyst: CR
Surr: 4-Bromofluorobenzene	96.6	65 - 135		%Rec	1	11/6/2020 12:24:49 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30295		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	11/6/2020 12:24:49 AM
Chloromethane	ND	2.00	Q	µg/L	1	11/6/2020 12:24:49 AM
Vinyl chloride	ND	0.200		µg/L	1	11/6/2020 12:24:49 AM
Bromomethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Chloroethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Methylene chloride	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Chloroform	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Carbon tetrachloride	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Benzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/6/2020 12:24:49 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Bromodichloromethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Dibromomethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Toluene	3.76	1.00		µg/L	1	11/6/2020 12:24:49 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Dibromochloromethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	11/6/2020 12:24:49 AM
Chlorobenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Ethylbenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
m,p-Xylene	1.21	1.00		µg/L	1	11/6/2020 12:24:49 AM
o-Xylene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011044-005
Client Sample ID: **TW01-20201103**

Collection Date: 11/3/2020 11:02:00 AM
Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30295		Analyst: CR
Styrene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Isopropylbenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Bromoform	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
n-Propylbenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Bromobenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
2-Chlorotoluene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
4-Chlorotoluene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
tert-Butylbenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/6/2020 12:24:49 AM
sec-Butylbenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
n-Butylbenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	11/6/2020 12:24:49 AM
Naphthalene	ND	1.00		µg/L	1	11/6/2020 12:24:49 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/6/2020 12:24:49 AM
Surr: Dibromofluoromethane	108	84.8 - 113		%Rec	1	11/6/2020 12:24:49 AM
Surr: Toluene-d8	101	88.5 - 110		%Rec	1	11/6/2020 12:24:49 AM
Surr: 1-Bromo-4-fluorobenzene	101	89.9 - 108		%Rec	1	11/6/2020 12:24:49 AM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Dissolved Mercury by EPA Method 245.1				Batch ID: 30301		Analyst: WF
Mercury	ND	0.100		µg/L	1	11/5/2020 5:07:47 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 30296		Analyst: CO
Antimony	17.7	1.00		µg/L	1	11/5/2020 8:52:40 PM
Arsenic	190	0.500		µg/L	1	11/5/2020 8:52:40 PM
Beryllium	ND	0.200		µg/L	1	11/5/2020 8:52:40 PM
Cadmium	0.377	0.200		µg/L	1	11/5/2020 8:52:40 PM

Analytical Report

Work Order: **2011044**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011044-005
Client Sample ID: **TW01-20201103**

Collection Date: 11/3/2020 11:02:00 AM
Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Metals by EPA Method 200.8				Batch ID: 30296		Analyst: CO
Chromium	2.68	1.00		µg/L	1	11/5/2020 8:52:40 PM
Copper	10.2	1.00		µg/L	1	11/5/2020 8:52:40 PM
Lead	6.53	0.500		µg/L	1	11/5/2020 8:52:40 PM
Nickel	9.14	2.50		µg/L	1	11/5/2020 8:52:40 PM
Selenium	ND	5.00		µg/L	1	11/5/2020 8:52:40 PM
Silver	ND	0.250		µg/L	1	11/5/2020 8:52:40 PM
Thallium	ND	0.200		µg/L	1	11/5/2020 8:52:40 PM
Zinc	4.98	2.50		µg/L	1	11/5/2020 8:52:40 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 1:45:00 PM
Project: Delta Marine
Lab ID: 2011044-006
Matrix: Groundwater
Client Sample ID: TB-20201103

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30355 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Chloromethane	ND	2.00		µg/L	1	11/10/2020 11:54:53 AM
Vinyl chloride	ND	0.200		µg/L	1	11/10/2020 11:54:53 AM
Bromomethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Chloroethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Methylene chloride	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Chloroform	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Carbon tetrachloride	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Benzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/10/2020 11:54:53 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Bromodichloromethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Dibromomethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Toluene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Dibromochloromethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	11/10/2020 11:54:53 AM
Chlorobenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Ethylbenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
m,p-Xylene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
o-Xylene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Styrene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Isopropylbenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Bromoform	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 1:45:00 PM
Project: Delta Marine
Lab ID: 2011044-006
Matrix: Groundwater
Client Sample ID: TB-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30355		Analyst: CR
n-Propylbenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Bromobenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
2-Chlorotoluene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
4-Chlorotoluene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
tert-Butylbenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/10/2020 11:54:53 AM
sec-Butylbenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
n-Butylbenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	11/10/2020 11:54:53 AM
Naphthalene	ND	1.00		µg/L	1	11/10/2020 11:54:53 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/10/2020 11:54:53 AM
Surr: Dibromofluoromethane	100	84.8 - 113		%Rec	1	11/10/2020 11:54:53 AM
Surr: Toluene-d8	99.9	88.5 - 110		%Rec	1	11/10/2020 11:54:53 AM
Surr: 1-Bromo-4-fluorobenzene	97.4	89.9 - 108		%Rec	1	11/10/2020 11:54:53 AM

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **MB-30296** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **MBLKW** Batch ID: **30296** Analysis Date: **11/5/2020** SeqNo: **1268588**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.00									
Arsenic	ND	0.500									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	ND	1.00									
Copper	ND	1.00									
Lead	ND	0.500									
Nickel	ND	2.50									
Selenium	ND	5.00									
Silver	ND	0.250									
Thallium	ND	0.200									
Zinc	ND	2.50									

Sample ID: **LCS-30296** SampType: **LCS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **LCSW** Batch ID: **30296** Analysis Date: **11/5/2020** SeqNo: **1268589**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	5.29	1.00	5.000	0	106	85	115				
Arsenic	110	0.500	100.0	0	110	85	115				
Beryllium	5.70	0.200	5.000	0	114	85	115				
Cadmium	5.62	0.200	5.000	0	112	85	115				
Chromium	107	1.00	100.0	0	107	85	115				
Copper	105	1.00	100.0	0	105	85	115				
Lead	57.2	0.500	50.00	0	114	85	115				
Nickel	107	2.50	100.0	0	107	85	115				
Silver	5.15	0.250	5.000	0	103	85	115				
Thallium	2.87	0.200	2.500	0	115	85	115				
Zinc	114	2.50	100.0	0	114	85	115				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **MB-30280FB** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **MBLKW** Batch ID: **30296** Analysis Date: **11/5/2020** SeqNo: **1268590**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.00									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	ND	1.00									
Lead	ND	0.500									
Nickel	ND	2.50									
Selenium	ND	5.00									
Silver	ND	0.250									
Thallium	ND	0.200									
Zinc	ND	2.50									

NOTES:
Filter Blank

Sample ID: **2011057-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **BATCH** Batch ID: **30296** Analysis Date: **11/5/2020** SeqNo: **1268592**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	36.9	1.00						37.46	1.46	30	
Arsenic	0.730	0.500						0.5760	23.5	30	
Beryllium	ND	0.200						0.4805	182	30	R
Cadmium	ND	0.200						0		30	
Chromium	ND	1.00						0		30	
Copper	13.5	1.00						35.65	90.3	30	R
Lead	ND	0.500						0		30	
Nickel	ND	2.50						0		30	
Selenium	ND	5.00						0		30	
Silver	ND	0.250						0		30	
Thallium	ND	0.200						0		30	
Zinc	321	2.50						332.6	3.39	30	

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **2011057-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **BATCH** Batch ID: **30296** Analysis Date: **11/5/2020** SeqNo: **1268593**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	64.1	1.00	25.00	37.46	106	70	130				
Arsenic	567	0.500	500.0	0.5760	113	70	130				
Beryllium	28.4	0.200	25.00	0.4805	112	70	130				
Cadmium	28.4	0.200	25.00	0.06050	113	70	130				
Chromium	534	1.00	500.0	0.1855	107	70	130				
Copper	538	1.00	500.0	35.65	101	70	130				
Lead	282	0.500	250.0	0.07550	113	70	130				
Nickel	529	2.50	500.0	0.3040	106	70	130				
Selenium	57.8	5.00	50.00	1.231	113	70	130				
Silver	25.7	0.250	25.00	0.03400	103	70	130				
Thallium	14.3	0.200	12.50	0	114	70	130				
Zinc	886	2.50	500.0	332.6	111	70	130				

Sample ID: **2011057-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **BATCH** Batch ID: **30296** Analysis Date: **11/5/2020** SeqNo: **1268594**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	63.8	1.00	25.00	37.46	105	70	130	64.07	0.434	30	
Arsenic	546	0.500	500.0	0.5760	109	70	130	566.9	3.78	30	
Beryllium	28.8	0.200	25.00	0.4805	113	70	130	28.36	1.50	30	
Cadmium	28.1	0.200	25.00	0.06050	112	70	130	28.40	1.21	30	
Chromium	534	1.00	500.0	0.1855	107	70	130	534.4	0.00225	30	
Copper	521	1.00	500.0	35.65	97.2	70	130	538.3	3.17	30	
Lead	283	0.500	250.0	0.07550	113	70	130	281.6	0.349	30	
Nickel	504	2.50	500.0	0.3040	101	70	130	528.6	4.76	30	
Selenium	56.5	5.00	50.00	1.231	110	70	130	57.77	2.29	30	
Silver	25.8	0.250	25.00	0.03400	103	70	130	25.70	0.334	30	
Thallium	14.3	0.200	12.50	0	114	70	130	14.30	0.0910	30	
Zinc	891	2.50	500.0	332.6	112	70	130	886.1	0.510	30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **MB-30280FB** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **MBLKW** Batch ID: **30296** Analysis Date: **11/9/2020** SeqNo: **1269647**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.500									

NOTES:
Filter Blank

Sample ID: **LCS-30296** SampType: **LCS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **LCSW** Batch ID: **30296** Analysis Date: **11/10/2020** SeqNo: **1269833**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	10.3	5.00	10.00	0	103	85	115				

Sample ID: **MB-30280FB** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63216**
Client ID: **MBLKW** Batch ID: **30296** Analysis Date: **11/10/2020** SeqNo: **1269837**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	1.00									

NOTES:
Filter Blank

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Mercury by EPA Method 245.1

Sample ID: **MB-30301**	SampType: **MBLK**			Units: **µg/L**		Prep Date: **11/5/2020**			RunNo: **63174**	
Client ID: **MBLKW**	Batch ID: **30301**					Analysis Date: **11/5/2020**			SeqNo: **1267982**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

Sample ID: **LCS-30301**	SampType: **LCS**			Units: **µg/L**		Prep Date: **11/5/2020**			RunNo: **63174**	
Client ID: **LCSW**	Batch ID: **30301**					Analysis Date: **11/5/2020**			SeqNo: **1267983**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.66	0.100	2.500	0	106	85	115				

Sample ID: **2010504-001EDUP**	SampType: **DUP**			Units: **µg/L**		Prep Date: **11/5/2020**			RunNo: **63174**	
Client ID: **BATCH**	Batch ID: **30301**					Analysis Date: **11/5/2020**			SeqNo: **1267985**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100						0		20	

Sample ID: **2010504-001EMS**	SampType: **MS**			Units: **µg/L**		Prep Date: **11/5/2020**			RunNo: **63174**	
Client ID: **BATCH**	Batch ID: **30301**					Analysis Date: **11/5/2020**			SeqNo: **1267986**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.65	0.100	2.500	0	106	70	130				

Sample ID: **2010504-001EMSD**	SampType: **MSD**			Units: **µg/L**		Prep Date: **11/5/2020**			RunNo: **63174**	
Client ID: **BATCH**	Batch ID: **30301**					Analysis Date: **11/5/2020**			SeqNo: **1267987**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.41	0.100	2.500	0	96.4	70	130	2.650	9.49	20	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Mercury by EPA Method 245.1

Sample ID: **MB-30280FB** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63174**
Client ID: **MBLKW** Batch ID: **30301** Analysis Date: **11/5/2020** SeqNo: **1267999**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

NOTES:
Filter Blank

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-30308** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **MBLKS** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269293**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.155									
Arsenic	ND	0.194									
Beryllium	ND	0.155									
Cadmium	ND	0.155									
Chromium	ND	0.0775									
Copper	ND	0.155									
Lead	ND	0.155									
Nickel	ND	0.388									
Selenium	ND	0.388									
Silver	ND	0.0775									
Thallium	ND	0.155									
Zinc	ND	0.388									

Sample ID: **LCS-30308** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **LCSS** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269294**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.05	0.154	1.923	0	107	80	120				
Arsenic	36.7	0.192	38.46	0	95.3	80	120				
Beryllium	1.96	0.154	1.923	0	102	80	120				
Cadmium	1.98	0.154	1.923	0	103	80	120				
Chromium	38.1	0.0769	38.46	0	99.1	80	120				
Copper	38.9	0.154	38.46	0	101	80	120				
Lead	19.4	0.154	19.23	0	101	80	120				
Nickel	37.7	0.385	38.46	0	98.0	80	120				
Selenium	3.78	0.385	3.846	0	98.2	80	120				
Silver	1.95	0.0769	1.923	0	102	80	120				
Thallium	1.03	0.154	0.9615	0	107	80	120				
Zinc	35.5	0.385	38.46	0	92.3	80	120				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011010-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.488	0.172	2.152	0.2377	11.6	75	125				S
Arsenic	57.8	0.215	43.04	15.05	99.3	75	125				
Beryllium	2.51	0.172	2.152	0.3003	103	75	125				
Cadmium	2.61	0.172	2.152	0.3715	104	75	125				
Chromium	78.3	0.0861	43.04	26.79	120	75	125				
Copper	69.6	0.172	43.04	25.66	102	75	125				
Lead	74.0	0.172	21.52	45.02	135	75	125				S
Nickel	78.3	0.430	43.04	31.86	108	75	125				
Selenium	5.33	0.430	4.304	0.7766	106	75	125				
Silver	2.13	0.0861	2.152	0.1123	93.7	75	125				
Thallium	1.39	0.172	1.076	0.08026	122	75	125				
Zinc	140	0.430	43.04	88.94	118	75	125				

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect (Sb).
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range (Pb).

Sample ID: **2011010-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269298**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.283	0.171	2.136	0.2377	2.14	75	125	0.4879	53.0	20	RS
Arsenic	53.3	0.214	42.71	15.05	89.6	75	125	57.80	8.08	20	
Beryllium	2.43	0.171	2.136	0.3003	99.9	75	125	2.507	2.99	20	
Cadmium	2.43	0.171	2.136	0.3715	96.2	75	125	2.614	7.48	20	
Chromium	75.1	0.0854	42.71	26.79	113	75	125	78.32	4.15	20	
Copper	68.2	0.171	42.71	25.66	99.6	75	125	69.58	1.99	20	
Lead	63.6	0.171	21.36	45.02	86.9	75	125	74.02	15.2	20	
Nickel	77.2	0.427	42.71	31.86	106	75	125	78.33	1.49	20	
Selenium	4.87	0.427	4.271	0.7766	95.7	75	125	5.328	9.07	20	
Silver	2.00	0.0854	2.136	0.1123	88.2	75	125	2.128	6.42	20	
Thallium	1.33	0.171	1.068	0.08026	117	75	125	1.391	4.85	20	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011010-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **11/5/2020**		RunNo: **63244**			
Client ID: **BATCH**	Batch ID: **30308**					Analysis Date: **11/9/2020**		SeqNo: **1269298**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	132	0.427	42.71	88.94	101	75	125	139.9	5.83	20	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: **2011010-001APDS**	SampType: **PDS**			Units: **mg/Kg-dry**		Prep Date: **11/5/2020**		RunNo: **63244**			
Client ID: **BATCH**	Batch ID: **30308**					Analysis Date: **11/9/2020**		SeqNo: **1269299**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.58	0.180	2.25	0.238	104	75	125				

Sample ID: **LCS-30551**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **11/30/2020**		RunNo: **63743**			
Client ID: **LCSS**	Batch ID: **30551**					Analysis Date: **12/1/2020**		SeqNo: **1279980**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	20.7	0.155	19.38	0	107	80	120				

Sample ID: **2011495-001AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **11/30/2020**		RunNo: **63743**			
Client ID: **BATCH**	Batch ID: **30551**					Analysis Date: **12/1/2020**		SeqNo: **1279983**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	84.3	0.354	70.88	4.468	113	75	125				
Lead	42.6	0.284	35.44	9.268	94.0	75	125				

Sample ID: **2011495-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **11/30/2020**		RunNo: **63743**			
Client ID: **BATCH**	Batch ID: **30551**					Analysis Date: **12/1/2020**		SeqNo: **1279984**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	96.6	0.354	70.88	4.468	130	75	125	84.30	13.6	20	S
Lead	42.9	0.284	35.44	9.268	95.0	75	125	42.57	0.863	20	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011495-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **11/30/2020**		RunNo: **63743**	
Client ID: **BATCH**	Batch ID: **30551**					Analysis Date: **12/1/2020**		SeqNo: **1279984**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range (As, Cd).

Sample ID: **LCS-30551**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **11/30/2020**		RunNo: **63743**	
Client ID: **LCSS**	Batch ID: **30551**					Analysis Date: **12/1/2020**		SeqNo: **1280056**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	38.9	0.194	38.76	0	100	80	120				

Sample ID: **MB-30551**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **11/30/2020**		RunNo: **63743**	
Client ID: **MBLKS**	Batch ID: **30551**					Analysis Date: **12/2/2020**		SeqNo: **1280261**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.188									
Lead	ND	0.150									

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID: **MB-30284**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **11/4/2020**			RunNo: **63132**		
Client ID: **MBLKS**	Batch ID: **30284**					Analysis Date: **11/4/2020**			SeqNo: **1267132**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.250									

Sample ID: **LCS-30284**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **11/4/2020**			RunNo: **63132**		
Client ID: **LCSS**	Batch ID: **30284**					Analysis Date: **11/4/2020**			SeqNo: **1267133**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.501	0.250	0.5000	0	100	80	120				

Sample ID: **2010469-001ADUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **11/4/2020**			RunNo: **63132**		
Client ID: **BATCH**	Batch ID: **30284**					Analysis Date: **11/4/2020**			SeqNo: **1267135**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.310						0		20	

Sample ID: **2010469-001AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **11/4/2020**			RunNo: **63132**		
Client ID: **BATCH**	Batch ID: **30284**					Analysis Date: **11/4/2020**			SeqNo: **1267136**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.651	0.310	0.6209	0.01850	102	70	130				

Sample ID: **2010469-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **11/4/2020**			RunNo: **63132**		
Client ID: **BATCH**	Batch ID: **30284**					Analysis Date: **11/4/2020**			SeqNo: **1267137**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.620	0.310	0.6209	0.01850	96.8	70	130	0.6507	4.89	20	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Metals (EPA 200.8) with TCLP Extraction (EPA 1311)

Sample ID: **MB-30544** SampType: **MBLK** Units: **mg/L** Prep Date: **11/25/2020** RunNo: **63729**
Client ID: **MBLKS** Batch ID: **30544** Analysis Date: **11/30/2020** SeqNo: **1279699**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Lead	ND	0.200									

Sample ID: **LCS-30544** SampType: **LCS** Units: **mg/L** Prep Date: **11/25/2020** RunNo: **63729**
Client ID: **LCSS** Batch ID: **30544** Analysis Date: **11/30/2020** SeqNo: **1279702**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.76	0.100	5.000	0	95.2	65	135				
Lead	2.37	0.200	2.500	0	94.9	65	135				

Sample ID: **2011478-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **11/25/2020** RunNo: **63729**
Client ID: **BATCH** Batch ID: **30544** Analysis Date: **11/30/2020** SeqNo: **1279704**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100						0		30	
Lead	ND	0.200						0		30	

Sample ID: **2011478-001AMS** SampType: **MS** Units: **mg/L** Prep Date: **11/25/2020** RunNo: **63729**
Client ID: **BATCH** Batch ID: **30544** Analysis Date: **11/30/2020** SeqNo: **1279705**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.91	0.100	5.000	0	98.3	65	135				
Lead	2.51	0.200	2.500	0	100	65	135				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Metals (EPA 200.8) with TCLP Extraction (EPA 1311)

Sample ID: **2011478-001AMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **11/25/2020**	RunNo: **63729**
Client ID: **BATCH**	Batch ID: **30544**		Analysis Date: **11/30/2020**	SeqNo: **1279706**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.87	0.100	5.000	0	97.5	65	135	4.913	0.796	30	
Lead	2.45	0.200	2.500	0	97.8	65	135	2.505	2.40	30	

Sample ID: **MB2-30544**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **11/25/2020**	RunNo: **63729**
Client ID: **MBLKS**	Batch ID: **30544**		Analysis Date: **11/30/2020**	SeqNo: **1279718**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Lead	ND	0.200									

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **MB-30277** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/4/2020** RunNo: **63149**
Client ID: **MBLKS** Batch ID: **30277** Analysis Date: **11/4/2020** SeqNo: **1267394**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	18.0		20.00		89.9	50	150				
Surr: o-Terphenyl	17.6		20.00		88.0	50	150				

Sample ID: **LCS-30277** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/4/2020** RunNo: **63149**
Client ID: **LCSS** Batch ID: **30277** Analysis Date: **11/4/2020** SeqNo: **1267395**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	474	20.0	500.0	0	94.9	73.6	116				
Surr: 2-Fluorobiphenyl	18.1		20.00		90.3	50	150				
Surr: o-Terphenyl	18.9		20.00		94.4	50	150				

Sample ID: **2011044-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63149**
Client ID: **SB11-3-20201103** Batch ID: **30277** Analysis Date: **11/4/2020** SeqNo: **1267397**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	656	28.3	706.3	0	92.9	56.3	134				
Surr: 2-Fluorobiphenyl	24.5		28.25		86.9	50	150				
Surr: o-Terphenyl	25.7		28.25		90.9	50	150				

Sample ID: **2011044-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63149**
Client ID: **SB11-3-20201103** Batch ID: **30277** Analysis Date: **11/4/2020** SeqNo: **1267398**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	686	26.1	652.7	0	105	56.3	134	656.5	4.42	30	
Surr: 2-Fluorobiphenyl	25.6		26.11		98.2	50	150		0		
Surr: o-Terphenyl	26.6		26.11		102	50	150		0		

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2011071-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63149**
Client ID: **BATCH** Batch ID: **30277** Analysis Date: **11/4/2020** SeqNo: **1267400**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	22.7						0		30	
Heavy Oil	ND	56.6						0		30	
Surr: 2-Fluorobiphenyl	17.7		22.65		78.4	50	150		0		
Surr: o-Terphenyl	17.7		22.65		78.3	50	150		0		

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **MB-30288** SampType: **MBLK** Units: **µg/L** Prep Date: **11/4/2020** RunNo: **63171**
Client ID: **MBLKW** Batch ID: **30288** Analysis Date: **11/5/2020** SeqNo: **1267748**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	49.2									
Heavy Oil	ND	98.4									
Surr: 2-Fluorobiphenyl	58.9		78.74		74.8	50	150				
Surr: o-Terphenyl	61.9		78.74		78.7	50	150				

Sample ID: **LCS-30288** SampType: **LCS** Units: **µg/L** Prep Date: **11/4/2020** RunNo: **63171**
Client ID: **LCSW** Batch ID: **30288** Analysis Date: **11/5/2020** SeqNo: **1267749**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	521	49.6	992.4	0	52.5	48.1	108				
Surr: 2-Fluorobiphenyl	53.9		79.39		67.9	50	150				
Surr: o-Terphenyl	50.0		79.39		63.0	50	150				

Sample ID: **2011011-004AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/4/2020** RunNo: **63171**
Client ID: **BATCH** Batch ID: **30288** Analysis Date: **11/5/2020** SeqNo: **1268111**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	713	49.8	995.2	0	71.7	18.7	128				
Surr: 2-Fluorobiphenyl	64.9		79.62		81.6	50	150				
Surr: o-Terphenyl	67.2		79.62		84.4	50	150				

Sample ID: **2011057-003CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/4/2020** RunNo: **63171**
Client ID: **BATCH** Batch ID: **30288** Analysis Date: **11/5/2020** SeqNo: **1268119**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	52.8						0		30	
Heavy Oil	990	106						1,001	1.15	30	
Surr: 2-Fluorobiphenyl	55.1		84.41		65.3	50	150		0		
Surr: o-Terphenyl	55.0		84.41		65.2	50	150		0		

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2011057-003CDUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **11/4/2020**	RunNo: **63171**
Client ID: **BATCH**	Batch ID: **30288**		Analysis Date: **11/5/2020**	SeqNo: **1268119**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2011058-002BDUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **11/4/2020**	RunNo: **63171**
Client ID: **BATCH**	Batch ID: **30288**		Analysis Date: **11/5/2020**	SeqNo: **1268123**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	50.6						0		30	
Heavy Oil	1,130	101						976.7	14.7	30	
Surr: 2-Fluorobiphenyl	63.1		80.91		78.0	50	150		0		
Surr: o-Terphenyl	52.6		80.91		65.0	50	150		0		

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **MB-30438** SampType: **MBLK** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **MBLKS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274287**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	40.0									
2-Methylnaphthalene	ND	40.0									
1-Methylnaphthalene	ND	40.0									
Acenaphthylene	ND	40.0									
Acenaphthene	ND	40.0									
Fluorene	ND	40.0									
Phenanthrene	ND	40.0									
Anthracene	ND	40.0									
Fluoranthene	ND	40.0									
Pyrene	ND	40.0									
Benz(a)anthracene	ND	40.0									
Chrysene	ND	40.0									
Benzo(b)fluoranthene	ND	40.0									
Benzo(k)fluoranthene	ND	40.0									
Benzo(a)pyrene	ND	40.0									
Indeno(1,2,3-cd)pyrene	ND	40.0									
Dibenz(a,h)anthracene	ND	40.0									
Benzo(g,h,i)perylene	ND	40.0									
Surr: 2-Fluorobiphenyl	342		500.0		68.3	16.9	122				
Surr: Terphenyl-d14 (surr)	474		500.0		94.7	38.4	153				

Sample ID: **LCS-30438** SampType: **LCS** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **LCSS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274289**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	840	40.0	1,000	0	84.0	57.2	127				
2-Methylnaphthalene	856	40.0	1,000	0	85.6	55.1	134				
1-Methylnaphthalene	881	40.0	1,000	0	88.1	56.9	136				
Acenaphthylene	796	40.0	1,000	0	79.6	58.5	132				
Acenaphthene	812	40.0	1,000	0	81.2	57.9	132				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **LCS-30438** SampType: **LCS** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **LCSS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274289**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluorene	848	40.0	1,000	0	84.8	59.2	134				
Phenanthrene	816	40.0	1,000	0	81.6	57.1	135				
Anthracene	813	40.0	1,000	0	81.3	55.7	137				
Fluoranthene	892	40.0	1,000	0	89.2	58.1	134				
Pyrene	884	40.0	1,000	0	88.4	59.6	136				
Benz(a)anthracene	930	40.0	1,000	0	93.0	51.5	139				
Chrysene	848	40.0	1,000	0	84.8	58.3	130				
Benzo(b)fluoranthene	878	40.0	1,000	0	87.8	53.4	138				
Benzo(k)fluoranthene	866	40.0	1,000	0	86.6	50.9	140				
Benzo(a)pyrene	1,050	40.0	1,000	0	105	50.4	143				
Indeno(1,2,3-cd)pyrene	918	40.0	1,000	0	91.8	52.3	138				
Dibenz(a,h)anthracene	853	40.0	1,000	0	85.3	53	140				
Benzo(g,h,i)perylene	848	40.0	1,000	0	84.8	51.7	139				
Surr: 2-Fluorobiphenyl	403		500.0		80.7	16.9	122				
Surr: Terphenyl-d14 (surr)	522		500.0		104	38.4	153				

Sample ID: **2011090-002AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **BATCH** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1,000	57.1	1,428	0	70.0	46	106				
2-Methylnaphthalene	1,010	57.1	1,428	0	70.7	45.3	117				
1-Methylnaphthalene	1,060	57.1	1,428	0	74.1	48.6	116				
Acenaphthylene	980	57.1	1,428	0	68.6	50	114				
Acenaphthene	969	57.1	1,428	0	67.9	54.9	108				
Fluorene	1,020	57.1	1,428	0	71.7	54.3	110				
Phenanthrene	943	57.1	1,428	0	66.1	48.9	114				
Anthracene	983	57.1	1,428	0	68.9	53.1	111				
Fluoranthene	1,330	57.1	1,428	0	93.0	48.5	117				
Pyrene	1,270	57.1	1,428	0	88.6	48.5	121				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011090-002AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **BATCH** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benz(a)anthracene	1,430	57.1	1,428	0	99.9	39.9	125				
Chrysene	991	57.1	1,428	0	69.4	46.8	112				
Benzo(b)fluoranthene	955	57.1	1,428	0	66.9	42.4	123				
Benzo(k)fluoranthene	1,210	57.1	1,428	0	84.7	41.7	122				
Benzo(a)pyrene	1,310	57.1	1,428	0	91.8	48.2	121				
Indeno(1,2,3-cd)pyrene	1,000	57.1	1,428	0	70.2	43.6	114				
Dibenz(a,h)anthracene	923	57.1	1,428	0	64.6	43.7	116				
Benzo(g,h,i)perylene	915	57.1	1,428	0	64.0	43.7	115				
Surr: 2-Fluorobiphenyl	453		714.1		63.5	16.9	122				
Surr: Terphenyl-d14 (surr)	669		714.1		93.7	38.4	153				

Sample ID: **2011090-002AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **BATCH** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1,010	57.3	1,432	0	70.7	46	106	1,000	1.25	30	
2-Methylnaphthalene	1,040	57.3	1,432	0	72.8	45.3	117	1,010	3.18	30	
1-Methylnaphthalene	1,070	57.3	1,432	0	74.5	48.6	116	1,059	0.785	30	
Acenaphthylene	997	57.3	1,432	0	69.6	50	114	979.8	1.69	30	
Acenaphthene	999	57.3	1,432	0	69.7	54.9	108	969.0	3.00	30	
Fluorene	1,070	57.3	1,432	0	74.7	54.3	110	1,023	4.49	30	
Phenanthrene	955	57.3	1,432	0	66.7	48.9	114	943.4	1.24	30	
Anthracene	980	57.3	1,432	0	68.4	53.1	111	983.4	0.336	30	
Fluoranthene	1,150	57.3	1,432	0	80.1	48.5	117	1,328	14.6	30	
Pyrene	1,070	57.3	1,432	0	74.4	48.5	121	1,265	17.2	30	
Benz(a)anthracene	1,080	57.3	1,432	0	75.6	39.9	125	1,427	27.5	30	
Chrysene	1,010	57.3	1,432	0	70.7	46.8	112	991.1	2.10	30	
Benzo(b)fluoranthene	1,140	57.3	1,432	0	79.3	42.4	123	955.3	17.2	30	
Benzo(k)fluoranthene	1,050	57.3	1,432	0	73.5	41.7	122	1,209	13.8	30	
Benzo(a)pyrene	1,320	57.3	1,432	0	92.0	48.2	121	1,310	0.577	30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011090-002AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **BATCH** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Indeno(1,2,3-cd)pyrene	1,280	57.3	1,432	0	89.2	43.6	114	1,003	24.0	30	
Dibenz(a,h)anthracene	1,170	57.3	1,432	0	82.0	43.7	116	922.9	24.0	30	
Benzo(g,h,i)perylene	1,170	57.3	1,432	0	82.0	43.7	115	914.5	24.9	30	
Surr: 2-Fluorobiphenyl	453		716.2		63.2	16.9	122		0		
Surr: Terphenyl-d14 (surr)	513		716.2		71.6	38.4	153		0		

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **MB-30363** SampType: **MBLK** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **MBLKW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270789**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	ND	0.101									
Naphthalene	ND	0.101									
2-Methylnaphthalene	ND	0.101									
1-Methylnaphthalene	ND	0.101									
Acenaphthylene	ND	0.101									
Acenaphthene	ND	0.101									
Fluorene	ND	0.101									
Phenanthrene	ND	0.101									
Anthracene	ND	0.101									
Fluoranthene	ND	0.101									
Pyrene	ND	0.101									
Benz(a)anthracene	ND	0.101									
Chrysene	ND	0.101									
Benzo(b)fluoranthene	ND	0.101									
Benzo(k)fluoranthene	ND	0.101									
Benzo(a)pyrene	ND	0.101									
Indeno(1,2,3-cd)pyrene	ND	0.101									
Dibenz(a,h)anthracene	ND	0.101									
Benzo(g,h,i)perylene	ND	0.101									
Surr: 2-Fluorobiphenyl	1.29		2.023		64.0	50.8	146				
Surr: Terphenyl-d14	1.49		2.023		73.7	26.1	145				

Sample ID: **LCS-30363** SampType: **LCS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **LCSW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	3.17	0.0975	3.898	0	81.3	27.8	98.4				
Naphthalene	2.55	0.0975	3.898	0	65.5	47.4	117				
2-Methylnaphthalene	2.81	0.0975	3.898	0	72.1	48.8	127				
1-Methylnaphthalene	2.95	0.0975	3.898	0	75.7	36.9	134				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **LCS-30363** SampType: **LCS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **LCSW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthylene	3.04	0.0975	3.898	0	78.0	42.5	137				
Acenaphthene	3.28	0.0975	3.898	0	84.1	50.6	128				
Fluorene	2.99	0.0975	3.898	0	76.6	42.7	142				
Phenanthrene	3.61	0.0975	3.898	0	92.6	48.1	137				
Anthracene	4.11	0.0975	3.898	0	105	37.5	137				
Fluoranthene	4.67	0.0975	3.898	0	120	47.5	140				
Pyrene	5.78	0.0975	3.898	0	148	52.3	135				S
Benz(a)anthracene	3.95	0.0975	3.898	0	101	39.4	125				
Chrysene	3.29	0.0975	3.898	0	84.4	37.9	108				
Benzo(b)fluoranthene	3.49	0.0975	3.898	0	89.6	25.5	110				
Benzo(k)fluoranthene	3.17	0.0975	3.898	0	81.3	27.8	98.4				
Benzo(a)pyrene	3.92	0.0975	3.898	0	100	21.5	107				
Indeno(1,2,3-cd)pyrene	3.27	0.0975	3.898	0	83.9	16.2	97.5				
Dibenz(a,h)anthracene	3.04	0.0975	3.898	0	77.9	15.9	98.8				
Benzo(g,h,i)perylene	3.11	0.0975	3.898	0	79.8	15.9	99.7				
Surr: 2-Fluorobiphenyl	2.78		1.949		143	50.8	146				
Surr: Terphenyl-d14	2.21		1.949		113	26.1	145				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **2011160-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	1.80	0.0995	3.981	0	45.1	15.9	99.8				
Naphthalene	2.59	0.0995	3.981	0	65.0	38.9	124				
2-Methylnaphthalene	2.69	0.0995	3.981	0	67.5	38.3	133				
1-Methylnaphthalene	2.81	0.0995	3.981	0	70.6	36.5	133				
Acenaphthylene	2.78	0.0995	3.981	0	69.7	38.8	141				
Acenaphthene	2.92	0.0995	3.981	0	73.4	26.4	151				
Fluorene	2.58	0.0995	3.981	0	64.7	41.6	146				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011160-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	2.95	0.0995	3.981	0	74.0	38.1	146				
Anthracene	2.92	0.0995	3.981	0	73.2	14.8	136				
Fluoranthene	3.86	0.0995	3.981	0	96.9	15.2	155				
Pyrene	4.24	0.0995	3.981	0	107	8.41	156				
Benz(a)anthracene	3.39	0.0995	3.981	0	85.3	8.9	131				
Chrysene	2.50	0.0995	3.981	0	62.7	7.73	127				
Benzo(b)fluoranthene	2.35	0.0995	3.981	0	58.9	14.8	118				
Benzo(k)fluoranthene	1.80	0.0995	3.981	0	45.1	15.9	99.8				
Benzo(a)pyrene	2.59	0.0995	3.981	0	64.9	12.1	106				
Indeno(1,2,3-cd)pyrene	2.27	0.0995	3.981	0	57.0	6.73	97.4				
Dibenz(a,h)anthracene	2.09	0.0995	3.981	0	52.4	5	95.6				
Benzo(g,h,i)perylene	2.10	0.0995	3.981	0	52.8	2.27	93.9				
Surr: 2-Fluorobiphenyl	3.23		1.990		162	50.8	146				S
Surr: Terphenyl-d14	2.01		1.990		101	26.1	145				

NOTES:
S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID: **2011160-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270793**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	2.24	0.100	4.000	0	56.1	15.9	99.8	1.795	22.2	30	
Naphthalene	2.21	0.100	4.000	0	55.2	38.9	124	2.587	15.8	30	
2-Methylnaphthalene	2.38	0.100	4.000	0	59.5	38.3	133	2.686	12.1	30	
1-Methylnaphthalene	2.51	0.100	4.000	0	62.6	36.5	133	2.810	11.5	30	
Acenaphthylene	2.48	0.100	4.000	0	61.9	38.8	141	2.776	11.4	30	
Acenaphthene	2.61	0.100	4.000	0	65.3	26.4	151	2.920	11.1	30	
Fluorene	2.87	0.100	4.000	0	71.7	41.6	146	2.577	10.7	30	
Phenanthrene	2.73	0.100	4.000	0	68.4	38.1	146	2.947	7.46	30	
Anthracene	2.73	0.100	4.000	0	68.3	14.8	136	2.916	6.49	30	
Fluoranthene	2.97	0.100	4.000	0	74.3	15.2	155	3.858	26.0	30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011160-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270793**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pyrene	2.88	0.100	4.000	0	72.0	8.41	156	4.245	38.4	30	R
Benz(a)anthracene	2.77	0.100	4.000	0	69.2	8.9	131	3.394	20.3	30	
Chrysene	2.24	0.100	4.000	0	55.9	7.73	127	2.496	11.0	30	
Benzo(b)fluoranthene	2.29	0.100	4.000	0	57.2	14.8	118	2.346	2.48	30	
Benzo(k)fluoranthene	2.24	0.100	4.000	0	56.1	15.9	99.8	1.795	22.2	30	
Benzo(a)pyrene	2.65	0.100	4.000	0	66.2	12.1	106	2.585	2.40	30	
Indeno(1,2,3-cd)pyrene	2.13	0.100	4.000	0	53.2	6.73	97.4	2.269	6.32	30	
Dibenz(a,h)anthracene	2.00	0.100	4.000	0	50.0	5	95.6	2.086	4.23	30	
Benzo(g,h,i)perylene	1.96	0.100	4.000	0	49.1	2.27	93.9	2.101	6.80	30	
Surr: 2-Fluorobiphenyl	1.85		2.000		92.7	50.8	146		0	0	
Surr: Terphenyl-d14	1.72		2.000		86.0	26.1	145		0	0	

NOTES:
R - High RPD observed, spike recovery is within range.

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **MB-30476** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **MBLKS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275523**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.100									
Aroclor 1221	ND	0.100									
Aroclor 1232	ND	0.100									
Aroclor 1242	ND	0.100									
Aroclor 1248	ND	0.100									
Aroclor 1254	ND	0.100									
Aroclor 1260	ND	0.100									
Aroclor 1262	ND	0.100									
Aroclor 1268	ND	0.100									
Total PCBs	ND	0.100									
Surr: Decachlorobiphenyl	35.3		50.00		70.6	6.8	211				
Surr: Tetrachloro-m-xylene	33.4		50.00		66.8	7.85	182				

Sample ID: **LCS1-30476** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **LCSS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275524**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.04	0.100	1.000	0	104	30.2	169				
Aroclor 1260	1.02	0.100	1.000	0	102	28.2	181				
Surr: Decachlorobiphenyl	41.7		50.00		83.4	6.8	211				
Surr: Tetrachloro-m-xylene	40.6		50.00		81.3	7.85	182				

Sample ID: **LCS2-30476** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **LCSS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275525**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	0.751	0.100	1.000	0	75.1	37.1	136				
Surr: Decachlorobiphenyl	49.5		50.00		99.0	6.8	211				
Surr: Tetrachloro-m-xylene	28.7		50.00		57.3	7.85	182				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **LCS2-30476**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **LCSS**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275525**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2011094-008AMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **BATCH**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275539**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.26	0.126	1.264	0	99.7	48.5	157				
Aroclor 1260	1.31	0.126	1.264	0	104	48.4	164				
Surr: Decachlorobiphenyl	53.7		63.18		85.0	6.8	211				
Surr: Tetrachloro-m-xylene	44.0		63.18		69.6	7.85	182				

Sample ID: **2011094-008AMSD**	SampType: **MSD**	Units: **mg/Kg-dry**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **BATCH**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275540**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.10	0.122	1.224	0	90.0	48.5	157	1.260	13.4	30	
Aroclor 1260	1.19	0.122	1.224	0	97.1	48.4	164	1.312	9.89	30	
Surr: Decachlorobiphenyl	43.2		61.21		70.6	6.8	211		0		
Surr: Tetrachloro-m-xylene	31.1		61.21		50.8	7.85	182		0		

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-30274**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/4/2020**	RunNo: **63169**
Client ID: **LCSS**	Batch ID: **30274**		Analysis Date: **11/5/2020**	SeqNo: **1267738**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	24.6	5.00	25.00	0	98.5	65	135				
Surr: Toluene-d8	1.24		1.250		98.9	65	135				
Surr: 4-Bromofluorobenzene	1.29		1.250		103	65	135				

Sample ID: **MB-30274**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/4/2020**	RunNo: **63169**
Client ID: **MBLKS**	Batch ID: **30274**		Analysis Date: **11/5/2020**	SeqNo: **1267739**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: Toluene-d8	1.26		1.250		101	65	135				
Surr: 4-Bromofluorobenzene	1.24		1.250		99.6	65	135				

Sample ID: **2011018-002BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/4/2020**	RunNo: **63169**
Client ID: **BATCH**	Batch ID: **30274**		Analysis Date: **11/5/2020**	SeqNo: **1267730**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	4.52						0		30	
Surr: Toluene-d8	1.13		1.131		100	65	135		0		
Surr: 4-Bromofluorobenzene	1.12		1.131		99.0	65	135		0		

Sample ID: **2011035-001BMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/4/2020**	RunNo: **63169**
Client ID: **BATCH**	Batch ID: **30274**		Analysis Date: **11/5/2020**	SeqNo: **1267733**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	21.7	4.53	22.66	0	95.8	65	135				
Surr: Toluene-d8	1.13		1.133		99.4	65	135				
Surr: 4-Bromofluorobenzene	1.18		1.133		104	65	135				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-30540**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/24/2020**	RunNo: **63657**
Client ID: **LCSS**	Batch ID: **30540**		Analysis Date: **11/24/2020**	SeqNo: **1278134**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	28.1	5.00	25.00	0	112	65	135				
Surr: Toluene-d8	1.28		1.250		103	65	135				
Surr: 4-Bromofluorobenzene	1.22		1.250		97.3	65	135				

Sample ID: **MB-30540**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/24/2020**	RunNo: **63657**
Client ID: **MBLKS**	Batch ID: **30540**		Analysis Date: **11/24/2020**	SeqNo: **1278135**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: Toluene-d8	1.28		1.250		102	65	135				
Surr: 4-Bromofluorobenzene	1.21		1.250		96.6	65	135				

Sample ID: **2011044-004BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/24/2020**	RunNo: **63657**
Client ID: **SB01-8-20201103**	Batch ID: **30540**		Analysis Date: **11/24/2020**	SeqNo: **1278123**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	15.1						0		30	H
Surr: Toluene-d8	3.85		3.772		102	65	135		0		H
Surr: 4-Bromofluorobenzene	3.50		3.772		92.7	65	135		0		H

Sample ID: **2011482-004BMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/24/2020**	RunNo: **63657**
Client ID: **BATCH**	Batch ID: **30540**		Analysis Date: **11/25/2020**	SeqNo: **1278131**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	17.3	3.84	19.19	0	89.9	65	135				
Surr: Toluene-d8	0.978		0.9595		102	65	135				
Surr: 4-Bromofluorobenzene	0.949		0.9595		98.9	65	135				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-30295**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63188**
Client ID: **LCSW**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268221**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	407	50.0	500.0	0	81.3	65	135				
Surr: Toluene-d8	25.0		25.00		100	65	135				
Surr: 4-Bromofluorobenzene	24.6		25.00		98.3	65	135				

Sample ID: **MB-30295**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63188**
Client ID: **MBLKW**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268209**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: Toluene-d8	24.3		25.00		97.2	65	135				
Surr: 4-Bromofluorobenzene	23.5		25.00		94.1	65	135				

Sample ID: **2011056-001ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63188**
Client ID: **BATCH**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268196**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0						0		30	
Surr: Toluene-d8	24.2		25.00		96.8	65	135		0		
Surr: 4-Bromofluorobenzene	23.7		25.00		94.7	65	135		0		

Sample ID: **2011092-004ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63188**
Client ID: **BATCH**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268206**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0						0		30	
Surr: Toluene-d8	24.3		25.00		97.1	65	135		0		
Surr: 4-Bromofluorobenzene	24.1		25.00		96.3	65	135		0		

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **2011090-006AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63188**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/6/2020** SeqNo: **1268199**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	381	50.0	500.0	0	76.1	65	135				
Surr: Toluene-d8	24.9		25.00		99.6	65	135				
Surr: 4-Bromofluorobenzene	24.8		25.00		99.3	65	135				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30274** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **LCSS** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267659**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.726	0.0200	1.000	0	72.6	26.1	178				
Chloromethane	0.850	0.0500	1.000	0	85.0	51.6	141				
Vinyl chloride	0.892	0.0200	1.000	0	89.2	66	131				
Bromomethane	0.898	0.0500	1.000	0	89.8	41	160				
Trichlorofluoromethane (CFC-11)	1.10	0.0200	1.000	0	110	61.2	145				
Chloroethane	0.838	0.0500	1.000	0	83.8	55.2	150				
1,1-Dichloroethene	1.03	0.0200	1.000	0	103	63.4	139				
Methylene chloride	1.06	0.0200	1.000	0	106	77.7	117				
trans-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	80.5	116				
Methyl tert-butyl ether (MTBE)	0.867	0.0200	1.000	0	86.7	77.1	118				
1,1-Dichloroethane	1.02	0.0200	1.000	0	102	79.6	116				
cis-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	81.8	114				
Chloroform	1.02	0.0200	1.000	0	102	81.7	115				
1,1,1-Trichloroethane (TCA)	1.03	0.0200	1.000	0	103	80.3	119				
1,1-Dichloropropene	1.03	0.0200	1.000	0	103	79.6	118				
Carbon tetrachloride	1.03	0.0200	1.000	0	103	78.6	121				
1,2-Dichloroethane (EDC)	0.962	0.0200	1.000	0	96.2	78.8	120				
Benzene	1.02	0.0200	1.000	0	102	79.4	116				
Trichloroethene (TCE)	1.03	0.0200	1.000	0	103	80.8	117				
1,2-Dichloropropane	0.999	0.0200	1.000	0	99.9	77.1	117				
Bromodichloromethane	0.989	0.0200	1.000	0	98.9	82.5	117				
Dibromomethane	0.951	0.0200	1.000	0	95.1	81.4	116				
cis-1,3-Dichloropropene	1.01	0.0200	1.000	0	101	77.3	119				
Toluene	1.06	0.0200	1.000	0	106	80.5	115				
trans-1,3-Dichloropropylene	0.967	0.0200	1.000	0	96.7	78.4	121				
1,1,2-Trichloroethane	0.965	0.0200	1.000	0	96.5	78.1	116				
1,3-Dichloropropane	0.967	0.0250	1.000	0	96.7	76.6	118				
Tetrachloroethene (PCE)	1.09	0.0200	1.000	0	109	81.8	116				
Dibromochloromethane	0.986	0.0200	1.000	0	98.6	81.2	117				
1,2-Dibromoethane (EDB)	0.959	0.00500	1.000	0	95.9	77.5	118				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30274** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **LCSS** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267659**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	1.00	0.0200	1.000	0	100	81.8	113				
1,1,1,2-Tetrachloroethane	0.992	0.0200	1.000	0	99.2	81.9	116				
Ethylbenzene	1.04	0.0250	1.000	0	104	81.6	116				
m,p-Xylene	2.07	0.0500	2.000	0	104	83.2	115				
o-Xylene	1.01	0.0250	1.000	0	101	82.5	114				
Styrene	1.00	0.0200	1.000	0	100	82	114				
Isopropylbenzene	1.03	0.0200	1.000	0	103	82.2	116				
Bromoform	0.928	0.0500	1.000	0	92.8	74.1	127				
1,1,2,2-Tetrachloroethane	0.854	0.0200	1.000	0	85.4	69.9	124				
n-Propylbenzene	1.05	0.0200	1.000	0	105	82.1	118				
Bromobenzene	0.977	0.0200	1.000	0	97.7	83.4	113				
1,3,5-Trimethylbenzene	1.05	0.0200	1.000	0	105	82.1	117				
2-Chlorotoluene	1.03	0.0250	1.000	0	103	82	115				
4-Chlorotoluene	1.04	0.0200	1.000	0	104	81.9	116				
tert-Butylbenzene	1.04	0.0200	1.000	0	104	81.8	117				
1,2,3-Trichloropropane	0.821	0.0250	1.000	0	82.1	72.9	124				
1,2,4-Trichlorobenzene	0.777	0.0200	1.000	0	77.7	75.8	121				
sec-Butylbenzene	1.08	0.0250	1.000	0	108	81.5	118				
4-Isopropyltoluene	1.09	0.0250	1.000	0	109	82.2	118				
1,3-Dichlorobenzene	1.09	0.0200	1.000	0	109	80.2	119				
1,4-Dichlorobenzene	1.08	0.0200	1.000	0	108	79.8	118				
n-Butylbenzene	1.16	0.0200	1.000	0	116	82.1	120				
1,2-Dichlorobenzene	1.02	0.0200	1.000	0	102	80.3	117				
1,2-Dibromo-3-chloropropane	0.781	0.500	1.000	0	78.1	68.7	132				
1,2,4-Trimethylbenzene	1.06	0.0200	1.000	0	106	82.1	118				
Hexachloro-1,3-butadiene	1.18	0.0250	1.000	0	118	81.4	122				
1,2,3-Trichlorobenzene	0.688	0.0200	1.000	0	68.8	65.4	125				
Surr: Dibromofluoromethane	1.34		1.250		107	85.2	113				
Surr: Toluene-d8	1.35		1.250		108	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.26		1.250		101	88.6	109				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30274**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/4/2020**	RunNo: **63165**
Client ID: **LCSS**	Batch ID: **30274**		Analysis Date: **11/5/2020**	SeqNo: **1267659**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **MB-30274**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/4/2020**	RunNo: **63165**
Client ID: **MBLKS**	Batch ID: **30274**		Analysis Date: **11/5/2020**	SeqNo: **1267657**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									Q
Chloromethane	ND	0.0500									
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0200									

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30274** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **MBLKS** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267657**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									Q
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									Q
1,2,4-Trimethylbenzene	ND	0.0200									

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30274** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **MBLKS** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267657**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloro-1,3-butadiene	ND	0.0250									
1,2,3-Trichlorobenzene	ND	0.0200									Q
Surr: Dibromofluoromethane	1.19		1.250		94.9	85.2	113				
Surr: Toluene-d8	1.24		1.250		99.2	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.19		1.250		94.9	88.6	109				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011018-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **BATCH** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267649**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0181						0		30	Q
Chloromethane	ND	0.0452						0		30	
Vinyl chloride	ND	0.0181						0		30	
Bromomethane	ND	0.0452						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0181						0		30	
Chloroethane	ND	0.0452						0		30	
1,1-Dichloroethene	ND	0.0181						0		30	
Methylene chloride	ND	0.0181						0		30	
trans-1,2-Dichloroethene	ND	0.0181						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0181						0		30	
1,1-Dichloroethane	ND	0.0181						0		30	
cis-1,2-Dichloroethene	ND	0.0181						0		30	
Chloroform	ND	0.0181						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0181						0		30	
1,1-Dichloropropene	ND	0.0181						0		30	
Carbon tetrachloride	ND	0.0181						0		30	
1,2-Dichloroethane (EDC)	ND	0.0181						0		30	
Benzene	ND	0.0181						0		30	
Trichloroethene (TCE)	ND	0.0181						0		30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011018-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **BATCH** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267649**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	0.0181						0		30	
Bromodichloromethane	ND	0.0181						0		30	
Dibromomethane	ND	0.0181						0		30	
cis-1,3-Dichloropropene	ND	0.0181						0		30	
Toluene	ND	0.0181						0		30	
trans-1,3-Dichloropropylene	ND	0.0181						0		30	
1,1,2-Trichloroethane	ND	0.0181						0		30	
1,3-Dichloropropane	ND	0.0226						0		30	
Tetrachloroethene (PCE)	ND	0.0181						0		30	
Dibromochloromethane	ND	0.0181						0		30	
1,2-Dibromoethane (EDB)	ND	0.00452						0		30	
Chlorobenzene	ND	0.0181						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0181						0		30	
Ethylbenzene	ND	0.0226						0		30	
m,p-Xylene	ND	0.0452						0		30	
o-Xylene	ND	0.0226						0		30	
Styrene	ND	0.0181						0		30	
Isopropylbenzene	ND	0.0181						0		30	
Bromoform	ND	0.0452						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0181						0		30	
n-Propylbenzene	ND	0.0181						0		30	
Bromobenzene	ND	0.0181						0		30	
1,3,5-Trimethylbenzene	ND	0.0181						0		30	
2-Chlorotoluene	ND	0.0226						0		30	
4-Chlorotoluene	ND	0.0181						0		30	
tert-Butylbenzene	ND	0.0181						0		30	
1,2,3-Trichloropropane	ND	0.0226						0		30	
1,2,4-Trichlorobenzene	ND	0.0181						0		30	Q
sec-Butylbenzene	ND	0.0226						0		30	
4-Isopropyltoluene	ND	0.0226						0		30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011018-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **BATCH** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267649**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	0.0181						0		30	
1,4-Dichlorobenzene	ND	0.0181						0		30	
n-Butylbenzene	ND	0.0181						0		30	
1,2-Dichlorobenzene	ND	0.0181						0		30	
1,2-Dibromo-3-chloropropane	ND	0.452						0		30	Q
1,2,4-Trimethylbenzene	ND	0.0181						0		30	
Hexachloro-1,3-butadiene	ND	0.0226						0		30	
1,2,3-Trichlorobenzene	ND	0.0181						0		30	Q
Surr: Dibromofluoromethane	1.10		1.131		97.6	85.2	113		0		
Surr: Toluene-d8	1.13		1.131		99.9	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	1.07		1.131		94.4	88.6	109		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011031-001BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **BATCH** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267651**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.881	0.0270	1.350	0	65.3	9.44	188				
Chloromethane	1.11	0.0675	1.350	0	82.0	40.6	156				
Vinyl chloride	1.18	0.0270	1.350	0	87.0	52.8	150				
Bromomethane	1.18	0.0675	1.350	0	87.6	41	165				
Trichlorofluoromethane (CFC-11)	1.19	0.0270	1.350	0	87.9	53.7	157				
Chloroethane	1.13	0.0675	1.350	0	83.4	29.9	178				
1,1-Dichloroethene	1.40	0.0270	1.350	0	104	62.9	149				
Methylene chloride	1.38	0.0270	1.350	0	102	74.3	126				
trans-1,2-Dichloroethene	1.32	0.0270	1.350	0	97.9	73.1	130				
Methyl tert-butyl ether (MTBE)	1.26	0.0270	1.350	0	93.7	71.8	123				
1,1-Dichloroethane	1.33	0.0270	1.350	0	98.2	73	128				
cis-1,2-Dichloroethene	1.36	0.0270	1.350	0	101	77.5	125				
Chloroform	1.37	0.0270	1.350	0	101	76.8	127				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011031-001BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **BATCH** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267651**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane (TCA)	1.31	0.0270	1.350	0	97.1	71.4	134				
1,1-Dichloropropene	1.27	0.0270	1.350	0	94.2	69	133				
Carbon tetrachloride	1.24	0.0270	1.350	0	91.8	67.5	136				
1,2-Dichloroethane (EDC)	1.35	0.0270	1.350	0	100	73.9	128				
Benzene	1.35	0.0270	1.350	0	99.9	74.6	126				
Trichloroethene (TCE)	2.28	0.0270	1.350	0	169	72	133				S
1,2-Dichloropropane	1.34	0.0270	1.350	0	99.6	73.5	125				
Bromodichloromethane	1.31	0.0270	1.350	0	96.8	77.1	125				
Dibromomethane	1.33	0.0270	1.350	0	98.5	79.6	122				
cis-1,3-Dichloropropene	1.21	0.0270	1.350	0	89.9	71.8	122				
Toluene	1.34	0.0270	1.350	0.01711	98.1	72.6	127				
trans-1,3-Dichloropropylene	1.19	0.0270	1.350	0	88.2	71.1	125				
1,1,2-Trichloroethane	1.28	0.0270	1.350	0	95.0	75.6	123				
1,3-Dichloropropane	1.35	0.0338	1.350	0	99.6	74.4	122				
Tetrachloroethene (PCE)	1.16	0.0270	1.350	0.02372	83.8	72.7	128				
Dibromochloromethane	1.27	0.0270	1.350	0	93.8	78.3	120				
1,2-Dibromoethane (EDB)	1.32	0.00675	1.350	0	97.4	76.1	121				
Chlorobenzene	1.31	0.0270	1.350	0	97.0	74.9	124				
1,1,1,2-Tetrachloroethane	1.30	0.0270	1.350	0	96.2	75.3	126				
Ethylbenzene	1.23	0.0338	1.350	0	91.3	77.3	126				
m,p-Xylene	2.45	0.0675	2.700	0.03094	89.6	78.5	126				
o-Xylene	1.25	0.0338	1.350	0.01683	91.2	79.4	123				
Styrene	1.27	0.0270	1.350	0	94.1	80	122				
Isopropylbenzene	0.999	0.0270	1.350	0.006822	73.5	77.3	128				S
Bromoform	1.31	0.0675	1.350	0	97.1	68.7	131				
1,1,2,2-Tetrachloroethane	0.0396	0.0270	1.350	0	2.93	58.2	134				S
n-Propylbenzene	0.923	0.0270	1.350	0.007434	67.8	76	130				S
Bromobenzene	1.26	0.0270	1.350	0	93.2	80.3	123				
1,3,5-Trimethylbenzene	0.961	0.0270	1.350	0.02001	69.7	75.8	128				S
2-Chlorotoluene	1.12	0.0338	1.350	0	82.8	78.6	127				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011031-001BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/4/2020** RunNo: **63165**
Client ID: **BATCH** Batch ID: **30274** Analysis Date: **11/5/2020** SeqNo: **1267651**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chlorotoluene	1.13	0.0270	1.350	0	83.5	79	126				
tert-Butylbenzene	0.784	0.0270	1.350	0	58.1	77.7	130				S
1,2,3-Trichloropropane	1.25	0.0338	1.350	0	92.3	60.3	139				
1,2,4-Trichlorobenzene	0.725	0.0270	1.350	0	53.7	75.1	128				S
sec-Butylbenzene	0.658	0.0338	1.350	0	48.8	76.2	132				S
4-Isopropyltoluene	0.709	0.0338	1.350	0.01616	51.3	77.3	130				S
1,3-Dichlorobenzene	1.09	0.0270	1.350	0	80.9	77.2	127				
1,4-Dichlorobenzene	1.13	0.0270	1.350	0	83.6	76.7	125				
n-Butylbenzene	0.566	0.0270	1.350	0.007038	41.4	74.8	133				S
1,2-Dichlorobenzene	1.13	0.0270	1.350	0	83.6	77.5	125				
1,2-Dibromo-3-chloropropane	1.13	0.675	1.350	0	83.5	59.9	139				
1,2,4-Trimethylbenzene	1.07	0.0270	1.350	0.05605	74.8	68.4	135				
Hexachloro-1,3-butadiene	0.327	0.0338	1.350	0	24.2	71	145				S
1,2,3-Trichlorobenzene	0.829	0.0270	1.350	0	61.4	67.2	133				S
Surr: Dibromofluoromethane	1.71		1.688		101	85.2	113				
Surr: Toluene-d8	1.71		1.688		101	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.73		1.688		102	88.6	109				

NOTES:
S - Outlying spike recovery(ies) observed.

Sample ID: **LCS-30327** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/6/2020** RunNo: **63225**
Client ID: **LCSS** Batch ID: **30327** Analysis Date: **11/7/2020** SeqNo: **1268764**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	0.927	0.0500	1.000	0	92.7	63.3	132				
Surr: Dibromofluoromethane	1.06		1.250		84.8	85.2	113				S
Surr: Toluene-d8	1.23		1.250		98.1	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.27		1.250		102	88.6	109				

NOTES:
S - Outlying surrogate recovery(ies) observed.

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30327** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/6/2020** RunNo: **63225**
Client ID: **MBLKS** Batch ID: **30327** Analysis Date: **11/7/2020** SeqNo: **1268765**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.0500									
Surr: Dibromofluoromethane	1.05		1.250		84.3	85.2	113				S
Surr: Toluene-d8	1.20		1.250		95.8	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.22		1.250		97.4	88.6	109				

NOTES:
S - Outlying surrogate recovery(ies) observed.

Sample ID: **2011031-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63225**
Client ID: **BATCH** Batch ID: **30327** Analysis Date: **11/7/2020** SeqNo: **1268758**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	0.206	0.0675						0.1713	18.3	30	
Surr: Dibromofluoromethane	1.47		1.688		87.2	85.2	113		0		
Surr: Toluene-d8	1.63		1.688		96.8	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	1.67		1.688		98.7	88.6	109		0		

Sample ID: **2011044-003BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63225**
Client ID: **SB01-5-20201103** Batch ID: **30327** Analysis Date: **11/7/2020** SeqNo: **1268761**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	2.03	0.104	2.089	0	97.4	64.3	140				
Surr: Dibromofluoromethane	2.11		2.611		80.8	85.2	113				S
Surr: Toluene-d8	2.59		2.611		99.2	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	2.64		2.611		101	88.6	109				

NOTES:
S - Outlying surrogate recovery(ies) observed.

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30295** SampType: **LCS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **LCSW** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	10.1	1.00	20.00	0	50.3	17.8	204				
Chloromethane	14.0	2.00	20.00	0	70.0	46.7	158				
Vinyl chloride	16.0	0.200	20.00	0	80.2	62.3	148				
Bromomethane	25.8	1.00	20.00	0	129	49.7	151				
Trichlorofluoromethane (CFC-11)	19.0	1.00	20.00	0	94.8	80.6	131				
Chloroethane	18.7	1.00	20.00	0	93.3	69.7	138				
1,1-Dichloroethene	19.3	1.00	20.00	0	96.3	77	134				
Methylene chloride	20.6	1.00	20.00	0	103	73.7	126				
trans-1,2-Dichloroethene	20.3	1.00	20.00	0	101	83	127				
Methyl tert-butyl ether (MTBE)	19.5	1.00	20.00	0	97.6	68.2	125				
1,1-Dichloroethane	20.3	1.00	20.00	0	101	70.3	133				
cis-1,2-Dichloroethene	20.5	1.00	20.00	0	102	83.7	122				
Chloroform	20.7	1.00	20.00	0	103	81.9	122				
1,1,1-Trichloroethane (TCA)	20.3	1.00	20.00	0	101	78.2	133				
1,1-Dichloropropene	19.9	1.00	20.00	0	99.7	84.1	127				
Carbon tetrachloride	20.5	1.00	20.00	0	103	81.8	129				
1,2-Dichloroethane (EDC)	20.4	1.00	20.00	0	102	73.3	123				
Benzene	20.4	1.00	20.00	0	102	80.5	126				
Trichloroethene (TCE)	20.5	0.500	20.00	0	103	75.5	132				
1,2-Dichloropropane	20.6	1.00	20.00	0	103	79.2	124				
Bromodichloromethane	21.1	1.00	20.00	0	106	78.4	122				
Dibromomethane	20.7	1.00	20.00	0	103	78.3	122				
cis-1,3-Dichloropropene	20.7	1.00	20.00	0	103	77.6	117				
Toluene	20.8	1.00	20.00	0	104	82.9	124				
trans-1,3-Dichloropropylene	20.2	1.00	20.00	0	101	72.5	122				
1,1,2-Trichloroethane	20.8	1.00	20.00	0	104	78.2	125				
1,3-Dichloropropane	20.6	1.00	20.00	0	103	76.7	124				
Tetrachloroethene (PCE)	21.1	1.00	20.00	0	106	90.5	121				
Dibromochloromethane	21.1	1.00	20.00	0	106	77.1	122				
1,2-Dibromoethane (EDB)	20.5	0.250	20.00	0	102	77.9	122				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30295** SampType: **LCS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **LCSW** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	19.6	1.00	20.00	0	97.9	84.3	121				
1,1,1,2-Tetrachloroethane	19.3	1.00	20.00	0	96.4	80.3	123				
Ethylbenzene	19.7	1.00	20.00	0	98.5	85.3	123				
m,p-Xylene	40.0	1.00	40.00	0	100	85.8	122				
o-Xylene	19.4	1.00	20.00	0	96.9	85.4	121				
Styrene	19.8	1.00	20.00	0	99.2	82	120				
Isopropylbenzene	19.8	1.00	20.00	0	99.0	87.7	123				
Bromoform	19.5	1.00	20.00	0	97.4	69.3	129				
1,1,2,2-Tetrachloroethane	19.4	1.00	20.00	0	97.2	74.4	133				
n-Propylbenzene	20.1	1.00	20.00	0	101	83.9	126				
Bromobenzene	19.7	1.00	20.00	0	98.7	85.1	120				
1,3,5-Trimethylbenzene	20.1	1.00	20.00	0	100	83.6	123				
2-Chlorotoluene	20.1	1.00	20.00	0	100	84.2	123				
4-Chlorotoluene	20.0	1.00	20.00	0	99.8	82.3	123				
tert-Butylbenzene	19.7	1.00	20.00	0	98.6	84.1	126				
1,2,3-Trichloropropane	19.0	1.00	20.00	0	95.1	73.6	118				B
1,2,4-Trichlorobenzene	20.0	2.00	20.00	0	99.9	73.2	129				
sec-Butylbenzene	20.2	1.00	20.00	0	101	83.9	126				
4-Isopropyltoluene	20.2	1.00	20.00	0	101	83.3	124				
1,3-Dichlorobenzene	20.2	1.00	20.00	0	101	87.3	121				
1,4-Dichlorobenzene	20.2	1.00	20.00	0	101	87.4	119				
n-Butylbenzene	20.2	1.00	20.00	0	101	82.8	124				
1,2-Dichlorobenzene	20.2	1.00	20.00	0	101	87.8	119				
1,2-Dibromo-3-chloropropane	19.7	1.00	20.00	0	98.7	61.6	135				
1,2,4-Trimethylbenzene	20.3	1.00	20.00	0	102	82.1	124				
Hexachloro-1,3-butadiene	20.6	0.500	20.00	0	103	79.8	129				
Naphthalene	18.4	1.00	20.00	0	92.0	67	138				
1,2,3-Trichlorobenzene	19.1	4.00	20.00	0	95.5	72.3	131				
Surr: Dibromofluoromethane	26.1		25.00		104	84.8	113				
Surr: Toluene-d8	26.9		25.00		108	88.5	110				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30295**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63187**
Client ID: **LCSW**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	24.6		25.00		98.4	89.9	108				

Sample ID: **MB-30295**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63187**
Client ID: **MBLKW**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268192**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									Q
Chloromethane	ND	2.00									Q
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30295** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **MBLKW** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268192**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	13.4	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30295** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **MBLKW** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268192**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	25.7		25.00		103	84.8	113				
Surr: Toluene-d8	24.9		25.00		99.5	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	24.5		25.00		98.1	89.9	108				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011056-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268179**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	2.00						0		30	Q
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	3.28	1.00						3.292	0.494	30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011056-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268179**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	2.24	1.00						2.174	2.98	30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	5.95	1.00						5.635	5.42	30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	10.6	1.00						9.957	6.34	30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011056-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268179**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	25.1		25.00		101	84.8	113		0		
Surr: Toluene-d8	24.8		25.00		99.3	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	24.7		25.00		98.8	89.9	108		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011092-004ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	2.00						0		30	Q
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011092-004ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011092-004ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	26.3		25.00		105	84.8	113		0		
Surr: Toluene-d8	25.0		25.00		99.9	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	25.1		25.00		100	89.9	108		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011090-005AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/6/2020** SeqNo: **1268181**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	13.0	1.00	20.00	0	65.1	17.8	204				
Chloromethane	11.6	2.00	20.00	0	58.0	46.7	158				
Vinyl chloride	15.0	0.200	20.00	0	75.1	62.3	148				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011090-005AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/6/2020** SeqNo: **1268181**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	14.0	1.00	20.00	0	70.0	49.7	151				
Trichlorofluoromethane (CFC-11)	19.8	1.00	20.00	0	98.8	80.6	131				
Chloroethane	19.2	1.00	20.00	0	95.9	69.7	138				
1,1-Dichloroethene	21.1	1.00	20.00	0	105	77	134				
Methylene chloride	20.1	1.00	20.00	0	100	73.7	126				
trans-1,2-Dichloroethene	20.1	1.00	20.00	0	100	83	127				
Methyl tert-butyl ether (MTBE)	18.2	1.00	20.00	0	91.0	68.2	125				
1,1-Dichloroethane	20.3	1.00	20.00	0	101	70.3	133				
cis-1,2-Dichloroethene	20.0	1.00	20.00	0	100	83.7	122				
Chloroform	20.2	1.00	20.00	0	101	81.9	122				
1,1,1-Trichloroethane (TCA)	20.9	1.00	20.00	0	104	78.2	133				
1,1-Dichloropropene	20.5	1.00	20.00	0	102	84.1	127				
Carbon tetrachloride	21.2	1.00	20.00	0	106	81.8	129				
1,2-Dichloroethane (EDC)	19.5	1.00	20.00	0	97.7	73.3	123				
Benzene	20.3	1.00	20.00	0	102	80.5	126				
Trichloroethene (TCE)	20.1	0.500	20.00	0	101	75.5	132				
1,2-Dichloropropane	19.8	1.00	20.00	0	99.1	79.2	124				
Bromodichloromethane	20.0	1.00	20.00	0	99.9	78.4	122				
Dibromomethane	19.8	1.00	20.00	0	99.2	78.3	122				
cis-1,3-Dichloropropene	18.3	1.00	20.00	0	91.5	77.6	117				
Toluene	20.2	1.00	20.00	0	101	82.9	124				
trans-1,3-Dichloropropylene	18.7	1.00	20.00	0	93.4	72.5	122				
1,1,2-Trichloroethane	19.3	1.00	20.00	0	96.7	78.2	125				
1,3-Dichloropropane	19.1	1.00	20.00	0	95.4	76.7	124				
Tetrachloroethene (PCE)	19.9	1.00	20.00	0	99.4	90.5	121				
Dibromochloromethane	20.2	1.00	20.00	0	101	77.1	122				
1,2-Dibromoethane (EDB)	19.1	0.250	20.00	0	95.6	77.9	122				
Chlorobenzene	20.4	1.00	20.00	0	102	84.3	121				
1,1,1,2-Tetrachloroethane	20.1	1.00	20.00	0	100	80.3	123				
Ethylbenzene	20.9	1.00	20.00	0	104	85.3	123				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011090-005AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/6/2020** SeqNo: **1268181**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
m,p-Xylene	41.8	1.00	40.00	0	105	85.8	122				
o-Xylene	20.2	1.00	20.00	0	101	85.4	121				
Styrene	20.3	1.00	20.00	0	101	82	120				
Isopropylbenzene	20.7	1.00	20.00	0	104	87.7	123				
Bromoform	20.3	1.00	20.00	0	102	69.3	129				
1,1,2,2-Tetrachloroethane	19.2	1.00	20.00	0	96.0	74.4	133				
n-Propylbenzene	21.0	1.00	20.00	0	105	83.9	126				
Bromobenzene	20.1	1.00	20.00	0	101	85.1	120				
1,3,5-Trimethylbenzene	20.8	1.00	20.00	0	104	83.6	123				
2-Chlorotoluene	20.7	1.00	20.00	0	104	84.2	123				
4-Chlorotoluene	20.8	1.00	20.00	0	104	82.3	123				
tert-Butylbenzene	20.6	1.00	20.00	0	103	84.1	126				
1,2,3-Trichloropropane	18.6	1.00	20.00	0	93.1	73.6	118				B
1,2,4-Trichlorobenzene	18.8	2.00	20.00	0	93.9	73.2	129				
sec-Butylbenzene	20.7	1.00	20.00	0	104	83.9	126				
4-Isopropyltoluene	20.4	1.00	20.00	0	102	83.3	124				
1,3-Dichlorobenzene	20.0	1.00	20.00	0	99.9	87.3	121				
1,4-Dichlorobenzene	19.9	1.00	20.00	0	99.6	87.4	119				
n-Butylbenzene	19.5	1.00	20.00	0	97.4	82.8	124				
1,2-Dichlorobenzene	20.2	1.00	20.00	0	101	87.8	119				
1,2-Dibromo-3-chloropropane	19.1	1.00	20.00	0	95.5	61.6	135				
1,2,4-Trimethylbenzene	20.9	1.00	20.00	0	104	82.1	124				
Hexachloro-1,3-butadiene	18.9	0.500	20.00	0	94.5	79.8	129				
Naphthalene	17.9	1.00	20.00	0	89.7	67	138				
1,2,3-Trichlorobenzene	18.7	4.00	20.00	0	93.7	72.3	131				
Surr: Dibromofluoromethane	24.9		25.00		99.5	84.8	113				
Surr: Toluene-d8	25.2		25.00		101	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	24.9		25.00		99.8	89.9	108				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30355** SampType: **LCS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **LCSW** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	21.6	1.00	20.00	0	108	17.8	204				
Chloromethane	16.6	2.00	20.00	0	83.2	46.7	158				
Vinyl chloride	22.0	0.200	20.00	0	110	62.3	148				
Bromomethane	20.3	1.00	20.00	0	101	49.7	151				
Trichlorofluoromethane (CFC-11)	21.5	1.00	20.00	0	108	80.6	131				
Chloroethane	20.9	1.00	20.00	0	104	69.7	138				
1,1-Dichloroethene	21.2	1.00	20.00	0	106	77	134				
Methylene chloride	20.4	1.00	20.00	0	102	73.7	126				
trans-1,2-Dichloroethene	21.0	1.00	20.00	0	105	83	127				
Methyl tert-butyl ether (MTBE)	22.0	1.00	20.00	0	110	68.2	125				
1,1-Dichloroethane	22.1	1.00	20.00	0	110	70.3	133				
cis-1,2-Dichloroethene	20.3	1.00	20.00	0	101	83.7	122				
Chloroform	20.2	1.00	20.00	0	101	81.9	122				
1,1,1-Trichloroethane (TCA)	20.9	1.00	20.00	0	105	78.2	133				
1,1-Dichloropropene	21.0	1.00	20.00	0	105	84.1	127				
Carbon tetrachloride	21.0	1.00	20.00	0	105	81.8	129				
1,2-Dichloroethane (EDC)	19.9	1.00	20.00	0	99.4	73.3	123				
Benzene	20.6	1.00	20.00	0	103	80.5	126				
Trichloroethene (TCE)	20.7	0.500	20.00	0	103	75.5	132				
1,2-Dichloropropane	20.8	1.00	20.00	0	104	79.2	124				
Bromodichloromethane	20.0	1.00	20.00	0	99.9	78.4	122				
Dibromomethane	19.5	1.00	20.00	0	97.6	78.3	122				
cis-1,3-Dichloropropene	20.4	1.00	20.00	0	102	77.6	117				
Toluene	20.4	1.00	20.00	0	102	82.9	124				
trans-1,3-Dichloropropylene	20.2	1.00	20.00	0	101	72.5	122				
1,1,2-Trichloroethane	19.7	1.00	20.00	0	98.7	78.2	125				
1,3-Dichloropropane	19.8	1.00	20.00	0	99.2	76.7	124				
Tetrachloroethene (PCE)	21.0	1.00	20.00	0	105	90.5	121				
Dibromochloromethane	19.2	1.00	20.00	0	96.0	77.1	122				
1,2-Dibromoethane (EDB)	19.3	0.250	20.00	0	96.6	77.9	122				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30355** SampType: **LCS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **LCSW** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	19.8	1.00	20.00	0	98.8	84.3	121				
1,1,1,2-Tetrachloroethane	19.5	1.00	20.00	0	97.4	80.3	123				
Ethylbenzene	20.2	1.00	20.00	0	101	85.3	123				
m,p-Xylene	40.4	1.00	40.00	0	101	85.8	122				
o-Xylene	20.1	1.00	20.00	0	100	85.4	121				
Styrene	19.6	1.00	20.00	0	98.0	82	120				
Isopropylbenzene	20.2	1.00	20.00	0	101	87.7	123				
Bromoform	18.5	1.00	20.00	0	92.4	69.3	129				
1,1,2,2-Tetrachloroethane	19.2	1.00	20.00	0	96.1	74.4	133				
n-Propylbenzene	20.4	1.00	20.00	0	102	83.9	126				
Bromobenzene	19.7	1.00	20.00	0	98.7	85.1	120				
1,3,5-Trimethylbenzene	20.3	1.00	20.00	0	101	83.6	123				
2-Chlorotoluene	20.3	1.00	20.00	0	101	84.2	123				
4-Chlorotoluene	20.3	1.00	20.00	0	101	82.3	123				
tert-Butylbenzene	20.4	1.00	20.00	0	102	84.1	126				
1,2,3-Trichloropropane	20.0	1.00	20.00	0	99.8	73.6	118				
1,2,4-Trichlorobenzene	19.0	2.00	20.00	0	94.9	73.2	129				
sec-Butylbenzene	20.7	1.00	20.00	0	103	83.9	126				
4-Isopropyltoluene	21.5	1.00	20.00	0	108	83.3	124				
1,3-Dichlorobenzene	20.0	1.00	20.00	0	100	87.3	121				
1,4-Dichlorobenzene	19.9	1.00	20.00	0	99.5	87.4	119				
n-Butylbenzene	22.0	1.00	20.00	0	110	82.8	124				
1,2-Dichlorobenzene	19.8	1.00	20.00	0	99.2	87.8	119				
1,2-Dibromo-3-chloropropane	18.3	1.00	20.00	0	91.7	61.6	135				
1,2,4-Trimethylbenzene	21.0	1.00	20.00	0	105	82.1	124				
Hexachloro-1,3-butadiene	21.9	0.500	20.00	0	110	79.8	129				
Naphthalene	17.4	1.00	20.00	0	86.9	67	138				
1,2,3-Trichlorobenzene	18.2	4.00	20.00	0	90.8	72.3	131				
Surr: Dibromofluoromethane	24.1		25.00		96.3	84.8	113				
Surr: Toluene-d8	25.2		25.00		101	88.5	110				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30355**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/10/2020**	RunNo: **63281**
Client ID: **LCSW**	Batch ID: **30355**		Analysis Date: **11/10/2020**	SeqNo: **1269792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	25.9		25.00		103	89.9	108				

Sample ID: **MB-30355**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/10/2020**	RunNo: **63281**
Client ID: **MBLKW**	Batch ID: **30355**		Analysis Date: **11/10/2020**	SeqNo: **1269791**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30355** SampType: **MBLK** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **MBLKW** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269791**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30355** SampType: **MBLK** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **MBLKW** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269791**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	24.9		25.00		99.4	84.8	113				
Surr: Toluene-d8	25.0		25.00		100	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	25.1		25.00		100	89.9	108				

Sample ID: **2011169-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **BATCH** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269788**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	23.0	1.00	20.00	0	115	17.8	204				
Chloromethane	22.8	2.00	20.00	0	114	46.7	158				
Vinyl chloride	23.1	0.200	20.00	0	115	62.3	148				
Bromomethane	18.6	1.00	20.00	0	93.1	49.7	151				
Trichlorofluoromethane (CFC-11)	23.9	1.00	20.00	0	120	80.6	131				
Chloroethane	22.2	1.00	20.00	0	111	69.7	138				
1,1-Dichloroethene	23.2	1.00	20.00	0	116	77	134				
Methylene chloride	23.0	1.00	20.00	0	115	73.7	126				
trans-1,2-Dichloroethene	22.9	1.00	20.00	0	114	83	127				
Methyl tert-butyl ether (MTBE)	28.6	1.00	20.00	0	143	68.2	125				S
1,1-Dichloroethane	23.6	1.00	20.00	0	118	70.3	133				
cis-1,2-Dichloroethene	22.7	1.00	20.00	0	113	83.7	122				
Chloroform	23.1	1.00	20.00	0.5893	113	81.9	122				
1,1,1-Trichloroethane (TCA)	22.9	1.00	20.00	0	114	78.2	133				
1,1-Dichloropropene	22.4	1.00	20.00	0	112	84.1	127				
Carbon tetrachloride	22.9	1.00	20.00	0	114	81.8	129				
1,2-Dichloroethane (EDC)	23.7	1.00	20.00	0	118	73.3	123				
Benzene	22.6	1.00	20.00	0	113	80.5	126				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011169-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **BATCH** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269788**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	21.4	0.500	20.00	0	107	75.5	132				
1,2-Dichloropropane	22.5	1.00	20.00	0	113	79.2	124				
Bromodichloromethane	22.4	1.00	20.00	0.1379	111	78.4	122				
Dibromomethane	25.3	1.00	20.00	0	126	78.3	122				S
cis-1,3-Dichloropropene	22.3	1.00	20.00	0	112	77.6	117				
Toluene	22.4	1.00	20.00	0	112	82.9	124				
trans-1,3-Dichloropropylene	23.4	1.00	20.00	0	117	72.5	122				
1,1,2-Trichloroethane	25.6	1.00	20.00	0	128	78.2	125				S
1,3-Dichloropropane	24.5	1.00	20.00	0	123	76.7	124				
Tetrachloroethene (PCE)	22.7	1.00	20.00	0	114	90.5	121				
Dibromochloromethane	24.4	1.00	20.00	0	122	77.1	122				S
1,2-Dibromoethane (EDB)	26.2	0.250	20.00	0	131	77.9	122				S
Chlorobenzene	21.8	1.00	20.00	0	109	84.3	121				
1,1,1,2-Tetrachloroethane	21.9	1.00	20.00	0	109	80.3	123				
Ethylbenzene	21.8	1.00	20.00	0	109	85.3	123				
m,p-Xylene	43.0	1.00	40.00	0	107	85.8	122				
o-Xylene	21.4	1.00	20.00	0	107	85.4	121				
Styrene	16.2	1.00	20.00	0	80.8	82	120				S
Isopropylbenzene	20.9	1.00	20.00	0	105	87.7	123				
Bromoform	27.7	1.00	20.00	0.2493	137	69.3	129				S
1,1,2,2-Tetrachloroethane	33.8	1.00	20.00	0	169	74.4	133				S
n-Propylbenzene	21.0	1.00	20.00	0	105	83.9	126				
Bromobenzene	21.7	1.00	20.00	0	109	85.1	120				
1,3,5-Trimethylbenzene	20.2	1.00	20.00	0	101	83.6	123				
2-Chlorotoluene	21.0	1.00	20.00	0	105	84.2	123				
4-Chlorotoluene	21.1	1.00	20.00	0	106	82.3	123				
tert-Butylbenzene	20.3	1.00	20.00	0	101	84.1	126				
1,2,3-Trichloropropane	35.6	1.00	20.00	0	178	73.6	118				S
1,2,4-Trichlorobenzene	20.1	2.00	20.00	0	101	73.2	129				
sec-Butylbenzene	19.3	1.00	20.00	0	96.6	83.9	126				

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011169-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **BATCH** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269788**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	19.9	1.00	20.00	0	99.6	83.3	124				
1,3-Dichlorobenzene	21.9	1.00	20.00	0	110	87.3	121				
1,4-Dichlorobenzene	21.9	1.00	20.00	0	110	87.4	119				
n-Butylbenzene	21.6	1.00	20.00	0	108	82.8	124				
1,2-Dichlorobenzene	23.0	1.00	20.00	0	115	87.8	119				
1,2-Dibromo-3-chloropropane	43.9	1.00	20.00	0	219	61.6	135				S
1,2,4-Trimethylbenzene	21.2	1.00	20.00	0	106	82.1	124				
Hexachloro-1,3-butadiene	21.7	0.500	20.00	0	109	79.8	129				
Naphthalene	27.9	1.00	20.00	0	139	67	138				S
1,2,3-Trichlorobenzene	20.8	4.00	20.00	0	104	72.3	131				
Surr: Dibromofluoromethane	24.8		25.00		99.2	84.8	113				
Surr: Toluene-d8	25.4		25.00		102	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	24.9		25.00		99.5	89.9	108				

NOTES:
S - Outlying spike recovery observed (high bias).

Sample ID: **LCSD-30355** SampType: **LCSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **LCSW02** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	20.5	1.00	20.00	0	102	17.8	204	21.62	5.53	20	
Chloromethane	18.9	2.00	20.00	0	94.6	46.7	158	16.65	12.7	20	
Vinyl chloride	20.3	0.200	20.00	0	102	62.3	148	22.03	8.14	20	
Bromomethane	15.5	1.00	20.00	0	77.7	49.7	151	20.27	26.4	20	R
Trichlorofluoromethane (CFC-11)	20.4	1.00	20.00	0	102	80.6	131	21.54	5.47	20	
Chloroethane	19.1	1.00	20.00	0	95.7	69.7	138	20.90	8.75	20	
1,1-Dichloroethene	20.6	1.00	20.00	0	103	77	134	21.16	2.43	20	
Methylene chloride	20.1	1.00	20.00	0	101	73.7	126	20.39	1.24	20	
trans-1,2-Dichloroethene	20.3	1.00	20.00	0	101	83	127	21.01	3.65	20	
Methyl tert-butyl ether (MTBE)	24.4	1.00	20.00	0	122	68.2	125	22.02	10.4	20	
1,1-Dichloroethane	20.9	1.00	20.00	0	105	70.3	133	22.07	5.33	20	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-30355** SampType: **LCSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **LCSW02** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	19.6	1.00	20.00	0	98.1	83.7	122	20.30	3.41	20	
Chloroform	19.5	1.00	20.00	0	97.5	81.9	122	20.16	3.32	20	
1,1,1-Trichloroethane (TCA)	20.0	1.00	20.00	0	100	78.2	133	20.93	4.40	20	
1,1-Dichloropropene	19.8	1.00	20.00	0	99.0	84.1	127	21.04	6.03	20	
Carbon tetrachloride	20.1	1.00	20.00	0	100	81.8	129	21.02	4.65	20	
1,2-Dichloroethane (EDC)	19.7	1.00	20.00	0	98.3	73.3	123	19.87	1.04	20	
Benzene	19.7	1.00	20.00	0	98.7	80.5	126	20.60	4.24	20	
Trichloroethene (TCE)	19.7	0.500	20.00	0	98.5	75.5	132	20.65	4.70	20	
1,2-Dichloropropane	19.9	1.00	20.00	0	99.6	79.2	124	20.84	4.45	20	
Bromodichloromethane	19.6	1.00	20.00	0	97.8	78.4	122	19.98	2.15	20	
Dibromomethane	20.1	1.00	20.00	0	101	78.3	122	19.51	3.02	20	
cis-1,3-Dichloropropene	19.9	1.00	20.00	0	99.4	77.6	117	20.39	2.57	20	
Toluene	19.5	1.00	20.00	0	97.6	82.9	124	20.39	4.31	20	
trans-1,3-Dichloropropylene	19.9	1.00	20.00	0	99.7	72.5	122	20.18	1.13	20	
1,1,2-Trichloroethane	19.9	1.00	20.00	0	99.7	78.2	125	19.74	1.03	20	
1,3-Dichloropropane	19.9	1.00	20.00	0	99.6	76.7	124	19.83	0.496	20	
Tetrachloroethene (PCE)	19.9	1.00	20.00	0	99.6	90.5	121	21.01	5.38	20	
Dibromochloromethane	19.5	1.00	20.00	0	97.3	77.1	122	19.19	1.37	20	
1,2-Dibromoethane (EDB)	19.7	0.250	20.00	0	98.5	77.9	122	19.32	1.93	20	
Chlorobenzene	19.5	1.00	20.00	0	97.6	84.3	121	19.76	1.27	20	
1,1,1,2-Tetrachloroethane	19.3	1.00	20.00	0	96.6	80.3	123	19.48	0.842	20	
Ethylbenzene	19.6	1.00	20.00	0	98.2	85.3	123	20.25	3.08	20	
m,p-Xylene	39.2	1.00	40.00	0	98.0	85.8	122	40.40	2.98	20	
o-Xylene	19.5	1.00	20.00	0	97.7	85.4	121	20.06	2.65	20	
Styrene	19.3	1.00	20.00	0	96.4	82	120	19.59	1.60	20	
Isopropylbenzene	19.5	1.00	20.00	0	97.7	87.7	123	20.22	3.48	20	
Bromoform	19.5	1.00	20.00	0	97.6	69.3	129	18.49	5.49	20	
1,1,2,2-Tetrachloroethane	20.7	1.00	20.00	0	103	74.4	133	19.21	7.44	20	
n-Propylbenzene	19.7	1.00	20.00	0	98.5	83.9	126	20.41	3.58	20	
Bromobenzene	19.6	1.00	20.00	0	97.9	85.1	120	19.73	0.733	20	

Work Order: 2011044
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCSD-30355** SampType: **LCSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63281**
Client ID: **LCSW02** Batch ID: **30355** Analysis Date: **11/10/2020** SeqNo: **1269790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	19.3	1.00	20.00	0	96.6	83.6	123	20.27	4.86	20	
2-Chlorotoluene	19.3	1.00	20.00	0	96.6	84.2	123	20.26	4.70	20	
4-Chlorotoluene	19.6	1.00	20.00	0	98.1	82.3	123	20.26	3.15	20	
tert-Butylbenzene	19.7	1.00	20.00	0	98.7	84.1	126	20.43	3.49	20	
1,2,3-Trichloropropane	20.7	1.00	20.00	0	103	73.6	118	19.96	3.42	20	
1,2,4-Trichlorobenzene	21.2	2.00	20.00	0	106	73.2	129	18.98	11.2	20	
sec-Butylbenzene	19.7	1.00	20.00	0	98.6	83.9	126	20.67	4.69	20	
4-Isopropyltoluene	20.9	1.00	20.00	0	104	83.3	124	21.53	3.09	20	
1,3-Dichlorobenzene	20.6	1.00	20.00	0	103	87.3	121	20.01	2.92	20	
1,4-Dichlorobenzene	20.3	1.00	20.00	0	102	87.4	119	19.89	2.23	20	
n-Butylbenzene	22.0	1.00	20.00	0	110	82.8	124	22.04	0.390	20	
1,2-Dichlorobenzene	21.0	1.00	20.00	0	105	87.8	119	19.83	5.50	20	
1,2-Dibromo-3-chloropropane	21.5	1.00	20.00	0	108	61.6	135	18.33	16.0	20	
1,2,4-Trimethylbenzene	20.8	1.00	20.00	0	104	82.1	124	21.03	1.20	20	
Hexachloro-1,3-butadiene	21.9	0.500	20.00	0	109	79.8	129	21.93	0.301	20	
Naphthalene	22.2	1.00	20.00	0	111	67	138	17.38	24.5	20	R
1,2,3-Trichlorobenzene	20.9	4.00	20.00	0	105	72.3	131	18.17	14.0	20	
Surr: Dibromofluoromethane	24.1		25.00		96.4	84.8	113		0		
Surr: Toluene-d8	24.9		25.00		99.5	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	24.9		25.00		99.7	89.9	108		0		

NOTES:
R - High RPD observed, spike recovery is within range.

Sample Log-In Check List

Client Name:	**RAMBOL**	Work Order Number:	**2011044**
Logged by:	**Carissa True**	Date Received:	**11/3/2020 2:21:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Courier				

Log In

3.	Coolers are present?	Yes	☑	No	☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No	☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No	☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☑	NA ☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☑	No	☐	NA ☐

Person Notified:	Amy Kephart	Date:	11/3/2020
By Whom:	Carissa True	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Confirm metals		
Client Instructions:	PPM		

19. Additional remarks:

No volume remaining for 2011044-005 PCB add-on. -CG

Item Information

Item #	Temp ºC
Sample 1	2.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/3/20 Page: of:

Laboratory Project No (internal): 20110044

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Suite 2830

Collected by: S. Leick

City, State, Zip: Seattle, WA 98164

Location: Seattle, WA

Telephone: 262-358-0557

Report To (PM): Amy Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Report to MTCA CULS	Comments
1	SBH-3-20201103		0850	SO	X			X		X		H	H	X					Hold for PAHs + PCBs
2	SBH-6S-20201103		0902	SO	H			H		H		H	H	H					Hold for all analyses
3	SB01-5-20201103		1045	SO	X			X		X		H	H	X					Hold for PAHs + PCBs
4	SB01-8-20201103		1055	SO	H			H		H		H	H	H					Hold for all analyses
5	TW01-20201103		1102	GW	X			X		X		H	H		D				Hold for PAHs + PCBs - Field Filtered
6	TB-20201103		1345	GW	X														
7																			
8																			
9																			
10																			

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard - All others
- ☒ 3 Day - TPH
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11-3-20 1347	x Blair Rambo	11-3-20 1452
Relinquished	Date/Time	Received	Date/Time
x		x Claire Anderson	11/3/20 1421

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/3/20 Page: of:

Laboratory Project No (internal): 20110044

Project Name: Delta Marine

Special Remarks:

Project No:

Client: Ramboll

Collected by: S. Leick

Address: 901 5th Ave, Suite 2830

Location: Seattle, WA

City, State, Zip: Seattle, WA 98164

Report To (PM): Amy Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Telephone: 262-358-0557

PM Email: AKephart@Ramboll.com

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
																		Report to MTCA CULS
1	SBLL-3-20201103		0850	SO	X			X		X		H	H	X				Hold for PAHs + PCBs
2	SBLL-6S-20201103		0902	SO	H			H		H		H	H	H				Hold for all analyses
3	SB01-5-20201103		1045	SO	X			X		X		H	H	X				Hold for PAHs + PCBs
4	SB01-8-20201103		1055	SO	H			H		H		H	H	H				Hold for all analyses
5	TW01-20201103		1102	GW	X			X		X		X	H		D			Hold for PAHs + PCBs - Field Filtered
6	TB-20201103		1345	GW	X													X = run per AK, Std TAT, 11/10/20 -CG
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard - All others
- ☒ 3 Day - TPH
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11-3-20 1347	x Blair Rample	11-3-20 1452
Relinquished	Date/Time	Received	Date/Time
x		x Claire Anderson	11/3/20 1421

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/3/20 Page: of:

Laboratory Project No (internal): 20110 44

Project Name: Delta Marine

Special Remarks: X = off hold per AK, Std TAT, 11/16/20 -CG

Client: Ramboll

Project No:

Address: 901 5th Ave, Suite 2830

Collected by: S. Leick

City, State, Zip: Seattle, WA 98164

Location: Seattle, WA

Telephone: 262-358-0557

Report To (PM): Amy Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
																		Report to MTCA CULS
1	SBH-3-20201103		0850	SO	X			X		X		X	X	X				Hold for PAHs + PCBs
2	SBH-6S-20201103		0902	SO	H			H		H		H	H	H				Hold for all analyses
3	SB01-5-20201103		1045	SO	X			X		X		X	X	X				Hold for PAHs + PCBs
4	SB01-8-20201103		1055	SO	H			H		H		H	H	H				Hold for all analyses
5	TW01-20201103		1102	GW	X			X		X		X	H		D			Hold for PAHs + PCBs - Field Filtered
6	TB-20201103		1345	GW	X													X = run per AK, Std TAT, 11/10/20 -CG
7																		
8																		
9																		
10																		

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard - All others
- ☒ 3 Day - TPH
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11-3-20 1347	x Blair Rambo	11-3-20 1452
Relinquished	Date/Time	Received	Date/Time
x		x Claire Anderson	11/3/20 1421

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/3/20 Page: of:

Project Name: Delta Marine

Project No:

Collected by: S. Leick

Location: Seattle, WA

Report To (PM): Amy Kephart

PM Email: AKephart@Ramboll.com

Laboratory Project No (internal): 20110 44

Special Remarks:
X = off hold per AK, Std TAT, 11/16/20 -CG
X = add per AK, Std TAT, 11/23/20 -CG

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Client: Ramboll

Address: 901 5th Ave, Suite 2830

City, State, Zip: Seattle, WA 98164

Telephone: 262-358-0557

Fax:

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	TCLP Pb/As			Comments
																						Report to MTCA CULS
1	SBH-3-20201103		0850	SO	X			X		X		X	X	X								Hold for PAHs + PCBs
2	SBH-6S-20201103		0902	SO	H			H		H		H	H	H								Hold for all analyses
3	SB01-5-20201103		1045	SO	X			X		X		X	X	X					X			Hold for PAHs + PCBs
4	SB01-8-20201103		1055	SO	H			H		H		H	H	X								Hold for all analyses Pb & As
5	TW01-20201103		1102	GW	X			X		X		X	X		D							Hold for PAHs + PCBs - Field Filtered
6	TB-20201103		1345	GW	X																	X = run per AK, Std TAT, 11/10/20 -CG
7																						
8																						
9																						
10																						

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11-3-20 1347	x Blasir Rambo	11-3-20 1452
Relinquished	Date/Time	Received	Date/Time
x		x Claire Anderson	11/3/20 1421

Turn-around Time:
- ☒ Standard - All others
- ☒ 3 Day - TPH
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Ramboll Environ
Amy Kephart
901 5th Ave., Ste. 2820
Seattle, WA 98164

RE: Delta Marine
Work Order Number: 2011090

December 02, 2020

Attention Amy Kephart:

Fremont Analytical, Inc. received 12 sample(s) on 11/4/2020 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Dissolved Mercury by EPA Method 245.1
Dissolved Metals by EPA Method 200.8
Gasoline by NWTPH-Gx
Mercury by EPA Method 7471
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)
Polychlorinated Biphenyls (PCB) by EPA 8082
Sample Moisture (Percent Moisture)
Total Metals by EPA Method 6020B
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

CC:
Sam Leick

Date: *12/02/2020*

CLIENT: Ramboll Environ
Project: Delta Marine
Work Order: 2011090

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2011090-001	SB07-4.5-20201103	11/03/2020 3:20 PM	11/04/2020 3:39 PM
2011090-002	SB07-7-20201103	11/03/2020 3:30 PM	11/04/2020 3:39 PM
2011090-003	SB08-4.5-20201103	11/03/2020 4:30 PM	11/04/2020 3:39 PM
2011090-004	SB08-8.5-20201103	11/03/2020 4:35 PM	11/04/2020 3:39 PM
2011090-005	TW07-20201103	11/03/2020 3:45 PM	11/04/2020 3:39 PM
2011090-006	TW08-20201104	11/04/2020 7:24 AM	11/04/2020 3:39 PM
2011090-007	TW108-20201104	11/04/2020 7:45 AM	11/04/2020 3:39 PM
2011090-008	SB12-4-20201104	11/04/2020 9:10 AM	11/04/2020 3:39 PM
2011090-009	SB12-6-20201104	11/04/2020 9:15 AM	11/04/2020 3:39 PM
2011090-010	TW12-20201104	11/04/2020 10:05 AM	11/04/2020 3:39 PM
2011090-011	SB06-5.0	11/04/2020 11:15 AM	11/04/2020 3:39 PM
2011090-012	SB06-7.5	11/04/2020 11:10 AM	11/04/2020 3:39 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2011090**
Date: **12/2/2020**

CLIENT: Ramboll Environ
Project: Delta Marine

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011090-005E) required Acid Cleanup Procedure (Using Method No 3665A).
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011090-006E) required Acid Cleanup Procedure (Using Method No 3665A).
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011090-007E) required Acid Cleanup Procedure (Using Method No 3665A).
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011090-010E) required Acid Cleanup Procedure (Using Method No 3665A).
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011090-005E) required Florisil Cleanup Procedure (Using Method No 3620C).
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011090-006E) required Florisil Cleanup Procedure (Using Method No 3620C).
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011090-007E) required Florisil Cleanup Procedure (Using Method No 3620C).
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011090-010E) required Florisil Cleanup Procedure (Using Method No 3620C).

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: Ramboll Environ
Collection Date: 11/3/2020 3:20:00 PM
Project: Delta Marine
Lab ID: 2011090-001
Matrix: Soil
Client Sample ID: SB07-4.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Aroclor 1221	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Aroclor 1232	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Aroclor 1242	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Aroclor 1248	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Aroclor 1254	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Aroclor 1260	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Aroclor 1262	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Aroclor 1268	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Total PCBs	ND	0.133		mg/Kg-dry	1	11/19/2020 7:20:54 PM
Surr: Decachlorobiphenyl	85.4	6.8 - 211		%Rec	1	11/19/2020 7:20:54 PM
Surr: Tetrachloro-m-xylene	67.5	7.85 - 182		%Rec	1	11/19/2020 7:20:54 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30299		Analyst: DW
Diesel (Fuel Oil)	ND	27.2		mg/Kg-dry	1	11/5/2020 4:52:25 PM
Heavy Oil	ND	67.9		mg/Kg-dry	1	11/5/2020 4:52:25 PM
Surr: 2-Fluorobiphenyl	99.6	50 - 150		%Rec	1	11/5/2020 4:52:25 PM
Surr: o-Terphenyl	82.6	50 - 150		%Rec	1	11/5/2020 4:52:25 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
2-Methylnaphthalene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
1-Methylnaphthalene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Acenaphthylene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Acenaphthene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Fluorene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Phenanthrene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Anthracene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Fluoranthene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Pyrene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Benz(a)anthracene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Chrysene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Benzo(b)fluoranthene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Benzo(k)fluoranthene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Benzo(a)pyrene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Indeno(1,2,3-cd)pyrene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Dibenz(a,h)anthracene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 3:20:00 PM
Project: Delta Marine
Lab ID: 2011090-001
Matrix: Soil
Client Sample ID: SB07-4.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	46.5		µg/Kg-dry	1	11/17/2020 9:09:09 PM
Surr: 2-Fluorobiphenyl	56.2	16.9 - 122		%Rec	1	11/17/2020 9:09:09 PM
Surr: Terphenyl-d14 (surr)	92.2	38.4 - 153		%Rec	1	11/17/2020 9:09:09 PM
Gasoline by NWTPH-Gx				Batch ID: 30298		Analyst: KT
Gasoline	ND	6.01		mg/Kg-dry	1	11/5/2020 10:05:52 PM
Surr: Toluene-d8	99.1	65 - 135		%Rec	1	11/5/2020 10:05:52 PM
Surr: 4-Bromofluorobenzene	100	65 - 135		%Rec	1	11/5/2020 10:05:52 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Chloromethane	ND	0.0601		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Vinyl chloride	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Bromomethane	ND	0.0601		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Trichlorofluoromethane (CFC-11)	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Chloroethane	ND	0.0601		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,1-Dichloroethene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Methylene chloride	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
trans-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Methyl tert-butyl ether (MTBE)	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,1-Dichloroethane	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
cis-1,2-Dichloroethene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Chloroform	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,1,1-Trichloroethane (TCA)	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,1-Dichloropropene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Carbon tetrachloride	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2-Dichloroethane (EDC)	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Benzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Trichloroethene (TCE)	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2-Dichloropropane	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Bromodichloromethane	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Dibromomethane	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
cis-1,3-Dichloropropene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Toluene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
trans-1,3-Dichloropropylene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,1,2-Trichloroethane	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,3-Dichloropropane	ND	0.0300		mg/Kg-dry	1	11/10/2020 1:52:04 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 3:20:00 PM
Project: Delta Marine
Lab ID: 2011090-001
Matrix: Soil
Client Sample ID: SB07-4.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Tetrachloroethene (PCE)	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Dibromochloromethane	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2-Dibromoethane (EDB)	ND	0.00601		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Chlorobenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,1,1,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Ethylbenzene	ND	0.0300		mg/Kg-dry	1	11/10/2020 1:52:04 AM
m,p-Xylene	ND	0.0601		mg/Kg-dry	1	11/10/2020 1:52:04 AM
o-Xylene	ND	0.0300		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Styrene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Isopropylbenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Bromoform	ND	0.0601		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,1,2,2-Tetrachloroethane	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
n-Propylbenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Bromobenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,3,5-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
2-Chlorotoluene	ND	0.0300		mg/Kg-dry	1	11/10/2020 1:52:04 AM
4-Chlorotoluene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
tert-Butylbenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2,3-Trichloropropane	ND	0.0300		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2,4-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
sec-Butylbenzene	ND	0.0300		mg/Kg-dry	1	11/10/2020 1:52:04 AM
4-Isopropyltoluene	ND	0.0300		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,3-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,4-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
n-Butylbenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2-Dichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2-Dibromo-3-chloropropane	ND	0.601		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2,4-Trimethylbenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Hexachloro-1,3-butadiene	ND	0.0300		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Naphthalene	ND	0.0601		mg/Kg-dry	1	11/10/2020 1:52:04 AM
1,2,3-Trichlorobenzene	ND	0.0240		mg/Kg-dry	1	11/10/2020 1:52:04 AM
Surr: Dibromofluoromethane	97.8	85.2 - 113		%Rec	1	11/10/2020 1:52:04 AM
Surr: Toluene-d8	96.8	88.5 - 110		%Rec	1	11/10/2020 1:52:04 AM
Surr: 1-Bromo-4-fluorobenzene	99.3	88.6 - 109		%Rec	1	11/10/2020 1:52:04 AM
Mercury by EPA Method 7471				Batch ID: 30315		Analyst: WF
Mercury	ND	0.340		mg/Kg-dry	1	11/6/2020 1:45:25 PM

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-001
Client Sample ID: **SB07-4.5-20201103**

Collection Date: 11/3/2020 3:20:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	ND	0.209		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Arsenic	4.76	0.261		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Beryllium	0.389	0.209		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Cadmium	ND	0.209		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Chromium	24.2	0.104		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Copper	19.2	0.209		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Lead	6.28	0.209		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Nickel	13.8	0.522		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Selenium	0.975	0.522		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Silver	ND	0.104		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Thallium	ND	0.209		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Zinc	43.7	0.522		mg/Kg-dry	1	11/9/2020 5:00:01 PM
Sample Moisture (Percent Moisture)				Batch ID: R63166		Analyst: RL
Percent Moisture	27.9	0.500		wt%	1	11/5/2020 2:18:48 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 3:30:00 PM
Project: Delta Marine
Lab ID: 2011090-002
Matrix: Soil
Client Sample ID: SB07-7-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Aroclor 1221	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Aroclor 1232	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Aroclor 1242	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Aroclor 1248	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Aroclor 1254	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Aroclor 1260	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Aroclor 1262	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Aroclor 1268	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Total PCBs	ND	0.140		mg/Kg-dry	1	11/19/2020 7:30:37 PM
Surr: Decachlorobiphenyl	72.3	6.8 - 211		%Rec	1	11/19/2020 7:30:37 PM
Surr: Tetrachloro-m-xylene	46.9	7.85 - 182		%Rec	1	11/19/2020 7:30:37 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30336		Analyst: DW
Diesel (Fuel Oil)	ND	24.6		mg/Kg-dry	1	11/9/2020 9:25:06 PM
Heavy Oil	ND	61.5		mg/Kg-dry	1	11/9/2020 9:25:06 PM
Surr: 2-Fluorobiphenyl	81.0	50 - 150		%Rec	1	11/9/2020 9:25:06 PM
Surr: o-Terphenyl	82.4	50 - 150		%Rec	1	11/9/2020 9:25:06 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
2-Methylnaphthalene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
1-Methylnaphthalene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Acenaphthylene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Acenaphthene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Fluorene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Phenanthrene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Anthracene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Fluoranthene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Pyrene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Benz(a)anthracene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Chrysene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Benzo(b)fluoranthene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Benzo(k)fluoranthene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Benzo(a)pyrene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Indeno(1,2,3-cd)pyrene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Dibenz(a,h)anthracene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 3:30:00 PM
Project: Delta Marine
Lab ID: 2011090-002
Matrix: Soil
Client Sample ID: SB07-7-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	49.3		µg/Kg-dry	1	11/17/2020 9:30:22 PM
Surr: 2-Fluorobiphenyl	63.1	16.9 - 122		%Rec	1	11/17/2020 9:30:22 PM
Surr: Terphenyl-d14 (surr)	97.5	38.4 - 153		%Rec	1	11/17/2020 9:30:22 PM
Gasoline by NWTPH-Gx				Batch ID: 30341		Analyst: KT
Gasoline	ND	7.59		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Surr: Toluene-d8	98.2	65 - 135		%Rec	1	11/9/2020 11:51:34 PM
Surr: 4-Bromofluorobenzene	98.4	65 - 135		%Rec	1	11/9/2020 11:51:34 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Chloromethane	ND	0.0759		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Vinyl chloride	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Bromomethane	ND	0.0759		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Trichlorofluoromethane (CFC-11)	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Chloroethane	ND	0.0759		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,1-Dichloroethene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Methylene chloride	ND	0.00247	MDL	mg/Kg-dry	1	11/9/2020 11:51:34 PM
trans-1,2-Dichloroethene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,1-Dichloroethane	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
cis-1,2-Dichloroethene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Chloroform	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,1,1-Trichloroethane (TCA)	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,1-Dichloropropene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Carbon tetrachloride	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2-Dichloroethane (EDC)	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Benzene	ND	0.0106	MDL	mg/Kg-dry	1	11/9/2020 11:51:34 PM
Trichloroethene (TCE)	ND	0.00330	MDL	mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2-Dichloropropane	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Bromodichloromethane	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Dibromomethane	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
cis-1,3-Dichloropropene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Toluene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
trans-1,3-Dichloropropylene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,1,2-Trichloroethane	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,3-Dichloropropane	ND	0.0379		mg/Kg-dry	1	11/9/2020 11:51:34 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 3:30:00 PM
Project: Delta Marine
Lab ID: 2011090-002
Matrix: Soil
Client Sample ID: SB07-7-20201103

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30341 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Dibromochloromethane	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2-Dibromoethane (EDB)	ND	0.00759		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Chlorobenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,1,1,2-Tetrachloroethane	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Ethylbenzene	ND	0.0379		mg/Kg-dry	1	11/9/2020 11:51:34 PM
m,p-Xylene	ND	0.0759		mg/Kg-dry	1	11/9/2020 11:51:34 PM
o-Xylene	ND	0.0379		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Styrene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Isopropylbenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Bromoform	ND	0.0759		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,1,2,2-Tetrachloroethane	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
n-Propylbenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Bromobenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,3,5-Trimethylbenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
2-Chlorotoluene	ND	0.0379		mg/Kg-dry	1	11/9/2020 11:51:34 PM
4-Chlorotoluene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
tert-Butylbenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2,3-Trichloropropane	ND	0.0379		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2,4-Trichlorobenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
sec-Butylbenzene	ND	0.0379		mg/Kg-dry	1	11/9/2020 11:51:34 PM
4-Isopropyltoluene	ND	0.0379		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,3-Dichlorobenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,4-Dichlorobenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
n-Butylbenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2-Dichlorobenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2-Dibromo-3-chloropropane	ND	0.759		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2,4-Trimethylbenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Hexachloro-1,3-butadiene	ND	0.0379		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Naphthalene	ND	0.0759		mg/Kg-dry	1	11/9/2020 11:51:34 PM
1,2,3-Trichlorobenzene	ND	0.0304		mg/Kg-dry	1	11/9/2020 11:51:34 PM
Surr: Dibromofluoromethane	98.1	85.2 - 113		%Rec	1	11/9/2020 11:51:34 PM
Surr: Toluene-d8	97.9	88.5 - 110		%Rec	1	11/9/2020 11:51:34 PM
Surr: 1-Bromo-4-fluorobenzene	99.4	88.6 - 109		%Rec	1	11/9/2020 11:51:34 PM

NOTES:
MDL - Analyte reported to Method Detection Limit (MDL)

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Collection Date: 11/3/2020 3:30:00 PM
Project: Delta Marine
Lab ID: 2011090-002
Matrix: Soil
Client Sample ID: SB07-7-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Mercury by EPA Method 7471				Batch ID: 30333		Analyst: WF
Mercury	ND	0.338		mg/Kg-dry	1	11/9/2020 1:11:17 PM
Total Metals by EPA Method 6020B				Batch ID: 30342		Analyst: CO
Antimony	ND	0.218		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Arsenic	21.3	0.272		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Beryllium	0.289	0.218		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Cadmium	ND	0.218		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Chromium	22.2	0.109		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Copper	35.1	0.218		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Lead	3.57	0.218		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Nickel	24.7	0.545		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Selenium	2.51	0.545		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Silver	ND	0.109		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Thallium	ND	0.218		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Zinc	73.1	0.545		mg/Kg-dry	1	11/11/2020 1:32:35 PM
Sample Moisture (Percent Moisture)				Batch ID: R63231		Analyst: RL
Percent Moisture	31.5	0.500		wt%	1	11/9/2020 9:44:11 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 4:30:00 PM
Project: Delta Marine
Lab ID: 2011090-003
Matrix: Soil
Client Sample ID: SB08-4.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Aroclor 1221	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Aroclor 1232	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Aroclor 1242	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Aroclor 1248	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Aroclor 1254	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Aroclor 1260	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Aroclor 1262	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Aroclor 1268	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Total PCBs	ND	0.104		mg/Kg-dry	1	11/19/2020 7:40:19 PM
Surr: Decachlorobiphenyl	71.0	6.8 - 211		%Rec	1	11/19/2020 7:40:19 PM
Surr: Tetrachloro-m-xylene	56.3	7.85 - 182		%Rec	1	11/19/2020 7:40:19 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30299		Analyst: DW
Diesel (Fuel Oil)	ND	19.6		mg/Kg-dry	1	11/5/2020 6:21:54 PM
Heavy Oil	ND	48.9		mg/Kg-dry	1	11/5/2020 6:21:54 PM
Surr: 2-Fluorobiphenyl	98.7	50 - 150		%Rec	1	11/5/2020 6:21:54 PM
Surr: o-Terphenyl	80.0	50 - 150		%Rec	1	11/5/2020 6:21:54 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
2-Methylnaphthalene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
1-Methylnaphthalene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Acenaphthylene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Acenaphthene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Fluorene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Phenanthrene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Anthracene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Fluoranthene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Pyrene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Benz(a)anthracene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Chrysene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Benzo(b)fluoranthene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Benzo(k)fluoranthene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Benzo(a)pyrene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Indeno(1,2,3-cd)pyrene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Dibenz(a,h)anthracene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 4:30:00 PM
Project: Delta Marine
Lab ID: 2011090-003
Matrix: Soil
Client Sample ID: SB08-4.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	39.4		µg/Kg-dry	1	11/17/2020 10:34:06 PM
Surr: 2-Fluorobiphenyl	59.8	16.9 - 122		%Rec	1	11/17/2020 10:34:06 PM
Surr: Terphenyl-d14 (surr)	92.5	38.4 - 153		%Rec	1	11/17/2020 10:34:06 PM
Gasoline by NWTPH-Gx				Batch ID: 30298		Analyst: KT
Gasoline	ND	5.65		mg/Kg-dry	1	11/5/2020 11:06:31 PM
Surr: Toluene-d8	101	65 - 135		%Rec	1	11/5/2020 11:06:31 PM
Surr: 4-Bromofluorobenzene	99.2	65 - 135		%Rec	1	11/5/2020 11:06:31 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Chloromethane	ND	0.0565		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Vinyl chloride	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Bromomethane	ND	0.0565		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Trichlorofluoromethane (CFC-11)	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Chloroethane	ND	0.0565		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,1-Dichloroethene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Methylene chloride	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
trans-1,2-Dichloroethene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Methyl tert-butyl ether (MTBE)	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,1-Dichloroethane	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
cis-1,2-Dichloroethene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Chloroform	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,1,1-Trichloroethane (TCA)	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,1-Dichloropropene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Carbon tetrachloride	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2-Dichloroethane (EDC)	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Benzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Trichloroethene (TCE)	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2-Dichloropropane	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Bromodichloromethane	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Dibromomethane	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
cis-1,3-Dichloropropene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Toluene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
trans-1,3-Dichloropropylene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,1,2-Trichloroethane	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,3-Dichloropropane	ND	0.0282		mg/Kg-dry	1	11/10/2020 2:22:14 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 4:30:00 PM
Project: Delta Marine
Lab ID: 2011090-003
Matrix: Soil
Client Sample ID: SB08-4.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Tetrachloroethene (PCE)	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Dibromochloromethane	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2-Dibromoethane (EDB)	ND	0.00565		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Chlorobenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,1,1,2-Tetrachloroethane	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Ethylbenzene	ND	0.0282		mg/Kg-dry	1	11/10/2020 2:22:14 AM
m,p-Xylene	ND	0.0565		mg/Kg-dry	1	11/10/2020 2:22:14 AM
o-Xylene	ND	0.0282		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Styrene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Isopropylbenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Bromoform	ND	0.0565		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,1,2,2-Tetrachloroethane	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
n-Propylbenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Bromobenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,3,5-Trimethylbenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
2-Chlorotoluene	ND	0.0282		mg/Kg-dry	1	11/10/2020 2:22:14 AM
4-Chlorotoluene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
tert-Butylbenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2,3-Trichloropropane	ND	0.0282		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2,4-Trichlorobenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
sec-Butylbenzene	ND	0.0282		mg/Kg-dry	1	11/10/2020 2:22:14 AM
4-Isopropyltoluene	ND	0.0282		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,3-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,4-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
n-Butylbenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2-Dichlorobenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2-Dibromo-3-chloropropane	ND	0.565		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2,4-Trimethylbenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Hexachloro-1,3-butadiene	ND	0.0282		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Naphthalene	ND	0.0565		mg/Kg-dry	1	11/10/2020 2:22:14 AM
1,2,3-Trichlorobenzene	ND	0.0226		mg/Kg-dry	1	11/10/2020 2:22:14 AM
Surr: Dibromofluoromethane	95.2	85.2 - 113		%Rec	1	11/10/2020 2:22:14 AM
Surr: Toluene-d8	98.1	88.5 - 110		%Rec	1	11/10/2020 2:22:14 AM
Surr: 1-Bromo-4-fluorobenzene	97.1	88.6 - 109		%Rec	1	11/10/2020 2:22:14 AM
Mercury by EPA Method 7471				Batch ID: 30315		Analyst: WF
Mercury	ND	0.270		mg/Kg-dry	1	11/6/2020 1:47:01 PM

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Collection Date: 11/3/2020 4:30:00 PM
Project: Delta Marine
Lab ID: 2011090-003
Matrix: Soil
Client Sample ID: SB08-4.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	0.335	0.175		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Arsenic	10.9	0.219		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Beryllium	0.256	0.175		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Cadmium	0.561	0.175		mg/Kg-dry	1	11/10/2020 2:39:07 PM
Chromium	35.1	0.0875		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Copper	87.2	0.175		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Lead	39.9	0.175		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Nickel	42.0	0.437		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Selenium	0.826	0.437		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Silver	0.117	0.0875		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Thallium	ND	0.175		mg/Kg-dry	1	11/9/2020 5:05:34 PM
Zinc	243	4.37	D	mg/Kg-dry	10	11/10/2020 2:44:41 PM
Sample Moisture (Percent Moisture)				Batch ID: R63166		Analyst: RL
Percent Moisture	12.7	0.500		wt%	1	11/5/2020 2:18:48 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 4:35:00 PM
Project: Delta Marine
Lab ID: 2011090-004
Matrix: Soil
Client Sample ID: SB08-8.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Aroclor 1221	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Aroclor 1232	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Aroclor 1242	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Aroclor 1248	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Aroclor 1254	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Aroclor 1260	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Aroclor 1262	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Aroclor 1268	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Total PCBs	ND	0.115		mg/Kg-dry	1	11/19/2020 7:50:00 PM
Surr: Decachlorobiphenyl	58.6	6.8 - 211		%Rec	1	11/19/2020 7:50:00 PM
Surr: Tetrachloro-m-xylene	43.5	7.85 - 182		%Rec	1	11/19/2020 7:50:00 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30336		Analyst: DW
Diesel (Fuel Oil)	ND	25.3		mg/Kg-dry	1	11/9/2020 10:23:57 PM
Heavy Oil	162	63.3		mg/Kg-dry	1	11/9/2020 10:23:57 PM
Surr: 2-Fluorobiphenyl	98.5	50 - 150		%Rec	1	11/9/2020 10:23:57 PM
Surr: o-Terphenyl	95.8	50 - 150		%Rec	1	11/9/2020 10:23:57 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
2-Methylnaphthalene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
1-Methylnaphthalene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Acenaphthylene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Acenaphthene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Fluorene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Phenanthrene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Anthracene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Fluoranthene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Pyrene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Benz(a)anthracene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Chrysene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Benzo(b)fluoranthene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Benzo(k)fluoranthene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Benzo(a)pyrene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Indeno(1,2,3-cd)pyrene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Dibenz(a,h)anthracene	ND	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 4:35:00 PM
Project: Delta Marine
Lab ID: 2011090-004
Matrix: Soil
Client Sample ID: SB08-8.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	80.4	45.9		µg/Kg-dry	1	11/17/2020 10:55:17 PM
Surr: 2-Fluorobiphenyl	74.8	16.9 - 122		%Rec	1	11/17/2020 10:55:17 PM
Surr: Terphenyl-d14 (surr)	87.6	38.4 - 153		%Rec	1	11/17/2020 10:55:17 PM
Gasoline by NWTPH-Gx				Batch ID: 30341		Analyst: KT
Gasoline	ND	7.25		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Surr: Toluene-d8	98.7	65 - 135		%Rec	1	11/10/2020 12:21:44 AM
Surr: 4-Bromofluorobenzene	92.6	65 - 135		%Rec	1	11/10/2020 12:21:44 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Chloromethane	ND	0.0725		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Vinyl chloride	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Bromomethane	ND	0.0725		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Trichlorofluoromethane (CFC-11)	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Chloroethane	ND	0.0725		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,1-Dichloroethene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Methylene chloride	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
trans-1,2-Dichloroethene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Methyl tert-butyl ether (MTBE)	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,1-Dichloroethane	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
cis-1,2-Dichloroethene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Chloroform	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,1,1-Trichloroethane (TCA)	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,1-Dichloropropene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Carbon tetrachloride	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2-Dichloroethane (EDC)	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Benzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Trichloroethene (TCE)	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2-Dichloropropane	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Bromodichloromethane	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Dibromomethane	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
cis-1,3-Dichloropropene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Toluene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
trans-1,3-Dichloropropylene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,1,2-Trichloroethane	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,3-Dichloropropane	ND	0.0363		mg/Kg-dry	1	11/10/2020 12:21:44 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 4:35:00 PM
Project: Delta Marine
Lab ID: 2011090-004
Matrix: Soil
Client Sample ID: SB08-8.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Tetrachloroethene (PCE)	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Dibromochloromethane	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2-Dibromoethane (EDB)	ND	0.00725		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Chlorobenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,1,1,2-Tetrachloroethane	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Ethylbenzene	ND	0.0363		mg/Kg-dry	1	11/10/2020 12:21:44 AM
m,p-Xylene	ND	0.0725		mg/Kg-dry	1	11/10/2020 12:21:44 AM
o-Xylene	ND	0.0363		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Styrene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Isopropylbenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Bromoform	ND	0.0725		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,1,2,2-Tetrachloroethane	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
n-Propylbenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Bromobenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,3,5-Trimethylbenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
2-Chlorotoluene	ND	0.0363		mg/Kg-dry	1	11/10/2020 12:21:44 AM
4-Chlorotoluene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
tert-Butylbenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2,3-Trichloropropane	ND	0.0363		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2,4-Trichlorobenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
sec-Butylbenzene	ND	0.0363		mg/Kg-dry	1	11/10/2020 12:21:44 AM
4-Isopropyltoluene	ND	0.0363		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,3-Dichlorobenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,4-Dichlorobenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
n-Butylbenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2-Dichlorobenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2-Dibromo-3-chloropropane	ND	0.725		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2,4-Trimethylbenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Hexachloro-1,3-butadiene	ND	0.0363		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Naphthalene	ND	0.0725		mg/Kg-dry	1	11/10/2020 12:21:44 AM
1,2,3-Trichlorobenzene	ND	0.0290		mg/Kg-dry	1	11/10/2020 12:21:44 AM
Surr: Dibromofluoromethane	96.4	85.2 - 113		%Rec	1	11/10/2020 12:21:44 AM
Surr: Toluene-d8	98.3	88.5 - 110		%Rec	1	11/10/2020 12:21:44 AM
Surr: 1-Bromo-4-fluorobenzene	98.7	88.6 - 109		%Rec	1	11/10/2020 12:21:44 AM
Mercury by EPA Method 7471				Batch ID: 30333		Analyst: WF
Mercury	ND	0.294		mg/Kg-dry	1	11/9/2020 1:12:52 PM

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Collection Date: 11/3/2020 4:35:00 PM
Project: Delta Marine
Lab ID: 2011090-004
Matrix: Soil
Client Sample ID: SB08-8.5-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 30342		Analyst: CO
Antimony	0.302	0.190		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Arsenic	10.6	0.237		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Beryllium	0.269	0.190		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Cadmium	6.91	0.190		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Chromium	72.4	0.0950		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Copper	237	0.190		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Lead	220	3.80	D	mg/Kg-dry	20	11/11/2020 1:38:09 PM
Nickel	124	0.475		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Selenium	1.12	0.475		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Silver	0.201	0.0950		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Thallium	ND	0.190		mg/Kg-dry	1	11/11/2020 1:43:43 PM
Zinc	1,930	9.50	D	mg/Kg-dry	20	11/11/2020 1:38:09 PM
Sample Moisture (Percent Moisture)				Batch ID: R63231		Analyst: RL
Percent Moisture	22.6	0.500		wt%	1	11/9/2020 9:44:11 AM

Client: Ramboll Environ
Collection Date: 11/3/2020 3:45:00 PM
Project: Delta Marine
Lab ID: 2011090-005
Matrix: Groundwater
Client Sample ID: TW07-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30557		Analyst: SB
Aroclor 1016	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Aroclor 1221	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Aroclor 1232	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Aroclor 1242	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Aroclor 1248	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Aroclor 1254	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Aroclor 1260	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Aroclor 1262	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Aroclor 1268	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Total PCBs	ND	0.108		µg/L	1	12/2/2020 10:17:30 AM
Surr: Decachlorobiphenyl	21.5	5 - 124		%Rec	1	12/2/2020 10:17:30 AM
Surr: Tetrachloro-m-xylene	12.9	21.2 - 115	S	%Rec	1	12/2/2020 10:17:30 AM

NOTES:
S - Outlying surrogate recovery(ies) observed.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30306		Analyst: DW
Diesel (Fuel Oil)	ND	49.4		µg/L	1	11/6/2020 5:38:57 PM
Heavy Oil	357	98.8		µg/L	1	11/6/2020 5:38:57 PM
Surr: 2-Fluorobiphenyl	86.0	50 - 150		%Rec	1	11/6/2020 5:38:57 PM
Surr: o-Terphenyl	43.8	50 - 150	S	%Rec	1	11/6/2020 5:38:57 PM

NOTES:
S - Outlying surrogate recovery(ies) observed. All other laboratory and field samples recovered within range.

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Naphthalene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
2-Methylnaphthalene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
1-Methylnaphthalene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Acenaphthylene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Acenaphthene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Fluorene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Phenanthrene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Anthracene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Fluoranthene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Pyrene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Benz(a)anthracene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Chrysene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Benzo(b)fluoranthene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM

Client: Ramboll Environ
Collection Date: 11/3/2020 3:45:00 PM
Project: Delta Marine
Lab ID: 2011090-005
Matrix: Groundwater
Client Sample ID: TW07-20201103

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Benzo(k)fluoranthene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Benzo(a)pyrene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Indeno(1,2,3-cd)pyrene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Dibenz(a,h)anthracene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Benzo(g,h,i)perylene	ND	0.0988		µg/L	1	11/11/2020 2:49:35 PM
Surr: 2-Fluorobiphenyl	75.0	50.8 - 146		%Rec	1	11/11/2020 2:49:35 PM
Surr: Terphenyl-d14	60.5	26.1 - 145		%Rec	1	11/11/2020 2:49:35 PM
Gasoline by NWTPH-Gx				Batch ID: 30295		Analyst: CR
Gasoline	ND	50.0		µg/L	1	11/5/2020 7:53:37 PM
Surr: Toluene-d8	96.5	65 - 135		%Rec	1	11/5/2020 7:53:37 PM
Surr: 4-Bromofluorobenzene	95.4	65 - 135		%Rec	1	11/5/2020 7:53:37 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30295		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	11/5/2020 7:53:37 PM
Chloromethane	ND	2.00	Q	µg/L	1	11/5/2020 7:53:37 PM
Vinyl chloride	ND	0.200		µg/L	1	11/5/2020 7:53:37 PM
Bromomethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Chloroethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Methylene chloride	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Chloroform	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Benzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/5/2020 7:53:37 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Bromodichloromethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Dibromomethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-005
Client Sample ID: **TW07-20201103**

Collection Date: 11/3/2020 3:45:00 PM
Matrix: Groundwater

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30295 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Toluene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	11/5/2020 7:53:37 PM
Chlorobenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Ethylbenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
m,p-Xylene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
o-Xylene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Styrene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Bromoform	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Bromobenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/5/2020 7:53:37 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	11/5/2020 7:53:37 PM
Naphthalene	ND	1.00		µg/L	1	11/5/2020 7:53:37 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/5/2020 7:53:37 PM
Surr: Dibromofluoromethane	104	84.8 - 113		%Rec	1	11/5/2020 7:53:37 PM
Surr: Toluene-d8	98.9	88.5 - 110		%Rec	1	11/5/2020 7:53:37 PM
Surr: 1-Bromo-4-fluorobenzene	99.5	89.9 - 108		%Rec	1	11/5/2020 7:53:37 PM

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-005
Client Sample ID: **TW07-20201103**

Collection Date: 11/3/2020 3:45:00 PM
Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30295		Analyst: CR
NOTES: Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria						
Dissolved Mercury by EPA Method 245.1				Batch ID: 30343		Analyst: WF
Mercury	ND	0.100		µg/L	1	11/10/2020 1:59:13 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 30329		Analyst: CO
Antimony	8.88	1.00		µg/L	1	11/9/2020 9:32:43 PM
Arsenic	1.84	0.500		µg/L	1	11/9/2020 9:32:43 PM
Beryllium	ND	0.200		µg/L	1	11/9/2020 9:32:43 PM
Cadmium	ND	0.200		µg/L	1	11/9/2020 9:32:43 PM
Chromium	ND	1.00		µg/L	1	11/9/2020 9:32:43 PM
Copper	3.55	1.00		µg/L	1	11/9/2020 9:32:43 PM
Lead	ND	0.500		µg/L	1	11/9/2020 9:32:43 PM
Nickel	ND	2.50		µg/L	1	11/9/2020 9:32:43 PM
Selenium	ND	5.00		µg/L	1	11/9/2020 9:32:43 PM
Silver	ND	0.250		µg/L	1	11/9/2020 9:32:43 PM
Thallium	ND	0.200		µg/L	1	11/9/2020 9:32:43 PM
Zinc	5.95	2.50		µg/L	1	11/9/2020 9:32:43 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 7:24:00 AM
Project: Delta Marine
Lab ID: 2011090-006
Matrix: Groundwater
Client Sample ID: TW08-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30557		Analyst: SB
Aroclor 1016	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Aroclor 1221	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Aroclor 1232	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Aroclor 1242	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Aroclor 1248	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Aroclor 1254	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Aroclor 1260	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Aroclor 1262	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Aroclor 1268	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Total PCBs	ND	0.100		µg/L	1	12/1/2020 9:55:54 PM
Surr: Decachlorobiphenyl	34.3	5 - 124		%Rec	1	12/1/2020 9:55:54 PM
Surr: Tetrachloro-m-xylene	48.4	21.2 - 115		%Rec	1	12/1/2020 9:55:54 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30306		Analyst: DW
Diesel (Fuel Oil)	ND	51.4		µg/L	1	11/6/2020 6:08:39 PM
Heavy Oil	185	103		µg/L	1	11/6/2020 6:08:39 PM
Surr: 2-Fluorobiphenyl	89.2	50 - 150		%Rec	1	11/6/2020 6:08:39 PM
Surr: o-Terphenyl	64.0	50 - 150		%Rec	1	11/6/2020 6:08:39 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Naphthalene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
2-Methylnaphthalene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
1-Methylnaphthalene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Acenaphthylene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Acenaphthene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Fluorene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Phenanthrene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Anthracene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Fluoranthene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Pyrene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Benz(a)anthracene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Chrysene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Benzo(b)fluoranthene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Benzo(k)fluoranthene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Benzo(a)pyrene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Indeno(1,2,3-cd)pyrene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Dibenz(a,h)anthracene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 7:24:00 AM
Project: Delta Marine
Lab ID: 2011090-006
Matrix: Groundwater
Client Sample ID: TW08-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Benzo(g,h,i)perylene	ND	0.100		µg/L	1	11/11/2020 3:10:59 PM
Surr: 2-Fluorobiphenyl	80.5	50.8 - 146		%Rec	1	11/11/2020 3:10:59 PM
Surr: Terphenyl-d14	41.4	26.1 - 145		%Rec	1	11/11/2020 3:10:59 PM
Gasoline by NWTPH-Gx				Batch ID: 30295		Analyst: CR
Gasoline	ND	50.0		µg/L	1	11/5/2020 8:23:43 PM
Surr: Toluene-d8	96.5	65 - 135		%Rec	1	11/5/2020 8:23:43 PM
Surr: 4-Bromofluorobenzene	96.3	65 - 135		%Rec	1	11/5/2020 8:23:43 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30295		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	11/5/2020 8:23:43 PM
Chloromethane	ND	2.00	Q	µg/L	1	11/5/2020 8:23:43 PM
Vinyl chloride	ND	0.200		µg/L	1	11/5/2020 8:23:43 PM
Bromomethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Chloroethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Methylene chloride	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Chloroform	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Benzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/5/2020 8:23:43 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Bromodichloromethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Dibromomethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Toluene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 7:24:00 AM
Project: Delta Marine
Lab ID: 2011090-006
Matrix: Groundwater
Client Sample ID: TW08-20201104

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30295 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	11/5/2020 8:23:43 PM
Chlorobenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Ethylbenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
m,p-Xylene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
o-Xylene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Styrene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Bromoform	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Bromobenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/5/2020 8:23:43 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	11/5/2020 8:23:43 PM
Naphthalene	ND	1.00		µg/L	1	11/5/2020 8:23:43 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/5/2020 8:23:43 PM
Surr: Dibromofluoromethane	104	84.8 - 113		%Rec	1	11/5/2020 8:23:43 PM
Surr: Toluene-d8	99.0	88.5 - 110		%Rec	1	11/5/2020 8:23:43 PM
Surr: 1-Bromo-4-fluorobenzene	100	89.9 - 108		%Rec	1	11/5/2020 8:23:43 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-006
Client Sample ID: **TW08-20201104**

Collection Date: 11/4/2020 7:24:00 AM
Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Mercury by EPA Method 245.1				Batch ID: 30343		Analyst: WF
Mercury	ND	0.100		µg/L	1	11/10/2020 2:06:02 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 30329		Analyst: CO
Antimony	ND	1.00		µg/L	1	11/9/2020 9:38:16 PM
Arsenic	1.07	0.500		µg/L	1	11/9/2020 9:38:16 PM
Beryllium	ND	0.200		µg/L	1	11/9/2020 9:38:16 PM
Cadmium	ND	0.200		µg/L	1	11/9/2020 9:38:16 PM
Chromium	1.95	1.00		µg/L	1	11/9/2020 9:38:16 PM
Copper	2.17	1.00		µg/L	1	11/9/2020 9:38:16 PM
Lead	ND	0.500		µg/L	1	11/9/2020 9:38:16 PM
Nickel	ND	2.50		µg/L	1	11/9/2020 9:38:16 PM
Selenium	ND	5.00		µg/L	1	11/9/2020 9:38:16 PM
Silver	ND	0.250		µg/L	1	11/9/2020 9:38:16 PM
Thallium	ND	0.200		µg/L	1	11/9/2020 9:38:16 PM
Zinc	8.84	2.50		µg/L	1	11/9/2020 9:38:16 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 7:45:00 AM
Project: Delta Marine
Lab ID: 2011090-007
Matrix: Groundwater
Client Sample ID: TW108-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30557		Analyst: SB
Aroclor 1016	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Aroclor 1221	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Aroclor 1232	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Aroclor 1242	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Aroclor 1248	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Aroclor 1254	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Aroclor 1260	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Aroclor 1262	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Aroclor 1268	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Total PCBs	ND	0.0981		µg/L	1	12/1/2020 10:05:38 PM
Surr: Decachlorobiphenyl	23.9	5 - 124		%Rec	1	12/1/2020 10:05:38 PM
Surr: Tetrachloro-m-xylene	38.7	21.2 - 115		%Rec	1	12/1/2020 10:05:38 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30306		Analyst: DW
Diesel (Fuel Oil)	ND	51.5		µg/L	1	11/6/2020 6:38:19 PM
Heavy Oil	190	103		µg/L	1	11/6/2020 6:38:19 PM
Surr: 2-Fluorobiphenyl	90.3	50 - 150		%Rec	1	11/6/2020 6:38:19 PM
Surr: o-Terphenyl	65.6	50 - 150		%Rec	1	11/6/2020 6:38:19 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Naphthalene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
2-Methylnaphthalene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
1-Methylnaphthalene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Acenaphthylene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Acenaphthene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Fluorene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Phenanthrene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Anthracene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Fluoranthene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Pyrene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Benz(a)anthracene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Chrysene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Benzo(b)fluoranthene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Benzo(k)fluoranthene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Benzo(a)pyrene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Indeno(1,2,3-cd)pyrene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Dibenz(a,h)anthracene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 7:45:00 AM
Project: Delta Marine
Lab ID: 2011090-007
Matrix: Groundwater
Client Sample ID: TW108-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Benzo(g,h,i)perylene	ND	0.0975		µg/L	1	11/11/2020 3:32:16 PM
Surr: 2-Fluorobiphenyl	90.7	50.8 - 146		%Rec	1	11/11/2020 3:32:16 PM
Surr: Terphenyl-d14	66.8	26.1 - 145		%Rec	1	11/11/2020 3:32:16 PM
Gasoline by NWTPH-Gx				Batch ID: 30295		Analyst: CR
Gasoline	ND	50.0		µg/L	1	11/5/2020 8:53:53 PM
Surr: Toluene-d8	96.8	65 - 135		%Rec	1	11/5/2020 8:53:53 PM
Surr: 4-Bromofluorobenzene	96.6	65 - 135		%Rec	1	11/5/2020 8:53:53 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30295		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	11/5/2020 8:53:53 PM
Chloromethane	ND	2.00	Q	µg/L	1	11/5/2020 8:53:53 PM
Vinyl chloride	ND	0.200		µg/L	1	11/5/2020 8:53:53 PM
Bromomethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Chloroethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Methylene chloride	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Chloroform	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Benzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/5/2020 8:53:53 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Bromodichloromethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Dibromomethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Toluene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 7:45:00 AM
Project: Delta Marine
Lab ID: 2011090-007
Matrix: Groundwater
Client Sample ID: TW108-20201104

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30295 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	11/5/2020 8:53:53 PM
Chlorobenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Ethylbenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
m,p-Xylene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
o-Xylene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Styrene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Bromoform	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Bromobenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/5/2020 8:53:53 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	11/5/2020 8:53:53 PM
Naphthalene	ND	1.00		µg/L	1	11/5/2020 8:53:53 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/5/2020 8:53:53 PM
Surr: Dibromofluoromethane	105	84.8 - 113		%Rec	1	11/5/2020 8:53:53 PM
Surr: Toluene-d8	99.7	88.5 - 110		%Rec	1	11/5/2020 8:53:53 PM
Surr: 1-Bromo-4-fluorobenzene	101	89.9 - 108		%Rec	1	11/5/2020 8:53:53 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-007
Client Sample ID: **TW108-20201104**

Collection Date: 11/4/2020 7:45:00 AM
Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Mercury by EPA Method 245.1				Batch ID: 30343		Analyst: WF
Mercury	ND	0.100		µg/L	1	11/10/2020 2:07:43 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 30329		Analyst: CO
Antimony	ND	1.00		µg/L	1	11/9/2020 9:43:50 PM
Arsenic	0.902	0.500		µg/L	1	11/9/2020 9:43:50 PM
Beryllium	ND	0.200		µg/L	1	11/9/2020 9:43:50 PM
Cadmium	ND	0.200		µg/L	1	11/9/2020 9:43:50 PM
Chromium	1.77	1.00		µg/L	1	11/9/2020 9:43:50 PM
Copper	1.77	1.00		µg/L	1	11/9/2020 9:43:50 PM
Lead	ND	0.500		µg/L	1	11/9/2020 9:43:50 PM
Nickel	ND	2.50		µg/L	1	11/9/2020 9:43:50 PM
Selenium	ND	5.00		µg/L	1	11/9/2020 9:43:50 PM
Silver	ND	0.250		µg/L	1	11/9/2020 9:43:50 PM
Thallium	ND	0.200		µg/L	1	11/9/2020 9:43:50 PM
Zinc	13.3	2.50		µg/L	1	11/9/2020 9:43:50 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 9:10:00 AM
Project: Delta Marine
Lab ID: 2011090-008
Matrix: Soil
Client Sample ID: SB12-4-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Aroclor 1221	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Aroclor 1232	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Aroclor 1242	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Aroclor 1248	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Aroclor 1254	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Aroclor 1260	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Aroclor 1262	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Aroclor 1268	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Total PCBs	ND	0.122		mg/Kg-dry	1	11/19/2020 7:59:42 PM
Surr: Decachlorobiphenyl	75.4	6.8 - 211		%Rec	1	11/19/2020 7:59:42 PM
Surr: Tetrachloro-m-xylene	63.1	7.85 - 182		%Rec	1	11/19/2020 7:59:42 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30299		Analyst: DW
Diesel (Fuel Oil)	ND	24.4		mg/Kg-dry	1	11/5/2020 6:51:34 PM
Heavy Oil	ND	61.1		mg/Kg-dry	1	11/5/2020 6:51:34 PM
Surr: 2-Fluorobiphenyl	97.2	50 - 150		%Rec	1	11/5/2020 6:51:34 PM
Surr: o-Terphenyl	81.3	50 - 150		%Rec	1	11/5/2020 6:51:34 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
2-Methylnaphthalene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
1-Methylnaphthalene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Acenaphthylene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Acenaphthene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Fluorene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Phenanthrene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Anthracene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Fluoranthene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Pyrene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Benz(a)anthracene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Chrysene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Benzo(b)fluoranthene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Benzo(k)fluoranthene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Benzo(a)pyrene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Indeno(1,2,3-cd)pyrene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Dibenz(a,h)anthracene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 9:10:00 AM
Project: Delta Marine
Lab ID: 2011090-008
Matrix: Soil
Client Sample ID: SB12-4-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	45.5		µg/Kg-dry	1	11/17/2020 11:16:33 PM
Surr: 2-Fluorobiphenyl	38.5	16.9 - 122		%Rec	1	11/17/2020 11:16:33 PM
Surr: Terphenyl-d14 (surr)	86.3	38.4 - 153		%Rec	1	11/17/2020 11:16:33 PM
Gasoline by NWTPH-Gx				Batch ID: 30298		Analyst: KT
Gasoline	ND	7.52		mg/Kg-dry	1	11/6/2020 2:38:26 AM
Surr: Toluene-d8	101	65 - 135		%Rec	1	11/6/2020 2:38:26 AM
Surr: 4-Bromofluorobenzene	101	65 - 135		%Rec	1	11/6/2020 2:38:26 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Chloromethane	ND	0.0752		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Vinyl chloride	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Bromomethane	ND	0.0752		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Trichlorofluoromethane (CFC-11)	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Chloroethane	ND	0.0752		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,1-Dichloroethene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Methylene chloride	ND	0.00245	MDL	mg/Kg-dry	1	11/10/2020 2:52:21 AM
trans-1,2-Dichloroethene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Methyl tert-butyl ether (MTBE)	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,1-Dichloroethane	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
cis-1,2-Dichloroethene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Chloroform	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,1,1-Trichloroethane (TCA)	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,1-Dichloropropene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Carbon tetrachloride	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2-Dichloroethane (EDC)	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Benzene	ND	0.0105	MDL	mg/Kg-dry	1	11/10/2020 2:52:21 AM
Trichloroethene (TCE)	ND	0.00327	MDL	mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2-Dichloropropane	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Bromodichloromethane	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Dibromomethane	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
cis-1,3-Dichloropropene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Toluene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
trans-1,3-Dichloropropylene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,1,2-Trichloroethane	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,3-Dichloropropane	ND	0.0376		mg/Kg-dry	1	11/10/2020 2:52:21 AM

Client: Ramboll Environ
Collection Date: 11/4/2020 9:10:00 AM
Project: Delta Marine
Lab ID: 2011090-008
Matrix: Soil
Client Sample ID: SB12-4-20201104

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30341 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Dibromochloromethane	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2-Dibromoethane (EDB)	ND	0.00752		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Chlorobenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,1,1,2-Tetrachloroethane	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Ethylbenzene	ND	0.0376		mg/Kg-dry	1	11/10/2020 2:52:21 AM
m,p-Xylene	ND	0.0752		mg/Kg-dry	1	11/10/2020 2:52:21 AM
o-Xylene	ND	0.0376		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Styrene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Isopropylbenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Bromoform	ND	0.0752		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,1,2,2-Tetrachloroethane	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
n-Propylbenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Bromobenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,3,5-Trimethylbenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
2-Chlorotoluene	ND	0.0376		mg/Kg-dry	1	11/10/2020 2:52:21 AM
4-Chlorotoluene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
tert-Butylbenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2,3-Trichloropropane	ND	0.0376		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2,4-Trichlorobenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
sec-Butylbenzene	ND	0.0376		mg/Kg-dry	1	11/10/2020 2:52:21 AM
4-Isopropyltoluene	ND	0.0376		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,3-Dichlorobenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,4-Dichlorobenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
n-Butylbenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2-Dichlorobenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2-Dibromo-3-chloropropane	ND	0.752		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2,4-Trimethylbenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Hexachloro-1,3-butadiene	ND	0.0376		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Naphthalene	ND	0.0752		mg/Kg-dry	1	11/10/2020 2:52:21 AM
1,2,3-Trichlorobenzene	ND	0.0301		mg/Kg-dry	1	11/10/2020 2:52:21 AM
Surr: Dibromofluoromethane	97.2	85.2 - 113		%Rec	1	11/10/2020 2:52:21 AM
Surr: Toluene-d8	98.5	88.5 - 110		%Rec	1	11/10/2020 2:52:21 AM
Surr: 1-Bromo-4-fluorobenzene	98.3	88.6 - 109		%Rec	1	11/10/2020 2:52:21 AM

NOTES:
MDL - Analyte reported to Method Detection Limit (MDL)

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Collection Date: 11/4/2020 9:10:00 AM
Project: Delta Marine
Lab ID: 2011090-008
Matrix: Soil
Client Sample ID: SB12-4-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Mercury by EPA Method 7471				Batch ID: 30315		Analyst: WF
Mercury	ND	0.298		mg/Kg-dry	1	11/6/2020 1:48:38 PM
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	ND	0.199		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Arsenic	7.66	0.249		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Beryllium	0.499	0.199		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Cadmium	ND	0.199		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Chromium	27.6	0.0995		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Copper	36.1	0.199		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Lead	10.0	0.199		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Nickel	21.7	0.498		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Selenium	1.55	0.498		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Silver	0.100	0.0995		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Thallium	ND	0.199		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Zinc	89.7	0.498		mg/Kg-dry	1	11/9/2020 5:11:08 PM
Sample Moisture (Percent Moisture)				Batch ID: R63166		Analyst: RL
Percent Moisture	25.0	0.500		wt%	1	11/5/2020 2:18:48 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 10:05:00 AM
Project: Delta Marine
Lab ID: 2011090-010
Matrix: Groundwater
Client Sample ID: TW12-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30557		Analyst: SB
Aroclor 1016	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Aroclor 1221	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Aroclor 1232	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Aroclor 1242	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Aroclor 1248	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Aroclor 1254	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Aroclor 1260	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Aroclor 1262	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Aroclor 1268	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Total PCBs	ND	0.0988		µg/L	1	12/1/2020 10:25:07 PM
Surr: Decachlorobiphenyl	56.0	5 - 124		%Rec	1	12/1/2020 10:25:07 PM
Surr: Tetrachloro-m-xylene	44.7	21.2 - 115		%Rec	1	12/1/2020 10:25:07 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30306		Analyst: DW
Diesel (Fuel Oil)	ND	51.3		µg/L	1	11/6/2020 7:07:59 PM
Heavy Oil	179	103		µg/L	1	11/6/2020 7:07:59 PM
Surr: 2-Fluorobiphenyl	91.4	50 - 150		%Rec	1	11/6/2020 7:07:59 PM
Surr: o-Terphenyl	53.0	50 - 150		%Rec	1	11/6/2020 7:07:59 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Naphthalene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
2-Methylnaphthalene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
1-Methylnaphthalene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Acenaphthylene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Acenaphthene	1.26	0.105		µg/L	1	11/11/2020 3:53:32 PM
Fluorene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Phenanthrene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Anthracene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Fluoranthene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Pyrene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Benz(a)anthracene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Chrysene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Benzo(b)fluoranthene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Benzo(k)fluoranthene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Benzo(a)pyrene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Indeno(1,2,3-cd)pyrene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Dibenz(a,h)anthracene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-010
Client Sample ID: **TW12-20201104**

Collection Date: 11/4/2020 10:05:00 AM
Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Benzo(g,h,i)perylene	ND	0.105		µg/L	1	11/11/2020 3:53:32 PM
Surr: 2-Fluorobiphenyl	80.1	50.8 - 146		%Rec	1	11/11/2020 3:53:32 PM
Surr: Terphenyl-d14	55.0	26.1 - 145		%Rec	1	11/11/2020 3:53:32 PM
Gasoline by NWTPH-Gx				Batch ID: 30295		Analyst: CR
Gasoline	ND	50.0		µg/L	1	11/5/2020 9:23:59 PM
Surr: Toluene-d8	96.6	65 - 135		%Rec	1	11/5/2020 9:23:59 PM
Surr: 4-Bromofluorobenzene	95.9	65 - 135		%Rec	1	11/5/2020 9:23:59 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30295		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	11/5/2020 9:23:59 PM
Chloromethane	ND	2.00	Q	µg/L	1	11/5/2020 9:23:59 PM
Vinyl chloride	ND	0.200		µg/L	1	11/5/2020 9:23:59 PM
Bromomethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Chloroethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Methylene chloride	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Chloroform	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Benzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/5/2020 9:23:59 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Bromodichloromethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Dibromomethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Toluene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 10:05:00 AM
Project: Delta Marine
Lab ID: 2011090-010
Matrix: Groundwater
Client Sample ID: TW12-20201104

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30295 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	11/5/2020 9:23:59 PM
Chlorobenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Ethylbenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
m,p-Xylene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
o-Xylene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Styrene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Bromoform	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Bromobenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/5/2020 9:23:59 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	11/5/2020 9:23:59 PM
Naphthalene	ND	1.00		µg/L	1	11/5/2020 9:23:59 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/5/2020 9:23:59 PM
Surr: Dibromofluoromethane	104	84.8 - 113		%Rec	1	11/5/2020 9:23:59 PM
Surr: Toluene-d8	99.3	88.5 - 110		%Rec	1	11/5/2020 9:23:59 PM
Surr: 1-Bromo-4-fluorobenzene	99.9	89.9 - 108		%Rec	1	11/5/2020 9:23:59 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-010
Client Sample ID: **TW12-20201104**

Collection Date: 11/4/2020 10:05:00 AM
Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Mercury by EPA Method 245.1				Batch ID: 30343		Analyst: WF
Mercury	ND	0.100		µg/L	1	11/10/2020 2:09:24 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 30329		Analyst: CO
Antimony	ND	1.00		µg/L	1	11/9/2020 9:49:24 PM
Arsenic	2.57	0.500		µg/L	1	11/9/2020 9:49:24 PM
Beryllium	ND	0.200		µg/L	1	11/9/2020 9:49:24 PM
Cadmium	ND	0.200		µg/L	1	11/9/2020 9:49:24 PM
Chromium	6.58	1.00		µg/L	1	11/9/2020 9:49:24 PM
Copper	9.88	1.00		µg/L	1	11/9/2020 9:49:24 PM
Lead	ND	0.500		µg/L	1	11/9/2020 9:49:24 PM
Nickel	ND	2.50		µg/L	1	11/9/2020 9:49:24 PM
Selenium	ND	5.00		µg/L	1	11/9/2020 9:49:24 PM
Silver	ND	0.250		µg/L	1	11/9/2020 9:49:24 PM
Thallium	ND	0.200		µg/L	1	11/9/2020 9:49:24 PM
Zinc	6.07	2.50		µg/L	1	11/9/2020 9:49:24 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 11:15:00 AM
Project: Delta Marine
Lab ID: 2011090-011
Matrix: Soil
Client Sample ID: SB06-5.0

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Aroclor 1221	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Aroclor 1232	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Aroclor 1242	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Aroclor 1248	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Aroclor 1254	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Aroclor 1260	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Aroclor 1262	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Aroclor 1268	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Total PCBs	ND	0.121		mg/Kg-dry	1	11/19/2020 8:09:23 PM
Surr: Decachlorobiphenyl	74.4	6.8 - 211		%Rec	1	11/19/2020 8:09:23 PM
Surr: Tetrachloro-m-xylene	56.5	7.85 - 182		%Rec	1	11/19/2020 8:09:23 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30299		Analyst: DW
Diesel (Fuel Oil)	ND	22.6		mg/Kg-dry	1	11/5/2020 7:21:17 PM
Heavy Oil	ND	56.5		mg/Kg-dry	1	11/5/2020 7:21:17 PM
Surr: 2-Fluorobiphenyl	96.6	50 - 150		%Rec	1	11/5/2020 7:21:17 PM
Surr: o-Terphenyl	79.6	50 - 150		%Rec	1	11/5/2020 7:21:17 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
2-Methylnaphthalene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
1-Methylnaphthalene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Acenaphthylene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Acenaphthene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Fluorene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Phenanthrene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Anthracene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Fluoranthene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Pyrene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Benz(a)anthracene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Chrysene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Benzo(b)fluoranthene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Benzo(k)fluoranthene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Benzo(a)pyrene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Indeno(1,2,3-cd)pyrene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Dibenz(a,h)anthracene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-011
Client Sample ID: **SB06-5.0**

Collection Date: 11/4/2020 11:15:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	48.9		µg/Kg-dry	1	11/17/2020 11:37:46 PM
Surr: 2-Fluorobiphenyl	52.1	16.9 - 122		%Rec	1	11/17/2020 11:37:46 PM
Surr: Terphenyl-d14 (surr)	99.3	38.4 - 153		%Rec	1	11/17/2020 11:37:46 PM
Gasoline by NWTPH-Gx				Batch ID: 30298		Analyst: KT
Gasoline	ND	5.24		mg/Kg-dry	1	11/6/2020 3:08:42 AM
Surr: Toluene-d8	101	65 - 135		%Rec	1	11/6/2020 3:08:42 AM
Surr: 4-Bromofluorobenzene	101	65 - 135		%Rec	1	11/6/2020 3:08:42 AM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Chloromethane	ND	0.0524		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Vinyl chloride	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Bromomethane	ND	0.0524		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Trichlorofluoromethane (CFC-11)	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Chloroethane	ND	0.0524		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,1-Dichloroethene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Methylene chloride	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
trans-1,2-Dichloroethene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Methyl tert-butyl ether (MTBE)	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,1-Dichloroethane	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
cis-1,2-Dichloroethene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Chloroform	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,1,1-Trichloroethane (TCA)	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,1-Dichloropropene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Carbon tetrachloride	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2-Dichloroethane (EDC)	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Benzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Trichloroethene (TCE)	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2-Dichloropropane	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Bromodichloromethane	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Dibromomethane	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
cis-1,3-Dichloropropene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Toluene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
trans-1,3-Dichloropropylene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,1,2-Trichloroethane	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,3-Dichloropropane	ND	0.0262		mg/Kg-dry	1	11/10/2020 3:22:32 AM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-011
Client Sample ID: **SB06-5.0**

Collection Date: 11/4/2020 11:15:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30341		Analyst: KT
Tetrachloroethene (PCE)	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Dibromochloromethane	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2-Dibromoethane (EDB)	ND	0.00524		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Chlorobenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,1,1,2-Tetrachloroethane	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Ethylbenzene	ND	0.0262		mg/Kg-dry	1	11/10/2020 3:22:32 AM
m,p-Xylene	ND	0.0524		mg/Kg-dry	1	11/10/2020 3:22:32 AM
o-Xylene	ND	0.0262		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Styrene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Isopropylbenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Bromoform	ND	0.0524		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,1,2,2-Tetrachloroethane	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
n-Propylbenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Bromobenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,3,5-Trimethylbenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
2-Chlorotoluene	ND	0.0262		mg/Kg-dry	1	11/10/2020 3:22:32 AM
4-Chlorotoluene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
tert-Butylbenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2,3-Trichloropropane	ND	0.0262		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2,4-Trichlorobenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
sec-Butylbenzene	ND	0.0262		mg/Kg-dry	1	11/10/2020 3:22:32 AM
4-Isopropyltoluene	ND	0.0262		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,3-Dichlorobenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,4-Dichlorobenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
n-Butylbenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2-Dichlorobenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2-Dibromo-3-chloropropane	ND	0.524		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2,4-Trimethylbenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Hexachloro-1,3-butadiene	ND	0.0262		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Naphthalene	ND	0.0524		mg/Kg-dry	1	11/10/2020 3:22:32 AM
1,2,3-Trichlorobenzene	ND	0.0210		mg/Kg-dry	1	11/10/2020 3:22:32 AM
Surr: Dibromofluoromethane	95.9	85.2 - 113		%Rec	1	11/10/2020 3:22:32 AM
Surr: Toluene-d8	98.5	88.5 - 110		%Rec	1	11/10/2020 3:22:32 AM
Surr: 1-Bromo-4-fluorobenzene	98.0	88.6 - 109		%Rec	1	11/10/2020 3:22:32 AM
Mercury by EPA Method 7471				Batch ID: 30315		Analyst: WF
Mercury	ND	0.310		mg/Kg-dry	1	11/6/2020 1:53:28 PM

Analytical Report

Work Order: **2011090**
Date Reported: **12/2/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011090-011
Client Sample ID: **SB06-5.0**

Collection Date: 11/4/2020 11:15:00 AM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	ND	0.193		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Arsenic	4.18	0.242		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Beryllium	0.328	0.193		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Cadmium	ND	0.193		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Chromium	20.1	0.0967		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Copper	28.2	0.193		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Lead	3.44	0.193		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Nickel	10.0	0.484		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Selenium	0.918	0.484		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Silver	ND	0.0967		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Thallium	ND	0.193		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Zinc	28.8	0.484		mg/Kg-dry	1	11/9/2020 5:16:42 PM
Sample Moisture (Percent Moisture)				Batch ID: R63166		Analyst: RL
Percent Moisture	24.0	0.500		wt%	1	11/5/2020 2:18:48 PM

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **MB-30329** SampType: **MBLK** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **MBLKW** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270450**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.00									
Arsenic	ND	0.500									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	ND	1.00									
Copper	ND	1.00									
Lead	ND	0.500									
Nickel	ND	2.50									
Selenium	ND	5.00									
Silver	ND	0.250									
Thallium	ND	0.200									
Zinc	ND	2.50									

Sample ID: **LCS-30329** SampType: **LCS** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **LCSW** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270451**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	5.09	1.00	5.000	0	102	85	115				
Arsenic	103	0.500	100.0	0	103	85	115				
Beryllium	5.52	0.200	5.000	0	110	85	115				
Cadmium	5.56	0.200	5.000	0	111	85	115				
Chromium	103	1.00	100.0	0	103	85	115				
Copper	105	1.00	100.0	0	105	85	115				
Lead	57.8	0.500	50.00	0	116	85	115				S
Nickel	102	2.50	100.0	0	102	85	115				
Selenium	10.9	5.00	10.00	0	109	85	115				
Silver	4.87	0.250	5.000	0	97.3	85	115				
Thallium	2.80	0.200	2.500	0	112	85	115				
Zinc	103	2.50	100.0	0	103	85	115				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **LCS-30329** SampType: **LCS** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **LCSW** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270451**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery observed (high bias). Detections will be qualified with a *.

Sample ID: **MB-30328FB** SampType: **MBLK** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **MBLKW** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270452**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.00									
Arsenic	ND	0.500									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	ND	1.00									
Copper	ND	1.00									
Lead	ND	0.500									
Nickel	ND	2.50									
Selenium	ND	5.00									
Silver	ND	0.250									
Thallium	ND	0.200									
Zinc	ND	2.50									

NOTES:
Filter Blank

Sample ID: **2011061-001CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **BATCH** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270454**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	1.31	1.00						1.388	5.40	30	
Arsenic	1.45	0.500						1.395	3.69	30	
Beryllium	ND	0.200						0		30	
Cadmium	ND	0.200						0		30	
Chromium	ND	1.00						0		30	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **2011061-001CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **BATCH** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270454**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	11.3	1.00						14.50	24.9	30	
Lead	ND	0.500						0		30	
Nickel	ND	2.50						0		30	
Selenium	ND	5.00						0		30	
Silver	ND	0.250						0		30	
Thallium	ND	0.200						0		30	
Zinc	42.8	2.50						46.97	9.27	30	

Sample ID: **2011061-001CMS** SampType: **MS** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **BATCH** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270455**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	27.6	1.00	25.00	1.388	105	70	130				
Arsenic	512	0.500	500.0	1.395	102	70	130				
Beryllium	29.3	0.200	25.00	0.01400	117	70	130				
Cadmium	28.6	0.200	25.00	0.02400	114	70	130				
Chromium	511	1.00	500.0	0.3290	102	70	130				
Copper	531	1.00	500.0	14.50	103	70	130				
Lead	286	0.500	250.0	0.3570	114	70	130				
Nickel	490	2.50	500.0	1.830	97.7	70	130				
Selenium	51.7	5.00	50.00	0	103	70	130				
Silver	24.1	0.250	25.00	0	96.4	70	130				
Thallium	13.8	0.200	12.50	0	111	70	130				
Zinc	569	2.50	500.0	46.97	104	70	130				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **2011061-001CMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **BATCH** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270458**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	27.3	1.00	25.00	1.388	104	70	130	27.64	1.23	30	
Arsenic	504	0.500	500.0	1.395	101	70	130	512.4	1.59	30	
Beryllium	30.2	0.200	25.00	0.01400	121	70	130	29.33	3.09	30	
Cadmium	29.0	0.200	25.00	0.02400	116	70	130	28.58	1.42	30	
Chromium	499	1.00	500.0	0.3290	99.7	70	130	511.0	2.39	30	
Copper	520	1.00	500.0	14.50	101	70	130	531.3	2.14	30	
Lead	280	0.500	250.0	0.3570	112	70	130	286.2	2.15	30	
Nickel	494	2.50	500.0	1.830	98.4	70	130	490.3	0.699	30	
Selenium	53.7	5.00	50.00	0	107	70	130	51.69	3.88	30	
Silver	25.3	0.250	25.00	0	101	70	130	24.11	4.72	30	
Thallium	13.4	0.200	12.50	0	107	70	130	13.83	3.08	30	
Zinc	542	2.50	500.0	46.97	99.1	70	130	568.9	4.77	30	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Mercury by EPA Method 245.1

Sample ID: **MB-30343**	SampType: **MBLK**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **MBLKW**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270109**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

Sample ID: **LCS-30343**	SampType: **LCS**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **LCSW**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270110**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.42	0.100	2.500	0	96.8	85	115				

Sample ID: **2011090-005CDUP**	SampType: **DUP**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **TW07-20201103**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270112**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100						0		20	

Sample ID: **2011090-005CMS**	SampType: **MS**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **TW07-20201103**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270113**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.28	0.100	2.500	0.01300	90.7	70	130				

Sample ID: **2011090-005CMSD**	SampType: **MSD**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **TW07-20201103**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270114**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.32	0.100	2.500	0.01300	92.3	70	130	2.280	1.74	20	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Mercury by EPA Method 245.1

Sample ID: **MB-30328FB**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/10/2020**	RunNo: **63274**
Client ID: **MBLKW**	Batch ID: **30343**		Analysis Date: **11/10/2020**	SeqNo: **1270123**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

NOTES:
Filter Blank

Sample ID: **MB-30345FB**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/10/2020**	RunNo: **63274**
Client ID: **MBLKW**	Batch ID: **30343**		Analysis Date: **11/10/2020**	SeqNo: **1270124**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

NOTES:
Filter Blank

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-30308** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **MBLKS** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269293**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.155									
Arsenic	ND	0.194									
Beryllium	ND	0.155									
Cadmium	ND	0.155									
Chromium	ND	0.0775									
Copper	ND	0.155									
Lead	ND	0.155									
Nickel	ND	0.388									
Selenium	ND	0.388									
Silver	ND	0.0775									
Thallium	ND	0.155									
Zinc	ND	0.388									

Sample ID: **LCS-30308** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **LCSS** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269294**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.05	0.154	1.923	0	107	80	120				
Arsenic	36.7	0.192	38.46	0	95.3	80	120				
Beryllium	1.96	0.154	1.923	0	102	80	120				
Cadmium	1.98	0.154	1.923	0	103	80	120				
Chromium	38.1	0.0769	38.46	0	99.1	80	120				
Copper	38.9	0.154	38.46	0	101	80	120				
Lead	19.4	0.154	19.23	0	101	80	120				
Nickel	37.7	0.385	38.46	0	98.0	80	120				
Selenium	3.78	0.385	3.846	0	98.2	80	120				
Silver	1.95	0.0769	1.923	0	102	80	120				
Thallium	1.03	0.154	0.9615	0	107	80	120				
Zinc	35.5	0.385	38.46	0	92.3	80	120				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011010-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.488	0.172	2.152	0.2377	11.6	75	125				S
Arsenic	57.8	0.215	43.04	15.05	99.3	75	125				
Beryllium	2.51	0.172	2.152	0.3003	103	75	125				
Cadmium	2.61	0.172	2.152	0.3715	104	75	125				
Chromium	78.3	0.0861	43.04	26.79	120	75	125				
Copper	69.6	0.172	43.04	25.66	102	75	125				
Lead	74.0	0.172	21.52	45.02	135	75	125				S
Nickel	78.3	0.430	43.04	31.86	108	75	125				
Selenium	5.33	0.430	4.304	0.7766	106	75	125				
Silver	2.13	0.0861	2.152	0.1123	93.7	75	125				
Thallium	1.39	0.172	1.076	0.08026	122	75	125				
Zinc	140	0.430	43.04	88.94	118	75	125				

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect (Sb).
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range (Pb).

Sample ID: **2011010-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269298**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.283	0.171	2.136	0.2377	2.14	75	125	0.4879	53.0	20	RS
Arsenic	53.3	0.214	42.71	15.05	89.6	75	125	57.80	8.08	20	
Beryllium	2.43	0.171	2.136	0.3003	99.9	75	125	2.507	2.99	20	
Cadmium	2.43	0.171	2.136	0.3715	96.2	75	125	2.614	7.48	20	
Chromium	75.1	0.0854	42.71	26.79	113	75	125	78.32	4.15	20	
Copper	68.2	0.171	42.71	25.66	99.6	75	125	69.58	1.99	20	
Lead	63.6	0.171	21.36	45.02	86.9	75	125	74.02	15.2	20	
Nickel	77.2	0.427	42.71	31.86	106	75	125	78.33	1.49	20	
Selenium	4.87	0.427	4.271	0.7766	95.7	75	125	5.328	9.07	20	
Silver	2.00	0.0854	2.136	0.1123	88.2	75	125	2.128	6.42	20	
Thallium	1.33	0.171	1.068	0.08026	117	75	125	1.391	4.85	20	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011010-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269298**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	132	0.427	42.71	88.94	101	75	125	139.9	5.83	20	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: **2011010-001APDS** SampType: **PDS** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269299**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.58	0.180	2.25	0.238	104	75	125				

Sample ID: **MB-30342** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63303**
Client ID: **MBLKS** Batch ID: **30342** Analysis Date: **11/10/2020** SeqNo: **1270534**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.154									
Arsenic	ND	0.192									
Beryllium	ND	0.154									
Cadmium	ND	0.154									
Chromium	ND	0.0769									
Copper	ND	0.154									
Lead	ND	0.154									
Nickel	ND	0.385									
Selenium	ND	0.385									
Silver	ND	0.0769									
Thallium	ND	0.154									
Zinc	ND	0.385									

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **LCS-30342** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63303**
Client ID: **LCSS** Batch ID: **30342** Analysis Date: **11/11/2020** SeqNo: **1270905**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.00	0.150	1.880	0	106	80	120				
Arsenic	38.2	0.188	37.59	0	102	80	120				
Beryllium	1.98	0.150	1.880	0	105	80	120				
Cadmium	2.09	0.150	1.880	0	111	80	120				
Chromium	37.5	0.0752	37.59	0	99.7	80	120				
Copper	39.1	0.150	37.59	0	104	80	120				
Lead	19.8	0.150	18.80	0	105	80	120				
Nickel	38.5	0.376	37.59	0	102	80	120				
Selenium	3.61	0.376	3.759	0	96.1	80	120				
Silver	1.99	0.0752	1.880	0	106	80	120				
Thallium	1.19	0.150	0.9398	0	126	80	120				S
Zinc	39.3	0.376	37.59	0	105	80	120				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **2011138-004AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63303**
Client ID: **BATCH** Batch ID: **30342** Analysis Date: **11/11/2020** SeqNo: **1270908**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.219	2.742	0.02542	5.72	75	125				S
Arsenic	65.1	0.274	54.84	4.451	111	75	125				
Beryllium	2.83	0.219	2.742	0.2065	95.7	75	125				
Cadmium	3.29	0.219	2.742	0.3708	106	75	125				
Chromium	87.5	0.110	54.84	27.82	109	75	125				
Copper	80.8	0.219	54.84	23.69	104	75	125				
Lead	36.1	0.219	27.42	12.19	87.3	75	125				
Nickel	89.8	0.548	54.84	29.68	110	75	125				
Selenium	7.10	0.548	5.484	1.305	106	75	125				
Silver	2.70	0.110	2.742	0.09575	94.9	75	125				
Thallium	1.55	0.219	1.371	0.1140	105	75	125				
Zinc	117	0.548	54.84	134.9	-31.9	75	125				S

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011138-004AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63303**
Client ID: **BATCH** Batch ID: **30342** Analysis Date: **11/11/2020** SeqNo: **1270908**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect (Sb, Zn).

Sample ID: **2011138-004AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63303**
Client ID: **BATCH** Batch ID: **30342** Analysis Date: **11/11/2020** SeqNo: **1270909**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.216	2.702	0.02542	5.87	75	125	0		20	S
Arsenic	61.2	0.270	54.04	4.451	105	75	125	65.10	6.23	20	
Beryllium	2.78	0.216	2.702	0.2065	95.1	75	125	2.832	2.00	20	
Cadmium	3.28	0.216	2.702	0.3708	108	75	125	3.286	0.141	20	
Chromium	86.5	0.108	54.04	27.82	109	75	125	87.54	1.20	20	
Copper	108	0.216	54.04	23.69	157	75	125	80.81	29.2	20	RS
Lead	36.5	0.216	27.02	12.19	89.8	75	125	36.14	0.903	20	
Nickel	84.6	0.540	54.04	29.68	102	75	125	89.78	6.00	20	
Selenium	7.24	0.540	5.404	1.305	110	75	125	7.104	1.93	20	
Silver	2.69	0.108	2.702	0.09575	96.0	75	125	2.697	0.268	20	
Thallium	1.54	0.216	1.351	0.1140	105	75	125	1.548	0.803	20	
Zinc	113	0.540	54.04	134.9	-40.1	75	125	117.5	3.64	20	S

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range (Cu).
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect (Sb, Zn).
R - High RPD observed. The method is in control as indicated by the LCS.

Sample ID: **2011138-004APDS** SampType: **PDS** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63303**
Client ID: **BATCH** Batch ID: **30342** Analysis Date: **11/11/2020** SeqNo: **1270910**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.88	0.221	2.76	0.0254	103	75	125				
Zinc	182	0.553	55.2	135	85.7	75	125				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID: **MB-30315**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/6/2020**	RunNo: **63203**
Client ID: **MBLKS**	Batch ID: **30315**		Analysis Date: **11/6/2020**	SeqNo: **1268508**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.236									

Sample ID: **LCS-30315**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/6/2020**	RunNo: **63203**
Client ID: **LCSS**	Batch ID: **30315**		Analysis Date: **11/6/2020**	SeqNo: **1268509**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.494	0.245	0.4902	0	101	80	120				

Sample ID: **2011091-001ADUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/6/2020**	RunNo: **63203**
Client ID: **BATCH**	Batch ID: **30315**		Analysis Date: **11/6/2020**	SeqNo: **1268511**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.286						0		20	

Sample ID: **2011091-001AMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/6/2020**	RunNo: **63203**
Client ID: **BATCH**	Batch ID: **30315**		Analysis Date: **11/6/2020**	SeqNo: **1268512**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.507	0.281	0.5618	0.01123	88.2	70	130				

Sample ID: **2011091-001AMSD**	SampType: **MSD**	Units: **mg/Kg-dry**	Prep Date: **11/6/2020**	RunNo: **63203**
Client ID: **BATCH**	Batch ID: **30315**		Analysis Date: **11/6/2020**	SeqNo: **1268513**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.508	0.276	0.5512	0.01123	90.2	70	130	0.5067	0.288	20	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID: **MB-30333**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **11/9/2020**			RunNo: **63204**		
Client ID: **MBLKS**	Batch ID: **30333**					Analysis Date: **11/9/2020**			SeqNo: **1269323**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.250									

Sample ID: **LCS-30333**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **11/9/2020**			RunNo: **63204**		
Client ID: **LCSS**	Batch ID: **30333**					Analysis Date: **11/9/2020**			SeqNo: **1269324**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.471	0.250	0.5000	0	94.2	80	120				

Sample ID: **2011150-007ADUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **11/9/2020**			RunNo: **63204**		
Client ID: **BATCH**	Batch ID: **30333**					Analysis Date: **11/9/2020**			SeqNo: **1269326**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.323						0		20	

Sample ID: **2011150-007AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **11/9/2020**			RunNo: **63204**		
Client ID: **BATCH**	Batch ID: **30333**					Analysis Date: **11/9/2020**			SeqNo: **1269327**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.968	0.342	0.6843	0.2278	108	70	130				

Sample ID: **2011150-007AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **11/9/2020**			RunNo: **63204**		
Client ID: **BATCH**	Batch ID: **30333**					Analysis Date: **11/9/2020**			SeqNo: **1269328**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.781	0.329	0.6585	0.2278	84.0	70	130	0.9676	21.3	20	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **MB-30299**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/5/2020**	RunNo: **63191**
Client ID: **MBLKS**	Batch ID: **30299**		Analysis Date: **11/5/2020**	SeqNo: **1268230**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	20.0		20.00		99.9	50	150				
Surr: o-Terphenyl	16.3		20.00		81.4	50	150				

Sample ID: **LCS-30299**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/5/2020**	RunNo: **63191**
Client ID: **LCSS**	Batch ID: **30299**		Analysis Date: **11/5/2020**	SeqNo: **1268231**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	479	20.0	500.0	0	95.8	73.6	116				
Surr: 2-Fluorobiphenyl	20.2		20.00		101	50	150				
Surr: o-Terphenyl	18.6		20.00		93.0	50	150				

Sample ID: **2011090-001AMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/5/2020**	RunNo: **63191**
Client ID: **SB07-4.5-20201103**	Batch ID: **30299**		Analysis Date: **11/5/2020**	SeqNo: **1268233**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	659	24.8	620.0	0	106	56.3	134				
Surr: 2-Fluorobiphenyl	26.5		24.80		107	50	150				
Surr: o-Terphenyl	25.2		24.80		102	50	150				

Sample ID: **2011090-001AMSD**	SampType: **MSD**	Units: **mg/Kg-dry**	Prep Date: **11/5/2020**	RunNo: **63191**
Client ID: **SB07-4.5-20201103**	Batch ID: **30299**		Analysis Date: **11/5/2020**	SeqNo: **1268234**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	606	24.6	616.1	0	98.3	56.3	134	659.4	8.48	30	
Surr: 2-Fluorobiphenyl	25.9		24.65		105	50	150		0		
Surr: o-Terphenyl	24.1		24.65		98.0	50	150		0		

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2011128-001ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63191**
Client ID: **BATCH** Batch ID: **30299** Analysis Date: **11/6/2020** SeqNo: **1268247**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.7						0		30	
Heavy Oil	ND	51.7						0		30	
Surr: 2-Fluorobiphenyl	21.6		20.66		104	50	150		0		
Surr: o-Terphenyl	17.5		20.66		84.6	50	150		0		

Sample ID: **MB-30336** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63264**
Client ID: **MBLKS** Batch ID: **30336** Analysis Date: **11/9/2020** SeqNo: **1269601**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	17.5		20.00		87.4	50	150				
Surr: o-Terphenyl	17.1		20.00		85.6	50	150				

Sample ID: **LCS-30336** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63264**
Client ID: **LCSS** Batch ID: **30336** Analysis Date: **11/9/2020** SeqNo: **1269602**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	485	20.0	500.0	0	97.0	73.6	116				
Surr: 2-Fluorobiphenyl	18.3		20.00		91.4	50	150				
Surr: o-Terphenyl	19.4		20.00		96.8	50	150				

Sample ID: **2011090-002ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63264**
Client ID: **SB07-7-20201103** Batch ID: **30336** Analysis Date: **11/9/2020** SeqNo: **1269609**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	29.1						0		30	
Heavy Oil	ND	72.8						0		30	
Surr: 2-Fluorobiphenyl	24.4		29.13		83.8	50	150		0		

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2011090-002ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63264**
Client ID: **SB07-7-20201103** Batch ID: **30336** Analysis Date: **11/9/2020** SeqNo: **1269609**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: o-Terphenyl	24.5		29.13		84.2	50	150		0		

Sample ID: **2011138-004AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63264**
Client ID: **BATCH** Batch ID: **30336** Analysis Date: **11/10/2020** SeqNo: **1269618**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	511	19.0	475.5	4.735	106	56.3	134				
Surr: 2-Fluorobiphenyl	18.8		19.02		98.6	50	150				
Surr: o-Terphenyl	19.7		19.02		103	50	150				

Sample ID: **2011138-004AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63264**
Client ID: **BATCH** Batch ID: **30336** Analysis Date: **11/10/2020** SeqNo: **1269619**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	489	19.3	481.4	4.735	101	56.3	134	511.1	4.46	30	
Surr: 2-Fluorobiphenyl	18.1		19.26		93.9	50	150		0		
Surr: o-Terphenyl	18.9		19.26		97.9	50	150		0		

Sample ID: **MB-30336** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63264**
Client ID: **MBLKS** Batch ID: **30336** Analysis Date: **11/10/2020** SeqNo: **1269624**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									SGT
Heavy Oil	ND	50.0									SGT
Surr: 2-Fluorobiphenyl	16.4		20.00		81.8	50	150				SGT
Surr: o-Terphenyl	16.2		20.00		80.8	50	150				SGT

NOTES:
SGT - Silica Gel Treatment

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **LCS-30336** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63264**
Client ID: **LCSS** Batch ID: **30336** Analysis Date: **11/10/2020** SeqNo: **1269625**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	510	20.0	500.0	0	102	73.6	116				SGT
Surr: 2-Fluorobiphenyl	19.9		20.00		99.5	50	150				SGT
Surr: o-Terphenyl	20.5		20.00		103	50	150				SGT

NOTES:
SGT - Silica Gel Treatment

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **MB-30306** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **MBLKW** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268768**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	49.4									
Heavy Oil	ND	98.9									
Surr: 2-Fluorobiphenyl	57.2		79.10		72.3	50	150				
Surr: o-Terphenyl	53.6		79.10		67.8	50	150				

Sample ID: **LCS-30306** SampType: **LCS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **LCSW** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268769**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	530	49.7	994.1	0	53.3	48.1	108				
Surr: 2-Fluorobiphenyl	60.3		79.53		75.8	50	150				
Surr: o-Terphenyl	45.8		79.53		57.6	50	150				

Sample ID: **2011045-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **BATCH** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268771**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	50.0						0		30	
Heavy Oil	ND	99.9						0		30	
Surr: 2-Fluorobiphenyl	66.1		79.95		82.6	50	150		0		
Surr: o-Terphenyl	55.4		79.95		69.4	50	150		0		

Sample ID: **2011092-003BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **BATCH** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268784**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	49.9						0		30	
Heavy Oil	ND	99.7						0		30	
Surr: 2-Fluorobiphenyl	78.1		79.78		97.9	50	150		0		

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2011092-003BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **BATCH** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268784**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: o-Terphenyl	62.7		79.78		78.6	50	150		0		

Sample ID: **2011100-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **BATCH** Batch ID: **30306** Analysis Date: **11/7/2020** SeqNo: **1268795**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	558	50.9	1,018	13.46	53.5	18.7	128				
Surr: 2-Fluorobiphenyl	63.7		81.44		78.2	50	150				
Surr: o-Terphenyl	45.2		81.44		55.5	50	150				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **MB-30438** SampType: **MBLK** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **MBLKS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274287**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	40.0									
2-Methylnaphthalene	ND	40.0									
1-Methylnaphthalene	ND	40.0									
Acenaphthylene	ND	40.0									
Acenaphthene	ND	40.0									
Fluorene	ND	40.0									
Phenanthrene	ND	40.0									
Anthracene	ND	40.0									
Fluoranthene	ND	40.0									
Pyrene	ND	40.0									
Benz(a)anthracene	ND	40.0									
Chrysene	ND	40.0									
Benzo(b)fluoranthene	ND	40.0									
Benzo(k)fluoranthene	ND	40.0									
Benzo(a)pyrene	ND	40.0									
Indeno(1,2,3-cd)pyrene	ND	40.0									
Dibenz(a,h)anthracene	ND	40.0									
Benzo(g,h,i)perylene	ND	40.0									
Surr: 2-Fluorobiphenyl	342		500.0		68.3	16.9	122				
Surr: Terphenyl-d14 (surr)	474		500.0		94.7	38.4	153				

Sample ID: **LCS-30438** SampType: **LCS** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **LCSS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274289**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	840	40.0	1,000	0	84.0	57.2	127				
2-Methylnaphthalene	856	40.0	1,000	0	85.6	55.1	134				
1-Methylnaphthalene	881	40.0	1,000	0	88.1	56.9	136				
Acenaphthylene	796	40.0	1,000	0	79.6	58.5	132				
Acenaphthene	812	40.0	1,000	0	81.2	57.9	132				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **LCS-30438** SampType: **LCS** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **LCSS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274289**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluorene	848	40.0	1,000	0	84.8	59.2	134				
Phenanthrene	816	40.0	1,000	0	81.6	57.1	135				
Anthracene	813	40.0	1,000	0	81.3	55.7	137				
Fluoranthene	892	40.0	1,000	0	89.2	58.1	134				
Pyrene	884	40.0	1,000	0	88.4	59.6	136				
Benz(a)anthracene	930	40.0	1,000	0	93.0	51.5	139				
Chrysene	848	40.0	1,000	0	84.8	58.3	130				
Benzo(b)fluoranthene	878	40.0	1,000	0	87.8	53.4	138				
Benzo(k)fluoranthene	866	40.0	1,000	0	86.6	50.9	140				
Benzo(a)pyrene	1,050	40.0	1,000	0	105	50.4	143				
Indeno(1,2,3-cd)pyrene	918	40.0	1,000	0	91.8	52.3	138				
Dibenz(a,h)anthracene	853	40.0	1,000	0	85.3	53	140				
Benzo(g,h,i)perylene	848	40.0	1,000	0	84.8	51.7	139				
Surr: 2-Fluorobiphenyl	403		500.0		80.7	16.9	122				
Surr: Terphenyl-d14 (surr)	522		500.0		104	38.4	153				

Sample ID: **2011090-002AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **SB07-7-20201103** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1,000	57.1	1,428	0	70.0	46	106				
2-Methylnaphthalene	1,010	57.1	1,428	0	70.7	45.3	117				
1-Methylnaphthalene	1,060	57.1	1,428	0	74.1	48.6	116				
Acenaphthylene	980	57.1	1,428	0	68.6	50	114				
Acenaphthene	969	57.1	1,428	0	67.9	54.9	108				
Fluorene	1,020	57.1	1,428	0	71.7	54.3	110				
Phenanthrene	943	57.1	1,428	0	66.1	48.9	114				
Anthracene	983	57.1	1,428	0	68.9	53.1	111				
Fluoranthene	1,330	57.1	1,428	0	93.0	48.5	117				
Pyrene	1,270	57.1	1,428	0	88.6	48.5	121				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011090-002AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **SB07-7-20201103** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benz(a)anthracene	1,430	57.1	1,428	0	99.9	39.9	125				
Chrysene	991	57.1	1,428	0	69.4	46.8	112				
Benzo(b)fluoranthene	955	57.1	1,428	0	66.9	42.4	123				
Benzo(k)fluoranthene	1,210	57.1	1,428	0	84.7	41.7	122				
Benzo(a)pyrene	1,310	57.1	1,428	0	91.8	48.2	121				
Indeno(1,2,3-cd)pyrene	1,000	57.1	1,428	0	70.2	43.6	114				
Dibenz(a,h)anthracene	923	57.1	1,428	0	64.6	43.7	116				
Benzo(g,h,i)perylene	915	57.1	1,428	0	64.0	43.7	115				
Surr: 2-Fluorobiphenyl	453		714.1		63.5	16.9	122				
Surr: Terphenyl-d14 (surr)	669		714.1		93.7	38.4	153				

Sample ID: **2011090-002AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **SB07-7-20201103** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1,010	57.3	1,432	0	70.7	46	106	1,000	1.25	30	
2-Methylnaphthalene	1,040	57.3	1,432	0	72.8	45.3	117	1,010	3.18	30	
1-Methylnaphthalene	1,070	57.3	1,432	0	74.5	48.6	116	1,059	0.785	30	
Acenaphthylene	997	57.3	1,432	0	69.6	50	114	979.8	1.69	30	
Acenaphthene	999	57.3	1,432	0	69.7	54.9	108	969.0	3.00	30	
Fluorene	1,070	57.3	1,432	0	74.7	54.3	110	1,023	4.49	30	
Phenanthrene	955	57.3	1,432	0	66.7	48.9	114	943.4	1.24	30	
Anthracene	980	57.3	1,432	0	68.4	53.1	111	983.4	0.336	30	
Fluoranthene	1,150	57.3	1,432	0	80.1	48.5	117	1,328	14.6	30	
Pyrene	1,070	57.3	1,432	0	74.4	48.5	121	1,265	17.2	30	
Benz(a)anthracene	1,080	57.3	1,432	0	75.6	39.9	125	1,427	27.5	30	
Chrysene	1,010	57.3	1,432	0	70.7	46.8	112	991.1	2.10	30	
Benzo(b)fluoranthene	1,140	57.3	1,432	0	79.3	42.4	123	955.3	17.2	30	
Benzo(k)fluoranthene	1,050	57.3	1,432	0	73.5	41.7	122	1,209	13.8	30	
Benzo(a)pyrene	1,320	57.3	1,432	0	92.0	48.2	121	1,310	0.577	30	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011090-002AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **SB07-7-20201103** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Indeno(1,2,3-cd)pyrene	1,280	57.3	1,432	0	89.2	43.6	114	1,003	24.0	30	
Dibenz(a,h)anthracene	1,170	57.3	1,432	0	82.0	43.7	116	922.9	24.0	30	
Benzo(g,h,i)perylene	1,170	57.3	1,432	0	82.0	43.7	115	914.5	24.9	30	
Surr: 2-Fluorobiphenyl	453		716.2		63.2	16.9	122		0		
Surr: Terphenyl-d14 (surr)	513		716.2		71.6	38.4	153		0		

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **MB-30363** SampType: **MBLK** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **MBLKW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270789**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	ND	0.101									
Naphthalene	ND	0.101									
2-Methylnaphthalene	ND	0.101									
1-Methylnaphthalene	ND	0.101									
Acenaphthylene	ND	0.101									
Acenaphthene	ND	0.101									
Fluorene	ND	0.101									
Phenanthrene	ND	0.101									
Anthracene	ND	0.101									
Fluoranthene	ND	0.101									
Pyrene	ND	0.101									
Benz(a)anthracene	ND	0.101									
Chrysene	ND	0.101									
Benzo(b)fluoranthene	ND	0.101									
Benzo(k)fluoranthene	ND	0.101									
Benzo(a)pyrene	ND	0.101									
Indeno(1,2,3-cd)pyrene	ND	0.101									
Dibenz(a,h)anthracene	ND	0.101									
Benzo(g,h,i)perylene	ND	0.101									
Surr: 2-Fluorobiphenyl	1.29		2.023		64.0	50.8	146				
Surr: Terphenyl-d14	1.49		2.023		73.7	26.1	145				

Sample ID: **LCS-30363** SampType: **LCS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **LCSW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	3.17	0.0975	3.898	0	81.3	27.8	98.4				
Naphthalene	2.55	0.0975	3.898	0	65.5	47.4	117				
2-Methylnaphthalene	2.81	0.0975	3.898	0	72.1	48.8	127				
1-Methylnaphthalene	2.95	0.0975	3.898	0	75.7	36.9	134				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **LCS-30363** SampType: **LCS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **LCSW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthylene	3.04	0.0975	3.898	0	78.0	42.5	137				
Acenaphthene	3.28	0.0975	3.898	0	84.1	50.6	128				
Fluorene	2.99	0.0975	3.898	0	76.6	42.7	142				
Phenanthrene	3.61	0.0975	3.898	0	92.6	48.1	137				
Anthracene	4.11	0.0975	3.898	0	105	37.5	137				
Fluoranthene	4.67	0.0975	3.898	0	120	47.5	140				
Pyrene	5.78	0.0975	3.898	0	148	52.3	135				S
Benz(a)anthracene	3.95	0.0975	3.898	0	101	39.4	125				
Chrysene	3.29	0.0975	3.898	0	84.4	37.9	108				
Benzo(b)fluoranthene	3.49	0.0975	3.898	0	89.6	25.5	110				
Benzo(k)fluoranthene	3.17	0.0975	3.898	0	81.3	27.8	98.4				
Benzo(a)pyrene	3.92	0.0975	3.898	0	100	21.5	107				
Indeno(1,2,3-cd)pyrene	3.27	0.0975	3.898	0	83.9	16.2	97.5				
Dibenz(a,h)anthracene	3.04	0.0975	3.898	0	77.9	15.9	98.8				
Benzo(g,h,i)perylene	3.11	0.0975	3.898	0	79.8	15.9	99.7				
Surr: 2-Fluorobiphenyl	2.78		1.949		143	50.8	146				
Surr: Terphenyl-d14	2.21		1.949		113	26.1	145				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **2011160-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	1.80	0.0995	3.981	0	45.1	15.9	99.8				
Naphthalene	2.59	0.0995	3.981	0	65.0	38.9	124				
2-Methylnaphthalene	2.69	0.0995	3.981	0	67.5	38.3	133				
1-Methylnaphthalene	2.81	0.0995	3.981	0	70.6	36.5	133				
Acenaphthylene	2.78	0.0995	3.981	0	69.7	38.8	141				
Acenaphthene	2.92	0.0995	3.981	0	73.4	26.4	151				
Fluorene	2.58	0.0995	3.981	0	64.7	41.6	146				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011160-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	2.95	0.0995	3.981	0	74.0	38.1	146				
Anthracene	2.92	0.0995	3.981	0	73.2	14.8	136				
Fluoranthene	3.86	0.0995	3.981	0	96.9	15.2	155				
Pyrene	4.24	0.0995	3.981	0	107	8.41	156				
Benz(a)anthracene	3.39	0.0995	3.981	0	85.3	8.9	131				
Chrysene	2.50	0.0995	3.981	0	62.7	7.73	127				
Benzo(b)fluoranthene	2.35	0.0995	3.981	0	58.9	14.8	118				
Benzo(k)fluoranthene	1.80	0.0995	3.981	0	45.1	15.9	99.8				
Benzo(a)pyrene	2.59	0.0995	3.981	0	64.9	12.1	106				
Indeno(1,2,3-cd)pyrene	2.27	0.0995	3.981	0	57.0	6.73	97.4				
Dibenz(a,h)anthracene	2.09	0.0995	3.981	0	52.4	5	95.6				
Benzo(g,h,i)perylene	2.10	0.0995	3.981	0	52.8	2.27	93.9				
Surr: 2-Fluorobiphenyl	3.23		1.990		162	50.8	146				S
Surr: Terphenyl-d14	2.01		1.990		101	26.1	145				

NOTES:
S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID: **2011160-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270793**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	2.24	0.100	4.000	0	56.1	15.9	99.8	1.795	22.2	30	
Naphthalene	2.21	0.100	4.000	0	55.2	38.9	124	2.587	15.8	30	
2-Methylnaphthalene	2.38	0.100	4.000	0	59.5	38.3	133	2.686	12.1	30	
1-Methylnaphthalene	2.51	0.100	4.000	0	62.6	36.5	133	2.810	11.5	30	
Acenaphthylene	2.48	0.100	4.000	0	61.9	38.8	141	2.776	11.4	30	
Acenaphthene	2.61	0.100	4.000	0	65.3	26.4	151	2.920	11.1	30	
Fluorene	2.87	0.100	4.000	0	71.7	41.6	146	2.577	10.7	30	
Phenanthrene	2.73	0.100	4.000	0	68.4	38.1	146	2.947	7.46	30	
Anthracene	2.73	0.100	4.000	0	68.3	14.8	136	2.916	6.49	30	
Fluoranthene	2.97	0.100	4.000	0	74.3	15.2	155	3.858	26.0	30	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011160-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270793**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pyrene	2.88	0.100	4.000	0	72.0	8.41	156	4.245	38.4	30	R
Benz(a)anthracene	2.77	0.100	4.000	0	69.2	8.9	131	3.394	20.3	30	
Chrysene	2.24	0.100	4.000	0	55.9	7.73	127	2.496	11.0	30	
Benzo(b)fluoranthene	2.29	0.100	4.000	0	57.2	14.8	118	2.346	2.48	30	
Benzo(k)fluoranthene	2.24	0.100	4.000	0	56.1	15.9	99.8	1.795	22.2	30	
Benzo(a)pyrene	2.65	0.100	4.000	0	66.2	12.1	106	2.585	2.40	30	
Indeno(1,2,3-cd)pyrene	2.13	0.100	4.000	0	53.2	6.73	97.4	2.269	6.32	30	
Dibenz(a,h)anthracene	2.00	0.100	4.000	0	50.0	5	95.6	2.086	4.23	30	
Benzo(g,h,i)perylene	1.96	0.100	4.000	0	49.1	2.27	93.9	2.101	6.80	30	
Surr: 2-Fluorobiphenyl	1.85		2.000		92.7	50.8	146		0	0	
Surr: Terphenyl-d14	1.72		2.000		86.0	26.1	145		0	0	

NOTES:
R - High RPD observed, spike recovery is within range.

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **MB-30476** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **MBLKS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275523**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.100									
Aroclor 1221	ND	0.100									
Aroclor 1232	ND	0.100									
Aroclor 1242	ND	0.100									
Aroclor 1248	ND	0.100									
Aroclor 1254	ND	0.100									
Aroclor 1260	ND	0.100									
Aroclor 1262	ND	0.100									
Aroclor 1268	ND	0.100									
Total PCBs	ND	0.100									
Surr: Decachlorobiphenyl	35.3		50.00		70.6	6.8	211				
Surr: Tetrachloro-m-xylene	33.4		50.00		66.8	7.85	182				

Sample ID: **LCS1-30476** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **LCSS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275524**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.04	0.100	1.000	0	104	30.2	169				
Aroclor 1260	1.02	0.100	1.000	0	102	28.2	181				
Surr: Decachlorobiphenyl	41.7		50.00		83.4	6.8	211				
Surr: Tetrachloro-m-xylene	40.6		50.00		81.3	7.85	182				

Sample ID: **LCS2-30476** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **LCSS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275525**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	0.751	0.100	1.000	0	75.1	37.1	136				
Surr: Decachlorobiphenyl	49.5		50.00		99.0	6.8	211				
Surr: Tetrachloro-m-xylene	28.7		50.00		57.3	7.85	182				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **LCS2-30476**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **LCSS**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275525**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2011094-008AMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **BATCH**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275539**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.26	0.126	1.264	0	99.7	48.5	157				
Aroclor 1260	1.31	0.126	1.264	0	104	48.4	164				
Surr: Decachlorobiphenyl	53.7		63.18		85.0	6.8	211				
Surr: Tetrachloro-m-xylene	44.0		63.18		69.6	7.85	182				

Sample ID: **2011094-008AMSD**	SampType: **MSD**	Units: **mg/Kg-dry**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **BATCH**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275540**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.10	0.122	1.224	0	90.0	48.5	157	1.260	13.4	30	
Aroclor 1260	1.19	0.122	1.224	0	97.1	48.4	164	1.312	9.89	30	
Surr: Decachlorobiphenyl	43.2		61.21		70.6	6.8	211		0		
Surr: Tetrachloro-m-xylene	31.1		61.21		50.8	7.85	182		0		

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **MB-30557** SampType: **MBLK** Units: **µg/L** Prep Date: **11/30/2020** RunNo: **63753**
Client ID: **MBLKW** Batch ID: **30557** Analysis Date: **12/1/2020** SeqNo: **1280238**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.0993									
Aroclor 1221	ND	0.0993									
Aroclor 1232	ND	0.0993									
Aroclor 1242	ND	0.0993									
Aroclor 1248	ND	0.0993									
Aroclor 1254	ND	0.0993									
Aroclor 1260	ND	0.0993									
Aroclor 1262	ND	0.0993									
Aroclor 1268	ND	0.0993									
Total PCBs	ND	0.0993									
Surr: Decachlorobiphenyl	191		397.1		48.2	5	124				
Surr: Tetrachloro-m-xylene	174		397.1		43.8	21.2	115				

Sample ID: **LCS1-30557** SampType: **LCS** Units: **µg/L** Prep Date: **11/30/2020** RunNo: **63753**
Client ID: **LCSW** Batch ID: **30557** Analysis Date: **12/1/2020** SeqNo: **1280239**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.16	0.0997	1.995	0	58.3	6.74	118				
Aroclor 1260	1.48	0.0997	1.995	0	74.2	5	123				
Surr: Decachlorobiphenyl	211		399.0		52.8	5	124				
Surr: Tetrachloro-m-xylene	215		399.0		53.8	21.2	115				

Sample ID: **LCS2-30557** SampType: **LCS** Units: **µg/L** Prep Date: **11/30/2020** RunNo: **63753**
Client ID: **LCSW** Batch ID: **30557** Analysis Date: **12/1/2020** SeqNo: **1280240**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	1.40	0.0989	1.978	0	70.9	33.3	137				
Surr: Decachlorobiphenyl	222		395.6		56.2	5	124				
Surr: Tetrachloro-m-xylene	165		395.6		41.7	21.2	115				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **LCS2-30557**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **LCSW**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280240**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2011481-001DMS**	SampType: **MS**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **BATCH**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280246**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.35	0.100	1.999	0	67.3	6.09	159				
Aroclor 1260	1.00	0.100	1.999	0	50.1	5	176				
Surr: Decachlorobiphenyl	108		399.8		27.0	5	124				
Surr: Tetrachloro-m-xylene	210		399.8		52.5	21.2	115				

Sample ID: **LCS1D-30557**	SampType: **LCSD**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **LCSW02**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280248**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	0.950	0.0988	1.977	0	48.0	6.74	118	1.162	20.2	20	R
Aroclor 1260	1.31	0.0988	1.977	0	66.4	5	123	1.481	12.0	20	
Surr: Decachlorobiphenyl	157		395.3		39.7	5	124		0		
Surr: Tetrachloro-m-xylene	152		395.3		38.5	21.2	115		0		

NOTES:
R - High RPD observed, spike recovery is within range.

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-30298**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/5/2020**	RunNo: **63184**
Client ID: **LCSS**	Batch ID: **30298**		Analysis Date: **11/5/2020**	SeqNo: **1268054**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	24.2	5.00	25.00	0	96.7	65	135				
Surr: Toluene-d8	1.25		1.250		100	65	135				
Surr: 4-Bromofluorobenzene	1.27		1.250		102	65	135				

Sample ID: **MB-30298**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/5/2020**	RunNo: **63184**
Client ID: **MBLKS**	Batch ID: **30298**		Analysis Date: **11/5/2020**	SeqNo: **1268055**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: Toluene-d8	1.27		1.250		101	65	135				
Surr: 4-Bromofluorobenzene	1.23		1.250		98.1	65	135				

Sample ID: **2011071-001BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/5/2020**	RunNo: **63184**
Client ID: **BATCH**	Batch ID: **30298**		Analysis Date: **11/5/2020**	SeqNo: **1268042**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.53						0		30	
Surr: Toluene-d8	1.38		1.382		100	65	135		0		
Surr: 4-Bromofluorobenzene	1.37		1.382		99.0	65	135		0		

Sample ID: **2011090-001BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/5/2020**	RunNo: **63184**
Client ID: **SB07-4.5-20201103**	Batch ID: **30298**		Analysis Date: **11/5/2020**	SeqNo: **1268044**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	6.01						0		30	
Surr: Toluene-d8	1.52		1.502		101	65	135		0		
Surr: 4-Bromofluorobenzene	1.52		1.502		101	65	135		0		

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **2011090-003BMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/5/2020**	RunNo: **63184**
Client ID: **SB08-4.5-20201103**	Batch ID: **30298**		Analysis Date: **11/6/2020**	SeqNo: **1268046**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	27.2	5.65	28.24	0	96.3	65	135				
Surr: Toluene-d8	1.40		1.412		99.0	65	135				
Surr: 4-Bromofluorobenzene	1.44		1.412		102	65	135				

Sample ID: **LCS-30341**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/9/2020**	RunNo: **63259**
Client ID: **LCSS**	Batch ID: **30341**		Analysis Date: **11/9/2020**	SeqNo: **1269510**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	28.4	5.00	25.00	0	114	65	135				
Surr: Toluene-d8	1.26		1.250		101	65	135				
Surr: 4-Bromofluorobenzene	1.24		1.250		98.9	65	135				

Sample ID: **MB-30341**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/9/2020**	RunNo: **63259**
Client ID: **MBLKS**	Batch ID: **30341**		Analysis Date: **11/9/2020**	SeqNo: **1269511**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: Toluene-d8	1.24		1.250		99.3	65	135				
Surr: 4-Bromofluorobenzene	1.16		1.250		92.7	65	135				

Sample ID: **2010403-026BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/9/2020**	RunNo: **63259**
Client ID: **BATCH**	Batch ID: **30341**		Analysis Date: **11/9/2020**	SeqNo: **1269498**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	7.37						0		30	H
Surr: Toluene-d8	1.81		1.843		98.4	65	135		0		H
Surr: 4-Bromofluorobenzene	1.70		1.843		92.2	65	135		0		H

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **2011165-001BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63259**
Client ID: **BATCH** Batch ID: **30341** Analysis Date: **11/10/2020** SeqNo: **1269507**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	20.9	4.86	24.31	0	86.1	65	135				
Surr: Toluene-d8	1.22		1.215		100	65	135				
Surr: 4-Bromofluorobenzene	1.20		1.215		98.5	65	135				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-30295**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63188**
Client ID: **LCSW**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268221**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	407	50.0	500.0	0	81.3	65	135				
Surr: Toluene-d8	25.0		25.00		100	65	135				
Surr: 4-Bromofluorobenzene	24.6		25.00		98.3	65	135				

Sample ID: **MB-30295**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63188**
Client ID: **MBLKW**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268209**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: Toluene-d8	24.3		25.00		97.2	65	135				
Surr: 4-Bromofluorobenzene	23.5		25.00		94.1	65	135				

Sample ID: **2011056-001ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63188**
Client ID: **BATCH**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268196**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0						0		30	
Surr: Toluene-d8	24.2		25.00		96.8	65	135		0		
Surr: 4-Bromofluorobenzene	23.7		25.00		94.7	65	135		0		

Sample ID: **2011092-004ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63188**
Client ID: **BATCH**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268206**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0						0		30	
Surr: Toluene-d8	24.3		25.00		97.1	65	135		0		
Surr: 4-Bromofluorobenzene	24.1		25.00		96.3	65	135		0		

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **2011090-006AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63188**
Client ID: **TW08-20201104** Batch ID: **30295** Analysis Date: **11/6/2020** SeqNo: **1268199**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	381	50.0	500.0	0	76.1	65	135				
Surr: Toluene-d8	24.9		25.00		99.6	65	135				
Surr: 4-Bromofluorobenzene	24.8		25.00		99.3	65	135				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30341** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **LCSS** Batch ID: **30341** Analysis Date: **11/9/2020** SeqNo: **1269494**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.849	0.0200	1.000	0	84.9	26.1	178				
Chloromethane	0.929	0.0500	1.000	0	92.9	51.6	141				
Vinyl chloride	0.917	0.0200	1.000	0	91.7	66	131				
Bromomethane	0.901	0.0500	1.000	0	90.1	41	160				
Trichlorofluoromethane (CFC-11)	0.955	0.0200	1.000	0	95.5	61.2	145				
Chloroethane	0.922	0.0500	1.000	0	92.2	55.2	150				
1,1-Dichloroethene	0.938	0.0200	1.000	0	93.8	63.4	139				
Methylene chloride	0.944	0.0200	1.000	0	94.4	77.7	117				
trans-1,2-Dichloroethene	0.944	0.0200	1.000	0	94.4	80.5	116				
Methyl tert-butyl ether (MTBE)	0.967	0.0200	1.000	0	96.7	77.1	118				
1,1-Dichloroethane	0.959	0.0200	1.000	0	95.9	79.6	116				
cis-1,2-Dichloroethene	0.944	0.0200	1.000	0	94.4	81.8	114				
Chloroform	0.963	0.0200	1.000	0	96.3	81.7	115				
1,1,1-Trichloroethane (TCA)	0.964	0.0200	1.000	0	96.4	80.3	119				
1,1-Dichloropropene	0.977	0.0200	1.000	0	97.7	79.6	118				
Carbon tetrachloride	0.956	0.0200	1.000	0	95.6	78.6	121				
1,2-Dichloroethane (EDC)	0.947	0.0200	1.000	0	94.7	78.8	120				
Benzene	0.972	0.0200	1.000	0	97.2	79.4	116				
Trichloroethene (TCE)	0.970	0.0200	1.000	0	97.0	80.8	117				
1,2-Dichloropropane	0.956	0.0200	1.000	0	95.6	77.1	117				
Bromodichloromethane	0.944	0.0200	1.000	0	94.4	82.5	117				
Dibromomethane	0.938	0.0200	1.000	0	93.8	81.4	116				
cis-1,3-Dichloropropene	1.00	0.0200	1.000	0	100	77.3	119				
Toluene	0.992	0.0200	1.000	0	99.2	80.5	115				
trans-1,3-Dichloropropylene	1.01	0.0200	1.000	0	101	78.4	121				
1,1,2-Trichloroethane	0.969	0.0200	1.000	0	96.9	78.1	116				
1,3-Dichloropropane	0.963	0.0250	1.000	0	96.3	76.6	118				
Tetrachloroethene (PCE)	0.986	0.0200	1.000	0	98.6	81.8	116				
Dibromochloromethane	0.932	0.0200	1.000	0	93.2	81.2	117				
1,2-Dibromoethane (EDB)	0.951	0.00500	1.000	0	95.1	77.5	118				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30341** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **LCSS** Batch ID: **30341** Analysis Date: **11/9/2020** SeqNo: **1269494**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	0.999	0.0200	1.000	0	99.9	81.8	113				
1,1,1,2-Tetrachloroethane	1.00	0.0200	1.000	0	100	81.9	116				
Ethylbenzene	1.01	0.0250	1.000	0	101	81.6	116				
m,p-Xylene	2.01	0.0500	2.000	0	100	83.2	115				
o-Xylene	0.988	0.0250	1.000	0	98.8	82.5	114				
Styrene	0.995	0.0200	1.000	0	99.5	82	114				
Isopropylbenzene	1.00	0.0200	1.000	0	100	82.2	116				
Bromoform	1.03	0.0500	1.000	0	103	74.1	127				
1,1,2,2-Tetrachloroethane	1.01	0.0200	1.000	0	101	69.9	124				
n-Propylbenzene	1.01	0.0200	1.000	0	101	82.1	118				
Bromobenzene	0.980	0.0200	1.000	0	98.0	83.4	113				
1,3,5-Trimethylbenzene	0.985	0.0200	1.000	0	98.5	82.1	117				
2-Chlorotoluene	0.994	0.0250	1.000	0	99.4	82	115				
4-Chlorotoluene	1.00	0.0200	1.000	0	100	81.9	116				
tert-Butylbenzene	0.991	0.0200	1.000	0	99.1	81.8	117				
1,2,3-Trichloropropane	0.985	0.0250	1.000	0	98.5	72.9	124				
1,2,4-Trichlorobenzene	1.05	0.0200	1.000	0	105	75.8	121				
sec-Butylbenzene	1.01	0.0250	1.000	0	101	81.5	118				
4-Isopropyltoluene	0.996	0.0250	1.000	0	99.6	82.2	118				
1,3-Dichlorobenzene	1.04	0.0200	1.000	0	104	80.2	119				
1,4-Dichlorobenzene	1.04	0.0200	1.000	0	104	79.8	118				
n-Butylbenzene	1.04	0.0200	1.000	0	104	82.1	120				
1,2-Dichlorobenzene	1.04	0.0200	1.000	0	104	80.3	117				
1,2-Dibromo-3-chloropropane	1.03	0.500	1.000	0	103	68.7	132				
1,2,4-Trimethylbenzene	0.994	0.0200	1.000	0	99.4	82.1	118				
Hexachloro-1,3-butadiene	1.05	0.0250	1.000	0	105	81.4	122				
Naphthalene	1.05	0.0500	1.000	0	105	63.3	132				
1,2,3-Trichlorobenzene	1.05	0.0200	1.000	0	105	65.4	125				
Surr: Dibromofluoromethane	1.21		1.250		96.5	85.2	113				
Surr: Toluene-d8	1.24		1.250		99.3	88.5	110				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30341**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/9/2020**	RunNo: **63258**
Client ID: **LCSS**	Batch ID: **30341**		Analysis Date: **11/9/2020**	SeqNo: **1269494**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	1.24		1.250		98.9	88.6	109				

Sample ID: **MB-30341**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/9/2020**	RunNo: **63258**
Client ID: **MBLKS**	Batch ID: **30341**		Analysis Date: **11/9/2020**	SeqNo: **1269489**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30341** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **MBLKS** Batch ID: **30341** Analysis Date: **11/9/2020** SeqNo: **1269489**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30341** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **MBLKS** Batch ID: **30341** Analysis Date: **11/9/2020** SeqNo: **1269489**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachloro-1,3-butadiene	ND	0.0250									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.18		1.250		94.4	85.2	113				
Surr: Toluene-d8	1.23		1.250		98.3	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.24		1.250		99.0	88.6	109				

Sample ID: **2010403-026BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **BATCH** Batch ID: **30341** Analysis Date: **11/9/2020** SeqNo: **1269480**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0295						0		30	H
Chloromethane	ND	0.0737						0		30	H
Vinyl chloride	ND	0.0295						0		30	H
Bromomethane	ND	0.0737						0		30	H
Trichlorofluoromethane (CFC-11)	ND	0.0295						0		30	H
Chloroethane	ND	0.0737						0		30	H
1,1-Dichloroethene	ND	0.0295						0		30	H
Methylene chloride	ND	0.0295						0		30	H
trans-1,2-Dichloroethene	ND	0.0295						0		30	H
Methyl tert-butyl ether (MTBE)	ND	0.0295						0		30	H
1,1-Dichloroethane	ND	0.0295						0		30	H
cis-1,2-Dichloroethene	ND	0.0295						0		30	H
Chloroform	ND	0.0295						0		30	H
1,1,1-Trichloroethane (TCA)	ND	0.0295						0		30	H
1,1-Dichloropropene	ND	0.0295						0		30	H
Carbon tetrachloride	ND	0.0295						0		30	H
1,2-Dichloroethane (EDC)	ND	0.0295						0		30	H
Benzene	ND	0.0295						0		30	H

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2010403-026BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **BATCH** Batch ID: **30341** Analysis Date: **11/9/2020** SeqNo: **1269480**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.0295						0		30	H
1,2-Dichloropropane	ND	0.0295						0		30	H
Bromodichloromethane	ND	0.0295						0		30	H
Dibromomethane	ND	0.0295						0		30	H
cis-1,3-Dichloropropene	ND	0.0295						0		30	H
Toluene	ND	0.0295						0		30	H
trans-1,3-Dichloropropylene	ND	0.0295						0		30	H
1,1,2-Trichloroethane	ND	0.0295						0		30	H
1,3-Dichloropropane	ND	0.0369						0		30	H
Tetrachloroethene (PCE)	ND	0.0295						0		30	H
Dibromochloromethane	ND	0.0295						0		30	H
1,2-Dibromoethane (EDB)	ND	0.00737						0		30	H
Chlorobenzene	ND	0.0295						0		30	H
1,1,1,2-Tetrachloroethane	ND	0.0295						0		30	H
Ethylbenzene	ND	0.0369						0		30	H
m,p-Xylene	ND	0.0737						0		30	H
o-Xylene	ND	0.0369						0		30	H
Styrene	ND	0.0295						0		30	H
Isopropylbenzene	ND	0.0295						0		30	H
Bromoform	ND	0.0737						0		30	H
1,1,2,2-Tetrachloroethane	ND	0.0295						0		30	H
n-Propylbenzene	ND	0.0295						0		30	H
Bromobenzene	ND	0.0295						0		30	H
1,3,5-Trimethylbenzene	ND	0.0295						0		30	H
2-Chlorotoluene	ND	0.0369						0		30	H
4-Chlorotoluene	ND	0.0295						0		30	H
tert-Butylbenzene	ND	0.0295						0		30	H
1,2,3-Trichloropropane	ND	0.0369						0		30	H
1,2,4-Trichlorobenzene	ND	0.0295						0		30	H
sec-Butylbenzene	ND	0.0369						0		30	H

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2010403-026BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **BATCH** Batch ID: **30341** Analysis Date: **11/9/2020** SeqNo: **1269480**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	ND	0.0369						0		30	H
1,3-Dichlorobenzene	ND	0.0295						0		30	H
1,4-Dichlorobenzene	ND	0.0295						0		30	H
n-Butylbenzene	ND	0.0295						0		30	H
1,2-Dichlorobenzene	ND	0.0295						0		30	H
1,2-Dibromo-3-chloropropane	ND	0.737						0		30	H
1,2,4-Trimethylbenzene	ND	0.0295						0		30	H
Hexachloro-1,3-butadiene	ND	0.0369						0		30	H
Naphthalene	ND	0.0737						0		30	H
1,2,3-Trichlorobenzene	ND	0.0295						0		30	H
Surr: Dibromofluoromethane	1.73		1.843		94.0	85.2	113		0		H
Surr: Toluene-d8	1.78		1.843		96.6	88.5	110		0		H
Surr: 1-Bromo-4-fluorobenzene	1.81		1.843		97.9	88.6	109		0		H

Sample ID: **2010403-027BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **BATCH** Batch ID: **30341** Analysis Date: **11/10/2020** SeqNo: **1269482**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.719	0.0204	1.018	0	70.7	9.44	188				H
Chloromethane	0.868	0.0509	1.018	0	85.3	40.6	156				H
Vinyl chloride	0.871	0.0204	1.018	0	85.6	52.8	150				H
Bromomethane	1.02	0.0509	1.018	0	100	41	165				H
Trichlorofluoromethane (CFC-11)	0.876	0.0204	1.018	0	86.1	53.7	157				H
Chloroethane	0.964	0.0509	1.018	0	94.7	29.9	178				H
1,1-Dichloroethene	0.923	0.0204	1.018	0	90.7	62.9	149				H
Methylene chloride	1.01	0.0204	1.018	0	99.7	74.3	126				H
trans-1,2-Dichloroethene	0.965	0.0204	1.018	0	94.8	73.1	130				H
Methyl tert-butyl ether (MTBE)	0.942	0.0204	1.018	0	92.6	71.8	123				H
1,1-Dichloroethane	0.979	0.0204	1.018	0	96.2	73	128				H
cis-1,2-Dichloroethene	0.986	0.0204	1.018	0	96.9	77.5	125				H

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2010403-027BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **BATCH** Batch ID: **30341** Analysis Date: **11/10/2020** SeqNo: **1269482**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	1.00	0.0204	1.018	0	98.3	76.8	127				H
1,1,1-Trichloroethane (TCA)	0.956	0.0204	1.018	0	94.0	71.4	134				H
1,1-Dichloropropene	0.919	0.0204	1.018	0	90.4	69	133				H
Carbon tetrachloride	0.922	0.0204	1.018	0	90.6	67.5	136				H
1,2-Dichloroethane (EDC)	1.00	0.0204	1.018	0	98.3	73.9	128				H
Benzene	0.970	0.0204	1.018	0	95.3	74.6	126				H
Trichloroethene (TCE)	0.952	0.0204	1.018	0	93.5	72	133				H
1,2-Dichloropropane	0.962	0.0204	1.018	0	94.5	73.5	125				H
Bromodichloromethane	0.975	0.0204	1.018	0	95.8	77.1	125				H
Dibromomethane	1.00	0.0204	1.018	0	98.5	79.6	122				H
cis-1,3-Dichloropropene	0.983	0.0204	1.018	0	96.6	71.8	122				H
Toluene	0.974	0.0204	1.018	0	95.7	72.6	127				H
trans-1,3-Dichloropropylene	0.969	0.0204	1.018	0	95.2	71.1	125				H
1,1,2-Trichloroethane	0.973	0.0204	1.018	0	95.7	75.6	123				H
1,3-Dichloropropane	0.971	0.0254	1.018	0	95.4	74.4	122				H
Tetrachloroethene (PCE)	0.933	0.0204	1.018	0	91.7	72.7	128				H
Dibromochloromethane	0.930	0.0204	1.018	0	91.4	78.3	120				H
1,2-Dibromoethane (EDB)	0.967	0.00509	1.018	0	95.0	76.1	121				H
Chlorobenzene	0.993	0.0204	1.018	0	97.6	74.9	124				H
1,1,1,2-Tetrachloroethane	0.954	0.0204	1.018	0	93.8	75.3	126				H
Ethylbenzene	1.00	0.0254	1.018	0	98.6	77.3	126				H
m,p-Xylene	2.03	0.0509	2.035	0	99.8	78.5	126				H
o-Xylene	1.01	0.0254	1.018	0	99.4	79.4	123				H
Styrene	1.01	0.0204	1.018	0	98.8	80	122				H
Isopropylbenzene	0.990	0.0204	1.018	0	97.3	77.3	128				H
Bromoform	0.987	0.0509	1.018	0	97.0	68.7	131				H
1,1,2,2-Tetrachloroethane	0.963	0.0204	1.018	0	94.7	58.2	134				H
n-Propylbenzene	0.996	0.0204	1.018	0	97.9	76	130				H
Bromobenzene	1.01	0.0204	1.018	0	99.7	80.3	123				H
1,3,5-Trimethylbenzene	1.00	0.0204	1.018	0	98.7	75.8	128				H

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2010403-027BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/9/2020** RunNo: **63258**
Client ID: **BATCH** Batch ID: **30341** Analysis Date: **11/10/2020** SeqNo: **1269482**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	1.01	0.0254	1.018	0	98.8	78.6	127				H
4-Chlorotoluene	1.02	0.0204	1.018	0	100	79	126				H
tert-Butylbenzene	0.992	0.0204	1.018	0	97.5	77.7	130				H
1,2,3-Trichloropropane	1.55	0.0254	1.018	0	152	60.3	139				SH
1,2,4-Trichlorobenzene	0.956	0.0204	1.018	0	94.0	75.1	128				H
sec-Butylbenzene	0.987	0.0254	1.018	0	97.0	76.2	132				H
4-Isopropyltoluene	0.992	0.0254	1.018	0	97.5	77.3	130				H
1,3-Dichlorobenzene	1.03	0.0204	1.018	0	101	77.2	127				H
1,4-Dichlorobenzene	1.02	0.0204	1.018	0	101	76.7	125				H
n-Butylbenzene	0.977	0.0204	1.018	0	96.0	74.8	133				H
1,2-Dichlorobenzene	1.03	0.0204	1.018	0	101	77.5	125				H
1,2-Dibromo-3-chloropropane	0.903	0.509	1.018	0	88.7	59.9	139				H
1,2,4-Trimethylbenzene	1.02	0.0204	1.018	0	100	68.4	135				H
Hexachloro-1,3-butadiene	0.925	0.0254	1.018	0	90.9	71	145				H
Naphthalene	0.954	0.0509	1.018	0	93.7	64.3	140				H
1,2,3-Trichlorobenzene	0.951	0.0204	1.018	0	93.4	67.2	133				H
Surr: Dibromofluoromethane	1.30		1.272		102	85.2	113				H
Surr: Toluene-d8	1.27		1.272		99.6	88.5	110				H
Surr: 1-Bromo-4-fluorobenzene	1.28		1.272		100	88.6	109				H

NOTES:
S - Spike recovery indicates a possible matrix effect. The method is in control as indicated by the Laboratory Control Sample (LCS).

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30295** SampType: **LCS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **LCSW** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	10.1	1.00	20.00	0	50.3	17.8	204				
Chloromethane	14.0	2.00	20.00	0	70.0	46.7	158				
Vinyl chloride	16.0	0.200	20.00	0	80.2	62.3	148				
Bromomethane	25.8	1.00	20.00	0	129	49.7	151				
Trichlorofluoromethane (CFC-11)	19.0	1.00	20.00	0	94.8	80.6	131				
Chloroethane	18.7	1.00	20.00	0	93.3	69.7	138				
1,1-Dichloroethene	19.3	1.00	20.00	0	96.3	77	134				
Methylene chloride	20.6	1.00	20.00	0	103	73.7	126				
trans-1,2-Dichloroethene	20.3	1.00	20.00	0	101	83	127				
Methyl tert-butyl ether (MTBE)	19.5	1.00	20.00	0	97.6	68.2	125				
1,1-Dichloroethane	20.3	1.00	20.00	0	101	70.3	133				
cis-1,2-Dichloroethene	20.5	1.00	20.00	0	102	83.7	122				
Chloroform	20.7	1.00	20.00	0	103	81.9	122				
1,1,1-Trichloroethane (TCA)	20.3	1.00	20.00	0	101	78.2	133				
1,1-Dichloropropene	19.9	1.00	20.00	0	99.7	84.1	127				
Carbon tetrachloride	20.5	1.00	20.00	0	103	81.8	129				
1,2-Dichloroethane (EDC)	20.4	1.00	20.00	0	102	73.3	123				
Benzene	20.4	1.00	20.00	0	102	80.5	126				
Trichloroethene (TCE)	20.5	0.500	20.00	0	103	75.5	132				
1,2-Dichloropropane	20.6	1.00	20.00	0	103	79.2	124				
Bromodichloromethane	21.1	1.00	20.00	0	106	78.4	122				
Dibromomethane	20.7	1.00	20.00	0	103	78.3	122				
cis-1,3-Dichloropropene	20.7	1.00	20.00	0	103	77.6	117				
Toluene	20.8	1.00	20.00	0	104	82.9	124				
trans-1,3-Dichloropropylene	20.2	1.00	20.00	0	101	72.5	122				
1,1,2-Trichloroethane	20.8	1.00	20.00	0	104	78.2	125				
1,3-Dichloropropane	20.6	1.00	20.00	0	103	76.7	124				
Tetrachloroethene (PCE)	21.1	1.00	20.00	0	106	90.5	121				
Dibromochloromethane	21.1	1.00	20.00	0	106	77.1	122				
1,2-Dibromoethane (EDB)	20.5	0.250	20.00	0	102	77.9	122				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30295** SampType: **LCS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **LCSW** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	19.6	1.00	20.00	0	97.9	84.3	121				
1,1,1,2-Tetrachloroethane	19.3	1.00	20.00	0	96.4	80.3	123				
Ethylbenzene	19.7	1.00	20.00	0	98.5	85.3	123				
m,p-Xylene	40.0	1.00	40.00	0	100	85.8	122				
o-Xylene	19.4	1.00	20.00	0	96.9	85.4	121				
Styrene	19.8	1.00	20.00	0	99.2	82	120				
Isopropylbenzene	19.8	1.00	20.00	0	99.0	87.7	123				
Bromoform	19.5	1.00	20.00	0	97.4	69.3	129				
1,1,2,2-Tetrachloroethane	19.4	1.00	20.00	0	97.2	74.4	133				
n-Propylbenzene	20.1	1.00	20.00	0	101	83.9	126				
Bromobenzene	19.7	1.00	20.00	0	98.7	85.1	120				
1,3,5-Trimethylbenzene	20.1	1.00	20.00	0	100	83.6	123				
2-Chlorotoluene	20.1	1.00	20.00	0	100	84.2	123				
4-Chlorotoluene	20.0	1.00	20.00	0	99.8	82.3	123				
tert-Butylbenzene	19.7	1.00	20.00	0	98.6	84.1	126				
1,2,3-Trichloropropane	19.0	1.00	20.00	0	95.1	73.6	118				B
1,2,4-Trichlorobenzene	20.0	2.00	20.00	0	99.9	73.2	129				
sec-Butylbenzene	20.2	1.00	20.00	0	101	83.9	126				
4-Isopropyltoluene	20.2	1.00	20.00	0	101	83.3	124				
1,3-Dichlorobenzene	20.2	1.00	20.00	0	101	87.3	121				
1,4-Dichlorobenzene	20.2	1.00	20.00	0	101	87.4	119				
n-Butylbenzene	20.2	1.00	20.00	0	101	82.8	124				
1,2-Dichlorobenzene	20.2	1.00	20.00	0	101	87.8	119				
1,2-Dibromo-3-chloropropane	19.7	1.00	20.00	0	98.7	61.6	135				
1,2,4-Trimethylbenzene	20.3	1.00	20.00	0	102	82.1	124				
Hexachloro-1,3-butadiene	20.6	0.500	20.00	0	103	79.8	129				
Naphthalene	18.4	1.00	20.00	0	92.0	67	138				
1,2,3-Trichlorobenzene	19.1	4.00	20.00	0	95.5	72.3	131				
Surr: Dibromofluoromethane	26.1		25.00		104	84.8	113				
Surr: Toluene-d8	26.9		25.00		108	88.5	110				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30295**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63187**
Client ID: **LCSW**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268210**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	24.6		25.00		98.4	89.9	108				

Sample ID: **MB-30295**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/5/2020**	RunNo: **63187**
Client ID: **MBLKW**	Batch ID: **30295**		Analysis Date: **11/5/2020**	SeqNo: **1268192**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									Q
Chloromethane	ND	2.00									Q
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	0.500									
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30295** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **MBLKW** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268192**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	13.4	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30295** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **MBLKW** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268192**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	25.7		25.00		103	84.8	113				
Surr: Toluene-d8	24.9		25.00		99.5	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	24.5		25.00		98.1	89.9	108				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011056-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268179**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	2.00						0		30	Q
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	3.28	1.00						3.292	0.494	30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011056-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268179**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	2.24	1.00						2.174	2.98	30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	5.95	1.00						5.635	5.42	30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	10.6	1.00						9.957	6.34	30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011056-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268179**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	25.1		25.00		101	84.8	113		0		
Surr: Toluene-d8	24.8		25.00		99.3	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	24.7		25.00		98.8	89.9	108		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011092-004ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	2.00						0		30	Q
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011092-004ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011092-004ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **BATCH** Batch ID: **30295** Analysis Date: **11/5/2020** SeqNo: **1268189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	26.3		25.00		105	84.8	113		0		
Surr: Toluene-d8	25.0		25.00		99.9	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	25.1		25.00		100	89.9	108		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011090-005AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **TW07-20201103** Batch ID: **30295** Analysis Date: **11/6/2020** SeqNo: **1268181**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	13.0	1.00	20.00	0	65.1	17.8	204				
Chloromethane	11.6	2.00	20.00	0	58.0	46.7	158				
Vinyl chloride	15.0	0.200	20.00	0	75.1	62.3	148				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011090-005AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **TW07-20201103** Batch ID: **30295** Analysis Date: **11/6/2020** SeqNo: **1268181**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	14.0	1.00	20.00	0	70.0	49.7	151				
Trichlorofluoromethane (CFC-11)	19.8	1.00	20.00	0	98.8	80.6	131				
Chloroethane	19.2	1.00	20.00	0	95.9	69.7	138				
1,1-Dichloroethene	21.1	1.00	20.00	0	105	77	134				
Methylene chloride	20.1	1.00	20.00	0	100	73.7	126				
trans-1,2-Dichloroethene	20.1	1.00	20.00	0	100	83	127				
Methyl tert-butyl ether (MTBE)	18.2	1.00	20.00	0	91.0	68.2	125				
1,1-Dichloroethane	20.3	1.00	20.00	0	101	70.3	133				
cis-1,2-Dichloroethene	20.0	1.00	20.00	0	100	83.7	122				
Chloroform	20.2	1.00	20.00	0	101	81.9	122				
1,1,1-Trichloroethane (TCA)	20.9	1.00	20.00	0	104	78.2	133				
1,1-Dichloropropene	20.5	1.00	20.00	0	102	84.1	127				
Carbon tetrachloride	21.2	1.00	20.00	0	106	81.8	129				
1,2-Dichloroethane (EDC)	19.5	1.00	20.00	0	97.7	73.3	123				
Benzene	20.3	1.00	20.00	0	102	80.5	126				
Trichloroethene (TCE)	20.1	0.500	20.00	0	101	75.5	132				
1,2-Dichloropropane	19.8	1.00	20.00	0	99.1	79.2	124				
Bromodichloromethane	20.0	1.00	20.00	0	99.9	78.4	122				
Dibromomethane	19.8	1.00	20.00	0	99.2	78.3	122				
cis-1,3-Dichloropropene	18.3	1.00	20.00	0	91.5	77.6	117				
Toluene	20.2	1.00	20.00	0	101	82.9	124				
trans-1,3-Dichloropropylene	18.7	1.00	20.00	0	93.4	72.5	122				
1,1,2-Trichloroethane	19.3	1.00	20.00	0	96.7	78.2	125				
1,3-Dichloropropane	19.1	1.00	20.00	0	95.4	76.7	124				
Tetrachloroethene (PCE)	19.9	1.00	20.00	0	99.4	90.5	121				
Dibromochloromethane	20.2	1.00	20.00	0	101	77.1	122				
1,2-Dibromoethane (EDB)	19.1	0.250	20.00	0	95.6	77.9	122				
Chlorobenzene	20.4	1.00	20.00	0	102	84.3	121				
1,1,1,2-Tetrachloroethane	20.1	1.00	20.00	0	100	80.3	123				
Ethylbenzene	20.9	1.00	20.00	0	104	85.3	123				

Work Order: 2011090
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011090-005AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63187**
Client ID: **TW07-20201103** Batch ID: **30295** Analysis Date: **11/6/2020** SeqNo: **1268181**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
m,p-Xylene	41.8	1.00	40.00	0	105	85.8	122				
o-Xylene	20.2	1.00	20.00	0	101	85.4	121				
Styrene	20.3	1.00	20.00	0	101	82	120				
Isopropylbenzene	20.7	1.00	20.00	0	104	87.7	123				
Bromoform	20.3	1.00	20.00	0	102	69.3	129				
1,1,2,2-Tetrachloroethane	19.2	1.00	20.00	0	96.0	74.4	133				
n-Propylbenzene	21.0	1.00	20.00	0	105	83.9	126				
Bromobenzene	20.1	1.00	20.00	0	101	85.1	120				
1,3,5-Trimethylbenzene	20.8	1.00	20.00	0	104	83.6	123				
2-Chlorotoluene	20.7	1.00	20.00	0	104	84.2	123				
4-Chlorotoluene	20.8	1.00	20.00	0	104	82.3	123				
tert-Butylbenzene	20.6	1.00	20.00	0	103	84.1	126				
1,2,3-Trichloropropane	18.6	1.00	20.00	0	93.1	73.6	118				B
1,2,4-Trichlorobenzene	18.8	2.00	20.00	0	93.9	73.2	129				
sec-Butylbenzene	20.7	1.00	20.00	0	104	83.9	126				
4-Isopropyltoluene	20.4	1.00	20.00	0	102	83.3	124				
1,3-Dichlorobenzene	20.0	1.00	20.00	0	99.9	87.3	121				
1,4-Dichlorobenzene	19.9	1.00	20.00	0	99.6	87.4	119				
n-Butylbenzene	19.5	1.00	20.00	0	97.4	82.8	124				
1,2-Dichlorobenzene	20.2	1.00	20.00	0	101	87.8	119				
1,2-Dibromo-3-chloropropane	19.1	1.00	20.00	0	95.5	61.6	135				
1,2,4-Trimethylbenzene	20.9	1.00	20.00	0	104	82.1	124				
Hexachloro-1,3-butadiene	18.9	0.500	20.00	0	94.5	79.8	129				
Naphthalene	17.9	1.00	20.00	0	89.7	67	138				
1,2,3-Trichlorobenzene	18.7	4.00	20.00	0	93.7	72.3	131				
Surr: Dibromofluoromethane	24.9		25.00		99.5	84.8	113				
Surr: Toluene-d8	25.2		25.00		101	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	24.9		25.00		99.8	89.9	108				

Sample Log-In Check List

Client Name:	**RAMBOL**	Work Order Number:	**2011090**
Logged by:	**Gabrielle Coeuille**	Date Received:	**11/4/2020 3:39:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐	
2.	How was the sample delivered?	Courier			

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐	
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐		
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑	
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐	
7.	Were all items received at a temperature of >2°C to 6°C *	Yes ☑	No ☐	NA ☐	
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐		
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐		
10.	Are samples properly preserved?	Yes ☑	No ☐		
11.	Was preservative added to bottles?	Yes ☑	No ☐	NA ☐ HCL	
12.	Is there headspace in the VOA vials?	Yes ☐	No ☑	NA ☐	
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐		
14.	Does paperwork match bottle labels?	Yes ☑	No ☐		
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐		
16.	Is it clear what analyses were requested?	Yes ☑	No ☐		
17.	Were all holding times able to be met?	Yes ☑	No ☐		

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑	

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	2.0

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 1 of: 2

Laboratory Project No (internal): 2011090

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave. Suite 2820

Collected by: S. Leick

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): A. Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
																		Report to MTCA CULs
1	SB07-4.5-20201103	11/3/20	1520	S	X			X		X		H	H	X				Hold for PAHs + PCBs
2	SB07-7-20201103	11/3/20	1530	S	H			H		H		H	H	H				Hold for all analyses
3	SB08-4.5-20201103	11/3/20	1630	S	X			X		X		H	H	X				Hold for PAHs + PCBs
4	SB08-8.5-20201103	11/3/20	1635	S	H			H		H		H	H	H				Hold for all analyses
5	TW07-20201103	11/3/20	1545	GW	X			X		X		H	H	X				Needs lab filter - metals, Hold for PAHs + PCBs
6	TW08-20201104	11/4/20	0724	GW	X			X		X		H	H	X				Hold for PAHs + PCBs
7	TW10S-20201104	11/4/20	0745	GW	X			X		X		H	H	X				↓
8	SB12-4-20201104	11/4/20	0910	S	X			X		X		H	H	X				
9	SB12-6-20201104	11/4/20	0915	S	H			H		H		H	H	X				Hold for all analyses
10	TW12-20201104	11/4/20	1005	GW	X			X		X		H	H	X				Hold for PAHs + PCBs

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 (Priority Pollutants) TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard - all others
- ☒ 3 Day - TPH-dx
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sally Leick	11-4-20/1505	x 789	11-4-20 1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 2 of: 2

Laboratory Project No (internal): 201090

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Ste 2820

Collected by: SLeiyk

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): AKephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SB06-5.0	11/4/20	1115	S	X			X		X		H	H	X				Hold for PAHs & PCBs
2	SB06-7.5	11/4/20	1110	S	H			H		H		H	H	H				Hold for all analyses
3	~~SB03-55-20201104~~	~~11/4/20~~	~~1245~~	S	H			H		H		H	H	H				
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Report to MTCA CULs

SL

SL

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☑ Standard - All others
- ☑ 3 Day - TPH-dx only
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Forde	11-4-20/1505	x	11-4-2020/1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 1 of: 2

Laboratory Project No (internal): 2011090

Project Name: Delta Marine

Special Remarks: Additions per SL 11/9/20- gac

Client: Ramboll

Project No:

Address: 901 5th Ave. Suite 2820

Collected by: S. Leick

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): A. Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments (Report to MTCA CULs)
1	SB07-4.5-20201103	11/3/20	1520	S	X			X		X		H	H	X				Hold for PAHs + PCBs
2	SB07-7-20201103	11/3/20	1530	S	X			X		X		H	H	X				Hold for all analyses
3	SB08-4.5-20201103	11/3/20	1630	S	X			X		X		H	H	X				
4	SB08-8.5-20201103	11/3/20	1635	S	X			X		X		H	H	X				
5	TW07-20201103	11/3/20	1545	GW	X			X		X		H	H	X				Needs lab filter - metals, Hold for PAHs + PCBs
6	TW08-20201104	11/4/20	0724	GW	X			X		X		H	H	X				Hold for PAHs + PCBs
7	TW10S-20201104	11/4/20	0745	GW	X			X		X		H	H	X				
8	SB12-4-20201104	11/4/20	0910	S	X			X		X		H	H	X				
9	SB12-6-20201104	11/4/20	0915	S	H			H		H		H	H	X				Hold for all analyses
10	TW12-20201104	11/4/20	1005	GW	X			X		X		H	H	X				Hold for PAHs + PCBs

Please run SB08-8.5-20201103 and SB07-7-2020-1103 for TPH-Dx at a 3-day TAT and for TPH-Gx, VOCs, and priority pollutant metals at a standard (5day) TAT.

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard - all others
- ☒ 3 Day – TPH-dx
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11-4-20/1505	x 789	11-4-20 1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 2 of: 2

Laboratory Project No (internal): 201090

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Ste 2820

Collected by: SLeiyk

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): AKephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SB06-5.0	11/4/20	1115	S	X			X		X		H	H	X				Hold for PAHs & PCBs
2	SB06-7.5	11/4/20	1110	S	H			H		H		H	H	H				Hold for all analyses
3	~~SB03-55-20201104~~	~~11/4/20~~	~~1245~~	S	H			H		H		H	H	H				SL
4																		
5																		
6																		
7																		
8																		
9																		
10																		SL

Report to MTCA CULs

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☑ Standard - All others
- ☑ 3 Day - TPH-dx only
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Forde	11-4-20/1505	x	11-4-2020/1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 1 of: 2

Laboratory Project No (internal): 2011090

Project Name: Delta Marine

Special Remarks:

Additions per SL 11/9/20- gac
X = Run per AK, Std TAT, 11/10/20 -CG

Client: Ramboll

Project No:

Address: 901 5th Ave. Suite 2820

Collected by: S. Leick

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): A. Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SB07-4.5-20201103	11/3/20	1520	S	X			X		X		H	H	X				Hold for PAHs + PCBs
2	SB07-7-20201103	11/3/20	1530	S	X			X		X		H	H	X				Hold for all analyses
3	SB08-4.5-20201103	11/3/20	1630	S	X			X		X		H	H	X				
4	SB08-8.5-20201103	11/3/20	1635	S	X			X		X		H	H	X				
5	TW07-20201103	11/3/20	1545	GW	X			X		X		X	H	X				Needs lab filter - metals, Hold for PAHs + PCBs
6	TW08-20201104	11/4/20	0724	GW	X			X		X		X	H	X				Hold for PAHs + PCBs
7	TW10S-20201104	11/4/20	0745	GW	X			X		X		X	H	X				
8	SB12-4-20201104	11/4/20	0910	S	X			X		X		H	H	X				
9	SB12-6-20201104	11/4/20	0915	S	H			H		H		H	H	X				Hold for all analyses
10	TW12-20201104	11/4/20	1005	GW	X			X		X		X	H	X				Hold for PAHs + PCBs

Please run SB08-8.5-20201103 and SB07-7-2020-1103 for TPH-Dx at a 3-day TAT and for TPH-Gx, VOCs, and priority pollutant metals at a standard (5day) TAT.

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard - all others
- ☒ 3 Day - TPH-dx
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11-4-20/1505	x	11-4-20 1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 2 of: 2

Laboratory Project No (internal): 201090

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Ste 2820

Collected by: SLeiyk

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): AKephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SB06-5.0	11/4/20	1115	S	X			X		X		H	H	X				Hold for PAHs & PCBs
2	SB06-7.5	11/4/20	1110	S	H			H		H		H	H	H				Hold for all analyses
3	~~SB03-55-20201104~~	~~11/4/20~~	~~1245~~	S	H			H		H		H	H	H				SL
4																		
5																		
6																		
7																		
8																		
9																		
10																		SL

Report to MTCA CULs

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Lorick	11-4-20/1505	x	11-4-2020/1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

Turn-around Time:

- ☑ Standard - All others
- ☑ 3 Day - TPH-dx only
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 1 of: 2

Laboratory Project No (internal): 2011090

Project Name: Delta Marine

Special Remarks:

Additions per SL 11/9/20- gac
X = Run per AK, Std TAT, 11/10/20 -CG
X = off hold per AK, Std TAT, 11/16/20 5pm -CG

Client: Ramboll

Project No:

Address: 901 5th Ave. Suite 2820

Collected by: S. Leick

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): A. Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SB07-4.5-20201103	11/3/20	1520	S	X			X		X	X	X	X					Hold for PAHs + PCBs
2	SB07-7-20201103	11/3/20	1530	S	H			H		H	X	X	H					Hold for all analyses
3	SB08-4.5-20201103	11/3/20	1630	S	X			X		X	X	X	X					
4	SB08-8.5-20201103	11/3/20	1635	S	H			H		H	X	X	H					
5	TW07-20201103	11/3/20	1545	GW	X			X		X	X	H	X					Needs lab filter - metals, Hold for PAHs + PCBs
6	TW08-20201104	11/4/20	0724	GW	X			X		X	X	H	X					Hold for PAHs + PCBs
7	TW10S-20201104	11/4/20	0745	GW	X			X		X	X	H	X					
8	SB12-4-20201104	11/4/20	0910	S	X			X		X	X	X	X					
9	SB12-6-20201104	11/4/20	0915	S	H			H		H	X	H	X					Hold for all analyses
10	TW12-20201104	11/4/20	1005	GW	X			X		X	X	H	X					Hold for PAHs + PCBs

Please run SB08-8.5-20201103 and SB07-7-2020-1103 for TPH-Dx at a 3-day TAT and for TPH-Gx, VOCs, and priority pollutant metals at a standard (5day) TAT.

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard - all others
- ☒ 3 Day – TPH-dx
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11-4-20/1505	x	11-4-20 1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 2 of: 2

Laboratory Project No (internal): 201090

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Ste 2820

Collected by: SLeiyk

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): AKephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
																		Report to MTCA CULs
1	SB06-5.0	11/4/20	1115	S	X			X		X	X	X	X					Hold for PAHs & PCBs
2	SB06-7.5	11/4/20	1110	S	H			H		H	H	H	H					Hold for all analyses
3	~~SB03-55-20201104~~	~~11/4/20~~	~~1245~~	S	H			H		H	H	H	H					SL
4																		
5																		
6																		
7																		
8																		
9																		
10																		SL

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☑ Standard - All others
- ☑ 3 Day - TPH-dx only
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Forde	11-4-20/1505	x	11-4-2020/1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 1 of: 2

Laboratory Project No (internal): 2011090

Project Name: Delta Marine

Special Remarks:

Additions per SL 11/9/20- gac
X = Run per AK, Std TAT, 11/10/20 -CG
X = off hold per AK, Std TAT, 11/16/20 5pm -CG
X = add per AK, Std TAT, 11/23/20 -CG

Client: Ramboll

Project No:

Address: 901 5th Ave. Suite 2820

Collected by: S. Leick

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): A. Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SB07-4.5-20201103	11/3/20	1520	S	X			X		X	X	X	X	X				Hold for PAHs + PCBs
2	SB07-7-20201103	11/3/20	1530	S	H			H		H	X	X	X	H				Hold for all analyses
3	SB08-4.5-20201103	11/3/20	1630	S	X			X		X	X	X	X	X				
4	SB08-8.5-20201103	11/3/20	1635	S	H			H		H	X	X	X	H				
5	TW07-20201103	11/3/20	1545	GW	X			X		X	X	X	X	X				Needs lab filter - metals, Hold for PAHs + PCBs
6	TW08-20201104	11/4/20	0724	GW	X			X		X	X	X	X	X				Hold for PAHs + PCBs
7	TW10S-20201104	11/4/20	0745	GW	X			X		X	X	X	X	X				
8	SB12-4-20201104	11/4/20	0910	S	X			X		X	X	X	X	X				
9	SB12-6-20201104	11/4/20	0915	S	H			H		H	X	H	H	X				Hold for all analyses
10	TW12-20201104	11/4/20	1005	GW	X			X		X	X	X	X	X				Hold for PAHs + PCBs

Please run SB08-8.5-20201103 and SB07-7-2020-1103 for TPH-Dx at a 3-day TAT and for TPH-Gx, VOCs, and priority pollutant metals at a standard (5day) TAT.

Report to MTCA CULs

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☒ Standard - all others
- ☒ 3 Day - TPH-dx
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11-4-20/1505	x	11-4-20 1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

www.fremontanalytical.com

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 2 of: 2

Laboratory Project No (internal): 201090

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Ste 2820

Collected by: SLeiyk

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): AKephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
																		Report to MTCA CULs
1	SB06-5.0	11/4/20	1115	S	X			X		X		X	X	X				Hold for PAHs & PCBs
2	SB06-7.5	11/4/20	1110	S	H			H		H		H	H	H				Hold for all analyses
3	~~SB03-55-20201104~~	~~11/4/20~~	~~1245~~	S	H			H		H		H	H	H				SL
4																		
5																		
6																		
7																		
8																		
9																		
10																		SL

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:

- ☑ Standard - All others
- ☑ 3 Day - TPH-dx only
- ☐ 2 Day
- ☐ Next Day
- Same Day _____ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leiyk	11-4-20/1505	x	11-4-2020/1505
Relinquished	Date/Time	Received	Date/Time
x		x	11/4/20 @ 1539

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Ramboll Environ
Amy Kephart
901 5th Ave., Ste. 2820
Seattle, WA 98164

RE: Delta Marine
Work Order Number: 2011094

December 03, 2020

Attention Amy Kephart:

Fremont Analytical, Inc. received 10 sample(s) on 11/4/2020 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Dissolved Mercury by EPA Method 245.1
Dissolved Metals by EPA Method 200.8
Gasoline by NWTPH-Gx
Mercury by EPA Method 7471
Metals (EPA 200.8) with TCLP Extraction (EPA 1311)
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)
Polychlorinated Biphenyls (PCB) by EPA 8082
Sample Moisture (Percent Moisture)
Total Metals by EPA Method 6020B
Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

CC:
Sam Leick

CLIENT: Ramboll Environ
Project: Delta Marine
Work Order: 2011094

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2011094-001	SB03-5.5-20201104	11/04/2020 12:45 PM	11/04/2020 5:53 PM
2011094-002	SB02-2.5-20201104	11/04/2020 1:30 PM	11/04/2020 5:53 PM
2011094-003	SB02-5-20201104	11/04/2020 1:35 PM	11/04/2020 5:53 PM
2011094-004	SB05-3.5-20201104	11/04/2020 2:55 PM	11/04/2020 5:53 PM
2011094-005	SB05-6-20201104	11/04/2020 3:00 PM	11/04/2020 5:53 PM
2011094-006	SB0105-3.5-20201104	11/04/2020 3:15 PM	11/04/2020 5:53 PM
2011094-007	SB04-20201104-EB	11/04/2020 3:20 PM	11/04/2020 5:53 PM
2011094-008	SB04-3-20201104	11/04/2020 4:25 PM	11/04/2020 5:53 PM
2011094-009	SB04-6-20201104	11/04/2020 4:30 PM	11/04/2020 5:53 PM
2011094-010	TB-20201104	11/04/2020 4:48 PM	11/04/2020 5:53 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2011094**
Date: **12/3/2020**

CLIENT: Ramboll Environ
Project: Delta Marine

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011094-007D) required Acid Cleanup Procedure (Using Method No 3665A).
Prep Comments for METHOD (PREP-PCB-W), SAMPLE (2011094-007D) required Florisil Cleanup Procedure (Using Method No 3620C).

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: Ramboll Environ
Collection Date: 11/4/2020 12:45:00 PM
Project: Delta Marine
Lab ID: 2011094-001
Matrix: Soil
Client Sample ID: SB03-5.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Aroclor 1221	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Aroclor 1232	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Aroclor 1242	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Aroclor 1248	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Aroclor 1254	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Aroclor 1260	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Aroclor 1262	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Aroclor 1268	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Total PCBs	ND	0.130		mg/Kg-dry	1	11/19/2020 8:19:07 PM
Surr: Decachlorobiphenyl	71.0	6.8 - 211		%Rec	1	11/19/2020 8:19:07 PM
Surr: Tetrachloro-m-xylene	55.5	7.85 - 182		%Rec	1	11/19/2020 8:19:07 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30409		Analyst: DW
Diesel (Fuel Oil)	ND	23.4		mg/Kg-dry	1	11/13/2020 9:24:56 PM
Heavy Oil	ND	58.4		mg/Kg-dry	1	11/13/2020 9:24:56 PM
Surr: 2-Fluorobiphenyl	117	50 - 150		%Rec	1	11/13/2020 9:24:56 PM
Surr: o-Terphenyl	98.4	50 - 150		%Rec	1	11/13/2020 9:24:56 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
2-Methylnaphthalene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
1-Methylnaphthalene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Acenaphthylene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Acenaphthene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Fluorene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Phenanthrene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Anthracene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Fluoranthene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Pyrene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Benz(a)anthracene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Chrysene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Benzo(b)fluoranthene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Benzo(k)fluoranthene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Benzo(a)pyrene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Indeno(1,2,3-cd)pyrene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Dibenz(a,h)anthracene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 12:45:00 PM
Project: Delta Marine
Lab ID: 2011094-001
Matrix: Soil
Client Sample ID: SB03-5.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	48.5		µg/Kg-dry	1	11/17/2020 11:58:57 PM
Surr: 2-Fluorobiphenyl	46.2	16.9 - 122		%Rec	1	11/17/2020 11:58:57 PM
Surr: Terphenyl-d14 (surr)	77.3	38.4 - 153		%Rec	1	11/17/2020 11:58:57 PM
Gasoline by NWTPH-Gx				Batch ID: 30400		Analyst: KT
Gasoline	ND	5.29		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Surr: Toluene-d8	98.3	65 - 135		%Rec	1	11/13/2020 4:19:47 PM
Surr: 4-Bromofluorobenzene	91.4	65 - 135		%Rec	1	11/13/2020 4:19:47 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30400		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Chloromethane	ND	0.0529		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Vinyl chloride	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Bromomethane	ND	0.0529		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Trichlorofluoromethane (CFC-11)	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Chloroethane	ND	0.0529		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,1-Dichloroethene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Methylene chloride	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
trans-1,2-Dichloroethene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,1-Dichloroethane	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
cis-1,2-Dichloroethene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Chloroform	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,1,1-Trichloroethane (TCA)	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,1-Dichloropropene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Carbon tetrachloride	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2-Dichloroethane (EDC)	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Benzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Trichloroethene (TCE)	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2-Dichloropropane	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Bromodichloromethane	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Dibromomethane	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
cis-1,3-Dichloropropene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Toluene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
trans-1,3-Dichloropropylene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,1,2-Trichloroethane	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,3-Dichloropropane	ND	0.0265		mg/Kg-dry	1	11/13/2020 4:19:47 PM

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011094-001
Client Sample ID: **SB03-5.5-20201104**

Collection Date: 11/4/2020 12:45:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30400		Analyst: KT
Tetrachloroethene (PCE)	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Dibromochloromethane	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2-Dibromoethane (EDB)	ND	0.00529		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Chlorobenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,1,1,2-Tetrachloroethane	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Ethylbenzene	ND	0.0265		mg/Kg-dry	1	11/13/2020 4:19:47 PM
m,p-Xylene	ND	0.0529		mg/Kg-dry	1	11/13/2020 4:19:47 PM
o-Xylene	ND	0.0265		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Styrene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Isopropylbenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Bromoform	ND	0.0529		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,1,2,2-Tetrachloroethane	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
n-Propylbenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Bromobenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,3,5-Trimethylbenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
2-Chlorotoluene	ND	0.0265		mg/Kg-dry	1	11/13/2020 4:19:47 PM
4-Chlorotoluene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
tert-Butylbenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2,3-Trichloropropane	ND	0.0265		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2,4-Trichlorobenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
sec-Butylbenzene	ND	0.0265		mg/Kg-dry	1	11/13/2020 4:19:47 PM
4-Isopropyltoluene	ND	0.0265		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,3-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,4-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
n-Butylbenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2-Dichlorobenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2-Dibromo-3-chloropropane	ND	0.529		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2,4-Trimethylbenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Hexachloro-1,3-butadiene	ND	0.0265		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Naphthalene	ND	0.0529		mg/Kg-dry	1	11/13/2020 4:19:47 PM
1,2,3-Trichlorobenzene	ND	0.0212		mg/Kg-dry	1	11/13/2020 4:19:47 PM
Surr: Dibromofluoromethane	87.6	85.2 - 113		%Rec	1	11/13/2020 4:19:47 PM
Surr: Toluene-d8	96.5	88.5 - 110		%Rec	1	11/13/2020 4:19:47 PM
Surr: 1-Bromo-4-fluorobenzene	97.5	88.6 - 109		%Rec	1	11/13/2020 4:19:47 PM
Mercury by EPA Method 7471				Batch ID: 30420		Analyst: WF
Mercury	ND	0.308		mg/Kg-dry	1	11/16/2020 2:59:09 PM

Analytical Report

Work Order: **2011094**
Date Reported: **12/3/2020**

Client: Ramboll Environ
Collection Date: 11/4/2020 12:45:00 PM
Project: Delta Marine
Lab ID: 2011094-001
Matrix: Soil
Client Sample ID: SB03-5.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 30418		Analyst: CO
Antimony	ND	0.208		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Arsenic	7.58	0.260		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Beryllium	0.283	0.208		mg/Kg-dry	1	11/17/2020 1:51:25 PM
Cadmium	ND	0.208		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Chromium	24.0	0.104	B	mg/Kg-dry	1	11/16/2020 4:03:35 PM
Copper	33.1	0.208		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Lead	4.58	0.208		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Nickel	9.91	0.519		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Selenium	1.18	0.519		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Silver	ND	0.104		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Thallium	ND	0.208		mg/Kg-dry	1	11/16/2020 4:03:35 PM
Zinc	22.2	0.519		mg/Kg-dry	1	11/16/2020 4:03:35 PM

NOTES:
B - Detection in sample is 10x greater than detection in Method Blank. No further action required.

Sample Moisture (Percent Moisture)				Batch ID: R63417		Analyst: LB
Percent Moisture	24.8			wt%	1	11/16/2020 10:35:50 AM

Client: Ramboll Environ
Collection Date: 11/4/2020 1:30:00 PM
Project: Delta Marine
Lab ID: 2011094-002
Matrix: Soil
Client Sample ID: SB02-2.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Aroclor 1221	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Aroclor 1232	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Aroclor 1242	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Aroclor 1248	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Aroclor 1254	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Aroclor 1260	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Aroclor 1262	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Aroclor 1268	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Total PCBs	ND	0.173		mg/Kg-dry	1	11/19/2020 8:28:51 PM
Surr: Decachlorobiphenyl	80.7	6.8 - 211		%Rec	1	11/19/2020 8:28:51 PM
Surr: Tetrachloro-m-xylene	59.9	7.85 - 182		%Rec	1	11/19/2020 8:28:51 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30299		Analyst: DW
Diesel (Fuel Oil)	ND	34.0		mg/Kg-dry	1	11/5/2020 10:19:03 PM
Heavy Oil	ND	85.1		mg/Kg-dry	1	11/5/2020 10:19:03 PM
Surr: 2-Fluorobiphenyl	99.8	50 - 150		%Rec	1	11/5/2020 10:19:03 PM
Surr: o-Terphenyl	83.4	50 - 150		%Rec	1	11/5/2020 10:19:03 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
2-Methylnaphthalene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
1-Methylnaphthalene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Acenaphthylene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Acenaphthene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Fluorene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Phenanthrene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Anthracene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Fluoranthene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Pyrene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Benz(a)anthracene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Chrysene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Benzo(b)fluoranthene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Benzo(k)fluoranthene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Benzo(a)pyrene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Indeno(1,2,3-cd)pyrene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Dibenz(a,h)anthracene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM

Client: Ramboll Environ
Collection Date: 11/4/2020 1:30:00 PM
Project: Delta Marine
Lab ID: 2011094-002
Matrix: Soil
Client Sample ID: SB02-2.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	68.1		µg/Kg-dry	1	11/18/2020 12:20:12 AM
Surr: 2-Fluorobiphenyl	36.3	16.9 - 122		%Rec	1	11/18/2020 12:20:12 AM
Surr: Terphenyl-d14 (surr)	82.2	38.4 - 153		%Rec	1	11/18/2020 12:20:12 AM
Gasoline by NWTPH-Gx				Batch ID: 30312		Analyst: CR
Gasoline	ND	10.4		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Surr: Toluene-d8	100	65 - 135		%Rec	1	11/6/2020 1:26:38 PM
Surr: 4-Bromofluorobenzene	101	65 - 135		%Rec	1	11/6/2020 1:26:38 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30312		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Chloromethane	ND	0.104		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Vinyl chloride	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Bromomethane	ND	0.104		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Trichlorofluoromethane (CFC-11)	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Chloroethane	ND	0.104		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,1-Dichloroethene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Methylene chloride	ND	0.00340	MDL	mg/Kg-dry	1	11/6/2020 1:26:38 PM
trans-1,2-Dichloroethene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Methyl tert-butyl ether (MTBE)	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,1-Dichloroethane	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
cis-1,2-Dichloroethene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Chloroform	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,1,1-Trichloroethane (TCA)	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,1-Dichloropropene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Carbon tetrachloride	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,2-Dichloroethane (EDC)	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Benzene	ND	0.0146	MDL	mg/Kg-dry	1	11/6/2020 1:26:38 PM
Trichloroethene (TCE)	ND	0.00454	MDL	mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,2-Dichloropropane	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Bromodichloromethane	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Dibromomethane	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
cis-1,3-Dichloropropene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Toluene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
trans-1,3-Dichloropropylene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,1,2-Trichloroethane	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,3-Dichloropropane	ND	0.0522		mg/Kg-dry	1	11/6/2020 1:26:38 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 1:30:00 PM
Project: Delta Marine
Lab ID: 2011094-002
Matrix: Soil
Client Sample ID: SB02-2.5-20201104

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30312 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Dibromochloromethane	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,2-Dibromoethane (EDB)	ND	0.0104		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Chlorobenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,1,1,2-Tetrachloroethane	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Ethylbenzene	ND	0.0522		mg/Kg-dry	1	11/6/2020 1:26:38 PM
m,p-Xylene	ND	0.104		mg/Kg-dry	1	11/6/2020 1:26:38 PM
o-Xylene	ND	0.0522		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Styrene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Isopropylbenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Bromoform	ND	0.104		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,1,2,2-Tetrachloroethane	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
n-Propylbenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Bromobenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,3,5-Trimethylbenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
2-Chlorotoluene	ND	0.0522		mg/Kg-dry	1	11/6/2020 1:26:38 PM
4-Chlorotoluene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
tert-Butylbenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,2,3-Trichloropropane	ND	0.0522		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,2,4-Trichlorobenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
sec-Butylbenzene	ND	0.0522		mg/Kg-dry	1	11/6/2020 1:26:38 PM
4-Isopropyltoluene	ND	0.0522		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,3-Dichlorobenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,4-Dichlorobenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
n-Butylbenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,2-Dichlorobenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,2-Dibromo-3-chloropropane	ND	1.04		mg/Kg-dry	1	11/6/2020 1:26:38 PM
1,2,4-Trimethylbenzene	ND	0.0417		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Hexachloro-1,3-butadiene	ND	0.0522		mg/Kg-dry	1	11/6/2020 1:26:38 PM
Naphthalene	ND	0.104		mg/Kg-dry	1	11/10/2020 11:46:41 PM
1,2,3-Trichlorobenzene	ND	0.0417	Q	mg/Kg-dry	1	11/6/2020 1:26:38 PM
Surr: Dibromofluoromethane	89.9	85.2 - 113		%Rec	1	11/6/2020 1:26:38 PM
Surr: Toluene-d8	99.3	88.5 - 110		%Rec	1	11/6/2020 1:26:38 PM
Surr: 1-Bromo-4-fluorobenzene	95.9	88.6 - 109		%Rec	1	11/6/2020 1:26:38 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011094**
Date Reported: **12/3/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011094-002
Client Sample ID: **SB02-2.5-20201104**

Collection Date: 11/4/2020 1:30:00 PM
Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Mercury by EPA Method 7471				Batch ID: 30315		Analyst: WF
Mercury	ND	0.430		mg/Kg-dry	1	11/6/2020 1:56:42 PM
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	6.52	0.281		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Arsenic	152	0.352		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Beryllium	ND	0.281		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Cadmium	2.81	0.281		mg/Kg-dry	1	11/10/2020 2:50:15 PM
Chromium	13.5	0.141		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Copper	67.0	0.281		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Lead	768	2.81	D	mg/Kg-dry	10	11/10/2020 2:55:49 PM
Nickel	5.90	0.704		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Selenium	2.62	0.704		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Silver	2.26	0.141		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Thallium	1.32	0.281		mg/Kg-dry	1	11/9/2020 5:22:16 PM
Zinc	571	7.04	D	mg/Kg-dry	10	11/10/2020 2:55:49 PM
Metals (EPA 200.8) with TCLP Extraction (EPA 1311)				Batch ID: 30544		Analyst: CO
Arsenic	ND	0.100		mg/L	1	11/30/2020 8:21:25 PM
Lead	0.206	0.200		mg/L	1	11/30/2020 8:21:25 PM
Sample Moisture (Percent Moisture)				Batch ID: R63166		Analyst: RL
Percent Moisture	44.0	0.500		wt%	1	11/5/2020 2:18:48 PM

Analytical Report

Work Order: **2011094**
Date Reported: **12/3/2020**

Client: Ramboll Environ
Collection Date: 11/4/2020 1:35:00 PM
Project: Delta Marine
Lab ID: 2011094-003
Matrix: Soil
Client Sample ID: SB02-5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Total Metals by EPA Method 6020B				Batch ID: 30551		Analyst: CO
Arsenic	12.2	0.354		mg/Kg-dry	1	12/2/2020 12:00:38 PM
Lead	36.6	0.283		mg/Kg-dry	1	12/2/2020 12:00:38 PM
Sample Moisture (Percent Moisture)				Batch ID: R63680		Analyst: OK
Percent Moisture	45.3	0.500		wt%	1	11/30/2020 9:23:24 AM

Client: Ramboll Environ
Collection Date: 11/4/2020 2:55:00 PM
Project: Delta Marine
Lab ID: 2011094-004
Matrix: Soil
Client Sample ID: SB05-3.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Aroclor 1221	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Aroclor 1232	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Aroclor 1242	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Aroclor 1248	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Aroclor 1254	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Aroclor 1260	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Aroclor 1262	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Aroclor 1268	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Total PCBs	ND	0.129		mg/Kg-dry	1	11/19/2020 8:38:38 PM
Surr: Decachlorobiphenyl	75.7	6.8 - 211		%Rec	1	11/19/2020 8:38:38 PM
Surr: Tetrachloro-m-xylene	48.6	7.85 - 182		%Rec	1	11/19/2020 8:38:38 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30299		Analyst: DW
Diesel (Fuel Oil)	ND	26.1		mg/Kg-dry	1	11/5/2020 10:48:52 PM
Heavy Oil	ND	65.2		mg/Kg-dry	1	11/5/2020 10:48:52 PM
Surr: 2-Fluorobiphenyl	97.4	50 - 150		%Rec	1	11/5/2020 10:48:52 PM
Surr: o-Terphenyl	81.5	50 - 150		%Rec	1	11/5/2020 10:48:52 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
2-Methylnaphthalene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
1-Methylnaphthalene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Acenaphthylene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Acenaphthene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Fluorene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Phenanthrene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Anthracene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Fluoranthene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Pyrene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Benz(a)anthracene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Chrysene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Benzo(b)fluoranthene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Benzo(k)fluoranthene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Benzo(a)pyrene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Indeno(1,2,3-cd)pyrene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Dibenz(a,h)anthracene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM

Client: Ramboll Environ
Collection Date: 11/4/2020 2:55:00 PM
Project: Delta Marine
Lab ID: 2011094-004
Matrix: Soil
Client Sample ID: SB05-3.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	53.9		µg/Kg-dry	1	11/18/2020 12:41:21 AM
Surr: 2-Fluorobiphenyl	53.2	16.9 - 122		%Rec	1	11/18/2020 12:41:21 AM
Surr: Terphenyl-d14 (surr)	99.2	38.4 - 153		%Rec	1	11/18/2020 12:41:21 AM
Gasoline by NWTPH-Gx				Batch ID: 30312		Analyst: CR
Gasoline	ND	6.42		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Surr: Toluene-d8	101	65 - 135		%Rec	1	11/6/2020 2:27:20 PM
Surr: 4-Bromofluorobenzene	101	65 - 135		%Rec	1	11/6/2020 2:27:20 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30312		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Chloromethane	ND	0.0642		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Vinyl chloride	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Bromomethane	ND	0.0642		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Trichlorofluoromethane (CFC-11)	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Chloroethane	ND	0.0642		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,1-Dichloroethene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Methylene chloride	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
trans-1,2-Dichloroethene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Methyl tert-butyl ether (MTBE)	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,1-Dichloroethane	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
cis-1,2-Dichloroethene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Chloroform	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,1,1-Trichloroethane (TCA)	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,1-Dichloropropene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Carbon tetrachloride	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,2-Dichloroethane (EDC)	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Benzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Trichloroethene (TCE)	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,2-Dichloropropane	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Bromodichloromethane	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Dibromomethane	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
cis-1,3-Dichloropropene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Toluene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
trans-1,3-Dichloropropylene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,1,2-Trichloroethane	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,3-Dichloropropane	ND	0.0321		mg/Kg-dry	1	11/6/2020 2:27:20 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 2:55:00 PM
Project: Delta Marine
Lab ID: 2011094-004
Matrix: Soil
Client Sample ID: **SB05-3.5-20201104**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30312 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Dibromochloromethane	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,2-Dibromoethane (EDB)	ND	0.00642		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Chlorobenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,1,1,2-Tetrachloroethane	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Ethylbenzene	ND	0.0321		mg/Kg-dry	1	11/6/2020 2:27:20 PM
m,p-Xylene	ND	0.0642		mg/Kg-dry	1	11/6/2020 2:27:20 PM
o-Xylene	ND	0.0321		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Styrene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Isopropylbenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Bromoform	ND	0.0642		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,1,2,2-Tetrachloroethane	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
n-Propylbenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Bromobenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,3,5-Trimethylbenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
2-Chlorotoluene	ND	0.0321		mg/Kg-dry	1	11/6/2020 2:27:20 PM
4-Chlorotoluene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
tert-Butylbenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,2,3-Trichloropropane	ND	0.0321		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,2,4-Trichlorobenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
sec-Butylbenzene	ND	0.0321		mg/Kg-dry	1	11/6/2020 2:27:20 PM
4-Isopropyltoluene	ND	0.0321		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,3-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,4-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
n-Butylbenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,2-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,2-Dibromo-3-chloropropane	ND	0.642		mg/Kg-dry	1	11/6/2020 2:27:20 PM
1,2,4-Trimethylbenzene	ND	0.0257		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Hexachloro-1,3-butadiene	ND	0.0321		mg/Kg-dry	1	11/6/2020 2:27:20 PM
Naphthalene	ND	0.0642		mg/Kg-dry	1	11/11/2020 12:16:49 AM
1,2,3-Trichlorobenzene	ND	0.0257	Q	mg/Kg-dry	1	11/6/2020 2:27:20 PM
Surr: Dibromofluoromethane	94.9	85.2 - 113		%Rec	1	11/6/2020 2:27:20 PM
Surr: Toluene-d8	101	88.5 - 110		%Rec	1	11/6/2020 2:27:20 PM
Surr: 1-Bromo-4-fluorobenzene	96.1	88.6 - 109		%Rec	1	11/6/2020 2:27:20 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011094**
Date Reported: **12/3/2020**

Client: Ramboll Environ
Collection Date: 11/4/2020 2:55:00 PM
Project: Delta Marine
Lab ID: 2011094-004
Matrix: Soil
Client Sample ID: **SB05-3.5-20201104**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Mercury by EPA Method 7471				Batch ID: 30315		Analyst: WF
Mercury	ND	0.339		mg/Kg-dry	1	11/6/2020 1:58:20 PM
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	ND	0.214		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Arsenic	10.9	0.267		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Beryllium	0.523	0.214		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Cadmium	0.305	0.214		mg/Kg-dry	1	11/10/2020 3:01:23 PM
Chromium	25.7	0.107		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Copper	34.2	0.214		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Lead	29.0	0.214		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Nickel	17.6	0.534		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Selenium	1.68	0.534		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Silver	0.116	0.107		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Thallium	ND	0.214		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Zinc	81.9	0.534		mg/Kg-dry	1	11/9/2020 5:27:50 PM
Sample Moisture (Percent Moisture)				Batch ID: R63166		Analyst: RL
Percent Moisture	29.0	0.500		wt%	1	11/5/2020 2:18:48 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 3:15:00 PM
Project: Delta Marine
Lab ID: 2011094-006
Matrix: Soil
Client Sample ID: SB0105-3.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Aroclor 1221	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Aroclor 1232	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Aroclor 1242	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Aroclor 1248	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Aroclor 1254	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Aroclor 1260	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Aroclor 1262	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Aroclor 1268	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Total PCBs	ND	0.131		mg/Kg-dry	1	11/19/2020 8:48:21 PM
Surr: Decachlorobiphenyl	79.6	6.8 - 211		%Rec	1	11/19/2020 8:48:21 PM
Surr: Tetrachloro-m-xylene	55.9	7.85 - 182		%Rec	1	11/19/2020 8:48:21 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30299		Analyst: DW
Diesel (Fuel Oil)	ND	22.6		mg/Kg-dry	1	11/5/2020 11:18:26 PM
Heavy Oil	ND	56.6		mg/Kg-dry	1	11/5/2020 11:18:26 PM
Surr: 2-Fluorobiphenyl	97.8	50 - 150		%Rec	1	11/5/2020 11:18:26 PM
Surr: o-Terphenyl	82.2	50 - 150		%Rec	1	11/5/2020 11:18:26 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
2-Methylnaphthalene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
1-Methylnaphthalene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Acenaphthylene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Acenaphthene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Fluorene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Phenanthrene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Anthracene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Fluoranthene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Pyrene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Benz(a)anthracene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Chrysene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Benzo(b)fluoranthene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Benzo(k)fluoranthene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Benzo(a)pyrene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Indeno(1,2,3-cd)pyrene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Dibenz(a,h)anthracene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM

Client: Ramboll Environ
Collection Date: 11/4/2020 3:15:00 PM
Project: Delta Marine
Lab ID: 2011094-006
Matrix: Soil
Client Sample ID: SB0105-3.5-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	50.3		µg/Kg-dry	1	11/18/2020 1:02:32 AM
Surr: 2-Fluorobiphenyl	41.1	16.9 - 122		%Rec	1	11/18/2020 1:02:32 AM
Surr: Terphenyl-d14 (surr)	81.7	38.4 - 153		%Rec	1	11/18/2020 1:02:32 AM
Gasoline by NWTPH-Gx				Batch ID: 30312		Analyst: CR
Gasoline	ND	5.16		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Surr: Toluene-d8	100	65 - 135		%Rec	1	11/6/2020 2:57:47 PM
Surr: 4-Bromofluorobenzene	101	65 - 135		%Rec	1	11/6/2020 2:57:47 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30312		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Chloromethane	ND	0.0516		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Vinyl chloride	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Bromomethane	ND	0.0516		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Trichlorofluoromethane (CFC-11)	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Chloroethane	ND	0.0516		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,1-Dichloroethene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Methylene chloride	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
trans-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,1-Dichloroethane	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
cis-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Chloroform	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,1,1-Trichloroethane (TCA)	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,1-Dichloropropene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Carbon tetrachloride	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,2-Dichloroethane (EDC)	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Benzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Trichloroethene (TCE)	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,2-Dichloropropane	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Bromodichloromethane	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Dibromomethane	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
cis-1,3-Dichloropropene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Toluene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
trans-1,3-Dichloropropylene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,1,2-Trichloroethane	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,3-Dichloropropane	ND	0.0258		mg/Kg-dry	1	11/6/2020 2:57:47 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 3:15:00 PM
Project: Delta Marine
Lab ID: 2011094-006
Matrix: Soil
Client Sample ID: **SB0105-3.5-20201104**

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30312 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Tetrachloroethene (PCE)	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Dibromochloromethane	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,2-Dibromoethane (EDB)	ND	0.00516		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Chlorobenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,1,1,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Ethylbenzene	ND	0.0258		mg/Kg-dry	1	11/6/2020 2:57:47 PM
m,p-Xylene	ND	0.0516		mg/Kg-dry	1	11/6/2020 2:57:47 PM
o-Xylene	ND	0.0258		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Styrene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Isopropylbenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Bromoform	ND	0.0516		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,1,2,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
n-Propylbenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Bromobenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,3,5-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
2-Chlorotoluene	ND	0.0258		mg/Kg-dry	1	11/6/2020 2:57:47 PM
4-Chlorotoluene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
tert-Butylbenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,2,3-Trichloropropane	ND	0.0258		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,2,4-Trichlorobenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
sec-Butylbenzene	ND	0.0258		mg/Kg-dry	1	11/6/2020 2:57:47 PM
4-Isopropyltoluene	ND	0.0258		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,3-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,4-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
n-Butylbenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,2-Dichlorobenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,2-Dibromo-3-chloropropane	ND	0.516		mg/Kg-dry	1	11/6/2020 2:57:47 PM
1,2,4-Trimethylbenzene	ND	0.0206		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Hexachloro-1,3-butadiene	ND	0.0258		mg/Kg-dry	1	11/6/2020 2:57:47 PM
Naphthalene	ND	0.0516		mg/Kg-dry	1	11/11/2020 12:46:55 AM
1,2,3-Trichlorobenzene	ND	0.0206	Q	mg/Kg-dry	1	11/6/2020 2:57:47 PM
Surr: Dibromofluoromethane	96.0	85.2 - 113		%Rec	1	11/6/2020 2:57:47 PM
Surr: Toluene-d8	99.7	88.5 - 110		%Rec	1	11/6/2020 2:57:47 PM
Surr: 1-Bromo-4-fluorobenzene	96.4	88.6 - 109		%Rec	1	11/6/2020 2:57:47 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011094**
Date Reported: **12/3/2020**

Client: Ramboll Environ
Collection Date: 11/4/2020 3:15:00 PM
Project: Delta Marine
Lab ID: 2011094-006
Matrix: Soil
Client Sample ID: **SB0105-3.5-20201104**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Mercury by EPA Method 7471				Batch ID: 30315		Analyst: WF
Mercury	ND	0.302		mg/Kg-dry	1	11/6/2020 1:59:56 PM
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	ND	0.202		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Arsenic	5.12	0.253		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Beryllium	0.490	0.202		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Cadmium	ND	0.202		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Chromium	21.8	0.101		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Copper	26.6	0.202		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Lead	10.4	0.202		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Nickel	14.0	0.505		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Selenium	1.31	0.505		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Silver	ND	0.101		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Thallium	ND	0.202		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Zinc	44.2	0.505		mg/Kg-dry	1	11/9/2020 6:12:22 PM
Sample Moisture (Percent Moisture)				Batch ID: R63166		Analyst: RL
Percent Moisture	26.2	0.500		wt%	1	11/5/2020 2:18:48 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 3:20:00 PM
Project: Delta Marine
Lab ID: 2011094-007
Matrix: Water
Client Sample ID: SB04-20201104-EB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30557		Analyst: SB
Aroclor 1016	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Aroclor 1221	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Aroclor 1232	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Aroclor 1242	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Aroclor 1248	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Aroclor 1254	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Aroclor 1260	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Aroclor 1262	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Aroclor 1268	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Total PCBs	ND	0.0984		µg/L	1	12/1/2020 10:15:23 PM
Surr: Decachlorobiphenyl	20.5	5 - 124		%Rec	1	12/1/2020 10:15:23 PM
Surr: Tetrachloro-m-xylene	39.5	21.2 - 115		%Rec	1	12/1/2020 10:15:23 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30306		Analyst: DW
Diesel (Fuel Oil)	ND	49.8		µg/L	1	11/6/2020 10:06:10 PM
Diesel Range Organics (C12-C24)	160	49.8		µg/L	1	11/6/2020 10:06:10 PM
Heavy Oil	ND	99.7		µg/L	1	11/6/2020 10:06:10 PM
Surr: 2-Fluorobiphenyl	101	50 - 150		%Rec	1	11/6/2020 10:06:10 PM
Surr: o-Terphenyl	81.6	50 - 150		%Rec	1	11/6/2020 10:06:10 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Naphthalene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
2-Methylnaphthalene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
1-Methylnaphthalene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Acenaphthylene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Acenaphthene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Fluorene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Phenanthrene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Anthracene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Fluoranthene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Pyrene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Benz(a)anthracene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Chrysene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Benzo(b)fluoranthene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Benzo(k)fluoranthene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM

NOTES:
Diesel Range Organics - Indicates unresolved compounds in the Diesel range inconsistent with a known petroleum standard.

Client: Ramboll Environ
Collection Date: 11/4/2020 3:20:00 PM
Project: Delta Marine
Lab ID: 2011094-007
Matrix: Water
Client Sample ID: SB04-20201104-EB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30363		Analyst: SB
Benzo(a)pyrene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Indeno(1,2,3-cd)pyrene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Dibenz(a,h)anthracene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Benzo(g,h,i)perylene	ND	0.0962		µg/L	1	11/11/2020 4:14:52 PM
Surr: 2-Fluorobiphenyl	97.8	50.8 - 146		%Rec	1	11/11/2020 4:14:52 PM
Surr: Terphenyl-d14	78.6	26.1 - 145		%Rec	1	11/11/2020 4:14:52 PM
Gasoline by NWTPH-Gx				Batch ID: 30311		Analyst: KT
Gasoline	ND	50.0		µg/L	1	11/6/2020 12:45:10 PM
Surr: Toluene-d8	99.1	65 - 135		%Rec	1	11/6/2020 12:45:10 PM
Surr: 4-Bromofluorobenzene	98.7	65 - 135		%Rec	1	11/6/2020 12:45:10 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30311		Analyst: KT
Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	11/6/2020 12:45:10 PM
Chloromethane	ND	2.00		µg/L	1	11/6/2020 12:45:10 PM
Vinyl chloride	ND	0.200		µg/L	1	11/6/2020 12:45:10 PM
Bromomethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Chloroethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,1-Dichloroethene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Methylene chloride	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Chloroform	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Carbon tetrachloride	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Benzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	11/6/2020 12:45:10 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Bromodichloromethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Dibromomethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Toluene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 3:20:00 PM
Project: Delta Marine
Lab ID: 2011094-007
Matrix: Water
Client Sample ID: SB04-20201104-EB

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30311 Analyst: KT

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Dibromochloromethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,2-Dibromoethane (EDB)	ND	0.250		µg/L	1	11/6/2020 12:45:10 PM
Chlorobenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Ethylbenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
m,p-Xylene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
o-Xylene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Styrene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Isopropylbenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Bromoform	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
n-Propylbenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Bromobenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
2-Chlorotoluene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
4-Chlorotoluene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
tert-Butylbenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	11/6/2020 12:45:10 PM
sec-Butylbenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
n-Butylbenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
Hexachloro-1,3-butadiene	ND	0.500		µg/L	1	11/6/2020 12:45:10 PM
Naphthalene	ND	1.00		µg/L	1	11/6/2020 12:45:10 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	11/6/2020 12:45:10 PM
Surr: Dibromofluoromethane	99.1	84.8 - 113		%Rec	1	11/6/2020 12:45:10 PM
Surr: Toluene-d8	99.6	88.5 - 110		%Rec	1	11/6/2020 12:45:10 PM
Surr: 1-Bromo-4-fluorobenzene	100	89.9 - 108		%Rec	1	11/6/2020 12:45:10 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011094**
Date Reported: **12/3/2020**

Client: Ramboll Environ
Project: Delta Marine
Lab ID: 2011094-007
Client Sample ID: **SB04-20201104-EB**

Collection Date: 11/4/2020 3:20:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Mercury by EPA Method 245.1				Batch ID: 30343		Analyst: WF
Mercury	ND	0.100		µg/L	1	11/10/2020 2:11:06 PM
Dissolved Metals by EPA Method 200.8				Batch ID: 30329		Analyst: CO
Antimony	ND	1.00		µg/L	1	11/9/2020 9:54:57 PM
Arsenic	ND	0.500		µg/L	1	11/9/2020 9:54:57 PM
Beryllium	ND	0.200		µg/L	1	11/9/2020 9:54:57 PM
Cadmium	ND	0.200		µg/L	1	11/9/2020 9:54:57 PM
Chromium	ND	1.00		µg/L	1	11/9/2020 9:54:57 PM
Copper	5.42	1.00		µg/L	1	11/9/2020 9:54:57 PM
Lead	ND	0.500		µg/L	1	11/9/2020 9:54:57 PM
Nickel	ND	2.50		µg/L	1	11/9/2020 9:54:57 PM
Selenium	ND	5.00		µg/L	1	11/9/2020 9:54:57 PM
Silver	ND	0.250		µg/L	1	11/9/2020 9:54:57 PM
Thallium	ND	0.200		µg/L	1	11/9/2020 9:54:57 PM
Zinc	2.57	2.50		µg/L	1	11/9/2020 9:54:57 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 4:25:00 PM
Project: Delta Marine
Lab ID: 2011094-008
Matrix: Soil
Client Sample ID: SB04-3-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polychlorinated Biphenyls (PCB) by EPA 8082				Batch ID: 30476		Analyst: SB
Aroclor 1016	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Aroclor 1221	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Aroclor 1232	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Aroclor 1242	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Aroclor 1248	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Aroclor 1254	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Aroclor 1260	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Aroclor 1262	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Aroclor 1268	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Total PCBs	ND	0.125		mg/Kg-dry	1	11/19/2020 8:58:02 PM
Surr: Decachlorobiphenyl	86.0	6.8 - 211		%Rec	1	11/19/2020 8:58:02 PM
Surr: Tetrachloro-m-xylene	70.2	7.85 - 182		%Rec	1	11/19/2020 8:58:02 PM
Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.				Batch ID: 30299		Analyst: DW
Diesel (Fuel Oil)	ND	24.6		mg/Kg-dry	1	11/5/2020 11:48:05 PM
Heavy Oil	ND	61.4		mg/Kg-dry	1	11/5/2020 11:48:05 PM
Surr: 2-Fluorobiphenyl	95.4	50 - 150		%Rec	1	11/5/2020 11:48:05 PM
Surr: o-Terphenyl	79.8	50 - 150		%Rec	1	11/5/2020 11:48:05 PM
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Naphthalene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
2-Methylnaphthalene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
1-Methylnaphthalene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Acenaphthylene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Acenaphthene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Fluorene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Phenanthrene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Anthracene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Fluoranthene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Pyrene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Benz(a)anthracene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Chrysene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Benzo(b)fluoranthene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Benzo(k)fluoranthene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Benzo(a)pyrene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Indeno(1,2,3-cd)pyrene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Dibenz(a,h)anthracene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM

Client: Ramboll Environ
Collection Date: 11/4/2020 4:25:00 PM
Project: Delta Marine
Lab ID: 2011094-008
Matrix: Soil
Client Sample ID: SB04-3-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)				Batch ID: 30438		Analyst: SB
Benzo(g,h,i)perylene	ND	46.4		µg/Kg-dry	1	11/18/2020 1:23:43 AM
Surr: 2-Fluorobiphenyl	55.5	16.9 - 122		%Rec	1	11/18/2020 1:23:43 AM
Surr: Terphenyl-d14 (surr)	94.6	38.4 - 153		%Rec	1	11/18/2020 1:23:43 AM
Gasoline by NWTPH-Gx				Batch ID: 30312		Analyst: CR
Gasoline	ND	5.74		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Surr: Toluene-d8	101	65 - 135		%Rec	1	11/6/2020 3:28:08 PM
Surr: 4-Bromofluorobenzene	99.5	65 - 135		%Rec	1	11/6/2020 3:28:08 PM
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30312		Analyst: CR
Dichlorodifluoromethane (CFC-12)	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Chloromethane	ND	0.0574		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Vinyl chloride	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Bromomethane	ND	0.0574		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Trichlorofluoromethane (CFC-11)	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Chloroethane	ND	0.0574		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,1-Dichloroethene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Methylene chloride	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
trans-1,2-Dichloroethene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Methyl tert-butyl ether (MTBE)	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,1-Dichloroethane	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
cis-1,2-Dichloroethene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Chloroform	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,1,1-Trichloroethane (TCA)	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,1-Dichloropropene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Carbon tetrachloride	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,2-Dichloroethane (EDC)	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Benzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Trichloroethene (TCE)	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,2-Dichloropropane	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Bromodichloromethane	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Dibromomethane	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
cis-1,3-Dichloropropene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Toluene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
trans-1,3-Dichloropropylene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,1,2-Trichloroethane	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,3-Dichloropropane	ND	0.0287		mg/Kg-dry	1	11/6/2020 3:28:08 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 4:25:00 PM
Project: Delta Marine
Lab ID: 2011094-008
Matrix: Soil
Client Sample ID: SB04-3-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30312		Analyst: CR
Tetrachloroethene (PCE)	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Dibromochloromethane	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,2-Dibromoethane (EDB)	ND	0.00574		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Chlorobenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,1,1,2-Tetrachloroethane	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Ethylbenzene	ND	0.0287		mg/Kg-dry	1	11/6/2020 3:28:08 PM
m,p-Xylene	ND	0.0574		mg/Kg-dry	1	11/6/2020 3:28:08 PM
o-Xylene	ND	0.0287		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Styrene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Isopropylbenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Bromoform	ND	0.0574		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,1,2,2-Tetrachloroethane	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
n-Propylbenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Bromobenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,3,5-Trimethylbenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
2-Chlorotoluene	ND	0.0287		mg/Kg-dry	1	11/6/2020 3:28:08 PM
4-Chlorotoluene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
tert-Butylbenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,2,3-Trichloropropane	ND	0.0287		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,2,4-Trichlorobenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
sec-Butylbenzene	ND	0.0287		mg/Kg-dry	1	11/6/2020 3:28:08 PM
4-Isopropyltoluene	ND	0.0287		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,3-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,4-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
n-Butylbenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,2-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,2-Dibromo-3-chloropropane	ND	0.574		mg/Kg-dry	1	11/6/2020 3:28:08 PM
1,2,4-Trimethylbenzene	ND	0.0229		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Hexachloro-1,3-butadiene	ND	0.0287		mg/Kg-dry	1	11/6/2020 3:28:08 PM
Naphthalene	ND	0.0574		mg/Kg-dry	1	11/11/2020 1:17:03 AM
1,2,3-Trichlorobenzene	ND	0.0229	Q	mg/Kg-dry	1	11/6/2020 3:28:08 PM
Surr: Dibromofluoromethane	95.0	85.2 - 113		%Rec	1	11/6/2020 3:28:08 PM
Surr: Toluene-d8	99.9	88.5 - 110		%Rec	1	11/6/2020 3:28:08 PM
Surr: 1-Bromo-4-fluorobenzene	94.9	88.6 - 109		%Rec	1	11/6/2020 3:28:08 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Analytical Report

Work Order: **2011094**
Date Reported: **12/3/2020**

Client: Ramboll Environ
Collection Date: 11/4/2020 4:25:00 PM
Project: Delta Marine
Lab ID: 2011094-008
Matrix: Soil
Client Sample ID: SB04-3-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Mercury by EPA Method 7471				Batch ID: 30315		Analyst: WF
Mercury	ND	0.283		mg/Kg-dry	1	11/6/2020 2:01:38 PM
Total Metals by EPA Method 6020B				Batch ID: 30308		Analyst: CO
Antimony	ND	0.200		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Arsenic	20.8	0.250		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Beryllium	0.321	0.200		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Cadmium	ND	0.200		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Chromium	18.8	0.100		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Copper	16.8	0.200		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Lead	47.2	0.200		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Nickel	11.3	0.501		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Selenium	1.08	0.501		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Silver	ND	0.100		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Thallium	ND	0.200		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Zinc	37.4	0.501		mg/Kg-dry	1	11/9/2020 6:17:56 PM
Sample Moisture (Percent Moisture)				Batch ID: R63166		Analyst: RL
Percent Moisture	22.6	0.500		wt%	1	11/5/2020 2:18:48 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 4:48:00 PM
Project: Delta Marine
Lab ID: 2011094-010
Matrix: Soil
Client Sample ID: TB-20201104

Volatile Organic Compounds by EPA Method 8260D

Batch ID: 30312 Analyst: CR

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane (CFC-12)	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Chloromethane	ND	0.0500		mg/Kg	1	11/6/2020 12:56:10 PM
Vinyl chloride	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Bromomethane	ND	0.0500		mg/Kg	1	11/6/2020 12:56:10 PM
Trichlorofluoromethane (CFC-11)	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Chloroethane	ND	0.0500		mg/Kg	1	11/6/2020 12:56:10 PM
1,1-Dichloroethene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Methylene chloride	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Methyl tert-butyl ether (MTBE)	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,1-Dichloroethane	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Chloroform	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,1,1-Trichloroethane (TCA)	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,1-Dichloropropene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Carbon tetrachloride	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,2-Dichloroethane (EDC)	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Benzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Trichloroethene (TCE)	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,2-Dichloropropane	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Bromodichloromethane	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Dibromomethane	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
cis-1,3-Dichloropropene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Toluene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
trans-1,3-Dichloropropylene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,1,2-Trichloroethane	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,3-Dichloropropane	ND	0.0250		mg/Kg	1	11/6/2020 12:56:10 PM
Tetrachloroethene (PCE)	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Dibromochloromethane	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,2-Dibromoethane (EDB)	ND	0.00500		mg/Kg	1	11/6/2020 12:56:10 PM
Chlorobenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,1,1,2-Tetrachloroethane	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Ethylbenzene	ND	0.0250		mg/Kg	1	11/6/2020 12:56:10 PM
m,p-Xylene	ND	0.0500		mg/Kg	1	11/6/2020 12:56:10 PM
o-Xylene	ND	0.0250		mg/Kg	1	11/6/2020 12:56:10 PM
Styrene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Isopropylbenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Bromoform	ND	0.0500		mg/Kg	1	11/6/2020 12:56:10 PM
1,1,2,2-Tetrachloroethane	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM

Client: Ramboll Environ
Collection Date: 11/4/2020 4:48:00 PM
Project: Delta Marine
Lab ID: 2011094-010
Matrix: Soil
Client Sample ID: TB-20201104

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260D				Batch ID: 30312		Analyst: CR
n-Propylbenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Bromobenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,3,5-Trimethylbenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
2-Chlorotoluene	ND	0.0250		mg/Kg	1	11/6/2020 12:56:10 PM
4-Chlorotoluene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
tert-Butylbenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,2,3-Trichloropropane	ND	0.0250		mg/Kg	1	11/6/2020 12:56:10 PM
1,2,4-Trichlorobenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
sec-Butylbenzene	ND	0.0250		mg/Kg	1	11/6/2020 12:56:10 PM
4-Isopropyltoluene	ND	0.0250		mg/Kg	1	11/6/2020 12:56:10 PM
1,3-Dichlorobenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,4-Dichlorobenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
n-Butylbenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,2-Dichlorobenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
1,2-Dibromo-3-chloropropane	ND	0.500		mg/Kg	1	11/6/2020 12:56:10 PM
1,2,4-Trimethylbenzene	ND	0.0200		mg/Kg	1	11/6/2020 12:56:10 PM
Hexachloro-1,3-butadiene	ND	0.0250		mg/Kg	1	11/6/2020 12:56:10 PM
Naphthalene	ND	0.0500		mg/Kg	1	11/10/2020 2:14:17 PM
1,2,3-Trichlorobenzene	ND	0.0200	Q	mg/Kg	1	11/6/2020 12:56:10 PM
Surr: Dibromofluoromethane	95.3	85.2 - 113		%Rec	1	11/6/2020 12:56:10 PM
Surr: Toluene-d8	99.2	88.5 - 110		%Rec	1	11/6/2020 12:56:10 PM
Surr: 1-Bromo-4-fluorobenzene	94.9	88.6 - 109		%Rec	1	11/6/2020 12:56:10 PM

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **MB-30329** SampType: **MBLK** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **MBLKW** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270450**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.00									
Arsenic	ND	0.500									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	ND	1.00									
Copper	ND	1.00									
Lead	ND	0.500									
Nickel	ND	2.50									
Selenium	ND	5.00									
Silver	ND	0.250									
Thallium	ND	0.200									
Zinc	ND	2.50									

Sample ID: **LCS-30329** SampType: **LCS** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **LCSW** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270451**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	5.09	1.00	5.000	0	102	85	115				
Arsenic	103	0.500	100.0	0	103	85	115				
Beryllium	5.52	0.200	5.000	0	110	85	115				
Cadmium	5.56	0.200	5.000	0	111	85	115				
Chromium	103	1.00	100.0	0	103	85	115				
Copper	105	1.00	100.0	0	105	85	115				
Lead	57.8	0.500	50.00	0	116	85	115				S
Nickel	102	2.50	100.0	0	102	85	115				
Selenium	10.9	5.00	10.00	0	109	85	115				
Silver	4.87	0.250	5.000	0	97.3	85	115				
Thallium	2.80	0.200	2.500	0	112	85	115				
Zinc	103	2.50	100.0	0	103	85	115				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **LCS-30329** SampType: **LCS** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **LCSW** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270451**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
S - Outlying spike recovery observed (high bias). Detections will be qualified with a *.

Sample ID: **MB-30328FB** SampType: **MBLK** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **MBLKW** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270452**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	1.00									
Arsenic	ND	0.500									
Beryllium	ND	0.200									
Cadmium	ND	0.200									
Chromium	ND	1.00									
Copper	ND	1.00									
Lead	ND	0.500									
Nickel	ND	2.50									
Selenium	ND	5.00									
Silver	ND	0.250									
Thallium	ND	0.200									
Zinc	ND	2.50									

NOTES:
Filter Blank

Sample ID: **2011061-001CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **BATCH** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270454**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	1.31	1.00						1.388	5.40	30	
Arsenic	1.45	0.500						1.395	3.69	30	
Beryllium	ND	0.200						0		30	
Cadmium	ND	0.200						0		30	
Chromium	ND	1.00						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **2011061-001CDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **BATCH** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270454**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	11.3	1.00						14.50	24.9	30	
Lead	ND	0.500						0		30	
Nickel	ND	2.50						0		30	
Selenium	ND	5.00						0		30	
Silver	ND	0.250						0		30	
Thallium	ND	0.200						0		30	
Zinc	42.8	2.50						46.97	9.27	30	

Sample ID: **2011061-001CMS** SampType: **MS** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **BATCH** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270455**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	27.6	1.00	25.00	1.388	105	70	130				
Arsenic	512	0.500	500.0	1.395	102	70	130				
Beryllium	29.3	0.200	25.00	0.01400	117	70	130				
Cadmium	28.6	0.200	25.00	0.02400	114	70	130				
Chromium	511	1.00	500.0	0.3290	102	70	130				
Copper	531	1.00	500.0	14.50	103	70	130				
Lead	286	0.500	250.0	0.3570	114	70	130				
Nickel	490	2.50	500.0	1.830	97.7	70	130				
Selenium	51.7	5.00	50.00	0	103	70	130				
Silver	24.1	0.250	25.00	0	96.4	70	130				
Thallium	13.8	0.200	12.50	0	111	70	130				
Zinc	569	2.50	500.0	46.97	104	70	130				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Metals by EPA Method 200.8

Sample ID: **2011061-001CMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/9/2020** RunNo: **63300**
Client ID: **BATCH** Batch ID: **30329** Analysis Date: **11/9/2020** SeqNo: **1270458**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	27.3	1.00	25.00	1.388	104	70	130	27.64	1.23	30	
Arsenic	504	0.500	500.0	1.395	101	70	130	512.4	1.59	30	
Beryllium	30.2	0.200	25.00	0.01400	121	70	130	29.33	3.09	30	
Cadmium	29.0	0.200	25.00	0.02400	116	70	130	28.58	1.42	30	
Chromium	499	1.00	500.0	0.3290	99.7	70	130	511.0	2.39	30	
Copper	520	1.00	500.0	14.50	101	70	130	531.3	2.14	30	
Lead	280	0.500	250.0	0.3570	112	70	130	286.2	2.15	30	
Nickel	494	2.50	500.0	1.830	98.4	70	130	490.3	0.699	30	
Selenium	53.7	5.00	50.00	0	107	70	130	51.69	3.88	30	
Silver	25.3	0.250	25.00	0	101	70	130	24.11	4.72	30	
Thallium	13.4	0.200	12.50	0	107	70	130	13.83	3.08	30	
Zinc	542	2.50	500.0	46.97	99.1	70	130	568.9	4.77	30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Mercury by EPA Method 245.1

Sample ID: **MB-30343**	SampType: **MBLK**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **MBLKW**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270109**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

Sample ID: **LCS-30343**	SampType: **LCS**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **LCSW**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270110**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.42	0.100	2.500	0	96.8	85	115				

Sample ID: **2011090-005CDUP**	SampType: **DUP**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **BATCH**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270112**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100						0		20	

Sample ID: **2011090-005CMS**	SampType: **MS**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **BATCH**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270113**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.28	0.100	2.500	0.01300	90.7	70	130				

Sample ID: **2011090-005CMSD**	SampType: **MSD**			Units: **µg/L**		Prep Date: **11/10/2020**			RunNo: **63274**		
Client ID: **BATCH**	Batch ID: **30343**					Analysis Date: **11/10/2020**			SeqNo: **1270114**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.32	0.100	2.500	0.01300	92.3	70	130	2.280	1.74	20	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Dissolved Mercury by EPA Method 245.1

Sample ID: **MB-30328FB** SampType: **MBLK** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63274**
Client ID: **MBLKW** Batch ID: **30343** Analysis Date: **11/10/2020** SeqNo: **1270123**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

NOTES:
Filter Blank

Sample ID: **MB-30345FB** SampType: **MBLK** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63274**
Client ID: **MBLKW** Batch ID: **30343** Analysis Date: **11/10/2020** SeqNo: **1270124**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.100									

NOTES:
Filter Blank

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-30308** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **MBLKS** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269293**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.155									
Arsenic	ND	0.194									
Beryllium	ND	0.155									
Cadmium	ND	0.155									
Chromium	ND	0.0775									
Copper	ND	0.155									
Lead	ND	0.155									
Nickel	ND	0.388									
Selenium	ND	0.388									
Silver	ND	0.0775									
Thallium	ND	0.155									
Zinc	ND	0.388									

Sample ID: **LCS-30308** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **LCSS** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269294**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.05	0.154	1.923	0	107	80	120				
Arsenic	36.7	0.192	38.46	0	95.3	80	120				
Beryllium	1.96	0.154	1.923	0	102	80	120				
Cadmium	1.98	0.154	1.923	0	103	80	120				
Chromium	38.1	0.0769	38.46	0	99.1	80	120				
Copper	38.9	0.154	38.46	0	101	80	120				
Lead	19.4	0.154	19.23	0	101	80	120				
Nickel	37.7	0.385	38.46	0	98.0	80	120				
Selenium	3.78	0.385	3.846	0	98.2	80	120				
Silver	1.95	0.0769	1.923	0	102	80	120				
Thallium	1.03	0.154	0.9615	0	107	80	120				
Zinc	35.5	0.385	38.46	0	92.3	80	120				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011010-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.488	0.172	2.152	0.2377	11.6	75	125				S
Arsenic	57.8	0.215	43.04	15.05	99.3	75	125				
Beryllium	2.51	0.172	2.152	0.3003	103	75	125				
Cadmium	2.61	0.172	2.152	0.3715	104	75	125				
Chromium	78.3	0.0861	43.04	26.79	120	75	125				
Copper	69.6	0.172	43.04	25.66	102	75	125				
Lead	74.0	0.172	21.52	45.02	135	75	125				S
Nickel	78.3	0.430	43.04	31.86	108	75	125				
Selenium	5.33	0.430	4.304	0.7766	106	75	125				
Silver	2.13	0.0861	2.152	0.1123	93.7	75	125				
Thallium	1.39	0.172	1.076	0.08026	122	75	125				
Zinc	140	0.430	43.04	88.94	118	75	125				

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect (Sb).
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range (Pb).

Sample ID: **2011010-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269298**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.283	0.171	2.136	0.2377	2.14	75	125	0.4879	53.0	20	RS
Arsenic	53.3	0.214	42.71	15.05	89.6	75	125	57.80	8.08	20	
Beryllium	2.43	0.171	2.136	0.3003	99.9	75	125	2.507	2.99	20	
Cadmium	2.43	0.171	2.136	0.3715	96.2	75	125	2.614	7.48	20	
Chromium	75.1	0.0854	42.71	26.79	113	75	125	78.32	4.15	20	
Copper	68.2	0.171	42.71	25.66	99.6	75	125	69.58	1.99	20	
Lead	63.6	0.171	21.36	45.02	86.9	75	125	74.02	15.2	20	
Nickel	77.2	0.427	42.71	31.86	106	75	125	78.33	1.49	20	
Selenium	4.87	0.427	4.271	0.7766	95.7	75	125	5.328	9.07	20	
Silver	2.00	0.0854	2.136	0.1123	88.2	75	125	2.128	6.42	20	
Thallium	1.33	0.171	1.068	0.08026	117	75	125	1.391	4.85	20	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011010-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269298**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	132	0.427	42.71	88.94	101	75	125	139.9	5.83	20	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: **2011010-001APDS** SampType: **PDS** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63244**
Client ID: **BATCH** Batch ID: **30308** Analysis Date: **11/9/2020** SeqNo: **1269299**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.58	0.180	2.25	0.238	104	75	125				

Sample ID: **MB-30418** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **MBLKS** Batch ID: **30418** Analysis Date: **11/16/2020** SeqNo: **1273126**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.185									
Cadmium	ND	0.148									
Chromium	0.103	0.0741									
Lead	ND	0.148									
Selenium	ND	0.370									
Silver	ND	0.0741									

Sample ID: **LCS-30418** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **LCSS** Batch ID: **30418** Analysis Date: **11/16/2020** SeqNo: **1273127**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	1.95	0.149	1.866	0	105	80	120				
Arsenic	37.5	0.187	37.31	0	100	80	120				
Cadmium	1.87	0.149	1.866	0	100	80	120				
Chromium	39.1	0.0746	37.31	0	105	80	120				B
Copper	41.6	0.149	37.31	0	111	80	120				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **LCS-30418** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **LCSS** Batch ID: **30418** Analysis Date: **11/16/2020** SeqNo: **1273127**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	18.4	0.149	18.66	0	98.5	80	120				
Nickel	39.2	0.373	37.31	0	105	80	120				
Selenium	3.87	0.373	3.731	0	104	80	120				
Silver	1.98	0.0746	1.866	0	106	80	120				
Zinc	37.7	0.373	37.31	0	101	80	120				

Sample ID: **2011269-002AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **BATCH** Batch ID: **30418** Analysis Date: **11/16/2020** SeqNo: **1273130**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.205	2.568	0.01960	6.44	75	125				S
Arsenic	61.7	0.257	51.36	6.660	107	75	125				
Cadmium	2.76	0.205	2.568	0.1205	103	75	125				
Chromium	158	0.103	51.36	92.78	128	75	125				BSE
Copper	113	0.205	51.36	58.70	105	75	125				
Lead	30.5	0.205	25.68	6.431	93.8	75	125				
Nickel	161	0.514	51.36	105.6	107	75	125				
Selenium	7.56	0.514	5.136	2.084	107	75	125				
Silver	2.52	0.103	2.568	0.1217	93.4	75	125				
Zinc	172	0.514	51.36	112.1	117	75	125				

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **2011269-002AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **BATCH** Batch ID: **30418** Analysis Date: **11/16/2020** SeqNo: **1273131**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.204	2.548	0.01960	6.49	75	125	0		20	S

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **2011269-002AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **BATCH** Batch ID: **30418** Analysis Date: **11/16/2020** SeqNo: **1273131**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	62.8	0.255	50.97	6.660	110	75	125	61.67	1.83	20	
Cadmium	2.71	0.204	2.548	0.1205	102	75	125	2.759	1.62	20	
Chromium	153	0.102	50.97	92.78	118	75	125	158.4	3.42	20	BE
Copper	112	0.204	50.97	58.70	105	75	125	112.7	0.637	20	
Lead	30.8	0.204	25.48	6.431	95.5	75	125	30.52	0.807	20	
Nickel	158	0.510	50.97	105.6	104	75	125	160.6	1.30	20	
Selenium	7.73	0.510	5.097	2.084	111	75	125	7.559	2.22	20	
Silver	2.46	0.102	2.548	0.1217	91.9	75	125	2.521	2.30	20	
Zinc	161	0.510	50.97	112.1	95.1	75	125	172.0	6.92	20	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **2011269-002APDS** SampType: **PDS** Units: **mg/Kg-dry** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **BATCH** Batch ID: **30418** Analysis Date: **11/16/2020** SeqNo: **1273132**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	2.90	0.221	2.76	0.0196	104	75	125				

Sample ID: **MB-30418** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **MBLKS** Batch ID: **30418** Analysis Date: **11/17/2020** SeqNo: **1273933**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.148									
Arsenic	ND	0.185									
Beryllium	ND	0.148									
Cadmium	ND	0.148									
Chromium	0.120	0.0741									
Copper	ND	0.148									
Lead	ND	0.148									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-30418** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **MBLKS** Batch ID: **30418** Analysis Date: **11/17/2020** SeqNo: **1273933**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	ND	0.370									
Selenium	ND	0.370									
Silver	ND	0.0741									
Thallium	ND	0.148									
Zinc	ND	0.370									

Sample ID: **LCS-30418** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **LCSS** Batch ID: **30418** Analysis Date: **11/17/2020** SeqNo: **1273934**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	1.81	0.149	1.866	0	97.1	80	120				
Thallium	0.981	0.149	0.9328	0	105	80	120				

Sample ID: **2011269-002AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **BATCH** Batch ID: **30418** Analysis Date: **11/17/2020** SeqNo: **1273937**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	3.28	0.205	2.568	0.5764	105	75	125				
Thallium	1.72	0.205	1.284	0.1916	119	75	125				

Sample ID: **2011269-002AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/16/2020** RunNo: **63437**
Client ID: **BATCH** Batch ID: **30418** Analysis Date: **11/17/2020** SeqNo: **1273992**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	2.88	0.204	2.548	0.5764	90.4	75	125	3.277	12.9	20	
Thallium	1.72	0.204	1.274	0.1916	120	75	125	1.719	0.221	20	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **LCS-30551** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/30/2020** RunNo: **63743**
Client ID: **LCSS** Batch ID: **30551** Analysis Date: **12/1/2020** SeqNo: **1279980**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	20.7	0.155	19.38	0	107	80	120				

Sample ID: **2011495-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/30/2020** RunNo: **63743**
Client ID: **BATCH** Batch ID: **30551** Analysis Date: **12/1/2020** SeqNo: **1279983**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	84.3	0.354	70.88	4.468	113	75	125				
Lead	42.6	0.284	35.44	9.268	94.0	75	125				

Sample ID: **2011495-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/30/2020** RunNo: **63743**
Client ID: **BATCH** Batch ID: **30551** Analysis Date: **12/1/2020** SeqNo: **1279984**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	96.6	0.354	70.88	4.468	130	75	125	84.30	13.6	20	S
Lead	42.9	0.284	35.44	9.268	95.0	75	125	42.57	0.863	20	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range (As, Cd).

Sample ID: **LCS-30551** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/30/2020** RunNo: **63743**
Client ID: **LCSS** Batch ID: **30551** Analysis Date: **12/1/2020** SeqNo: **1280056**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	38.9	0.194	38.76	0	100	80	120				

Sample ID: **MB-30551** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/30/2020** RunNo: **63743**
Client ID: **MBLKS** Batch ID: **30551** Analysis Date: **12/2/2020** SeqNo: **1280261**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.188									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Total Metals by EPA Method 6020B

Sample ID: **MB-30551** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/30/2020** RunNo: **63743**
Client ID: **MBLKS** Batch ID: **30551** Analysis Date: **12/2/2020** SeqNo: **1280261**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.150									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID: **MB-30315**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **11/6/2020**			RunNo: **63203**		
Client ID: **MBLKS**	Batch ID: **30315**					Analysis Date: **11/6/2020**			SeqNo: **1268508**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.236									

Sample ID: **LCS-30315**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **11/6/2020**			RunNo: **63203**		
Client ID: **LCSS**	Batch ID: **30315**					Analysis Date: **11/6/2020**			SeqNo: **1268509**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.494	0.245	0.4902	0	101	80	120				

Sample ID: **2011091-001ADUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **11/6/2020**			RunNo: **63203**		
Client ID: **BATCH**	Batch ID: **30315**					Analysis Date: **11/6/2020**			SeqNo: **1268511**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.286						0		20	

Sample ID: **2011091-001AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **11/6/2020**			RunNo: **63203**		
Client ID: **BATCH**	Batch ID: **30315**					Analysis Date: **11/6/2020**			SeqNo: **1268512**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.507	0.281	0.5618	0.01123	88.2	70	130				

Sample ID: **2011091-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **11/6/2020**			RunNo: **63203**		
Client ID: **BATCH**	Batch ID: **30315**					Analysis Date: **11/6/2020**			SeqNo: **1268513**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.508	0.276	0.5512	0.01123	90.2	70	130	0.5067	0.288	20	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID: **MB-30420**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **11/16/2020**		RunNo: **63431**			
Client ID: **MBLKS**	Batch ID: **30420**					Analysis Date: **11/16/2020**		SeqNo: **1273014**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.250									

Sample ID: **LCS-30420**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **11/16/2020**		RunNo: **63431**			
Client ID: **LCSS**	Batch ID: **30420**					Analysis Date: **11/16/2020**		SeqNo: **1273015**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.469	0.250	0.5000	0	93.8	80	120				

Sample ID: **2011246-001ADUP**	SampType: **DUP**			Units: **mg/Kg-dry**		Prep Date: **11/16/2020**		RunNo: **63431**			
Client ID: **BATCH**	Batch ID: **30420**					Analysis Date: **11/16/2020**		SeqNo: **1273017**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.291						0		20	

Sample ID: **2011246-001AMS**	SampType: **MS**			Units: **mg/Kg-dry**		Prep Date: **11/16/2020**		RunNo: **63431**			
Client ID: **BATCH**	Batch ID: **30420**					Analysis Date: **11/16/2020**		SeqNo: **1273018**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.470	0.302	0.6035	0.01762	74.9	70	130				

Sample ID: **2011246-001AMSD**	SampType: **MSD**			Units: **mg/Kg-dry**		Prep Date: **11/16/2020**		RunNo: **63431**			
Client ID: **BATCH**	Batch ID: **30420**					Analysis Date: **11/16/2020**		SeqNo: **1273019**			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.572	0.308	0.6151	0.01762	90.1	70	130	0.4696	19.7	20	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Metals (EPA 200.8) with TCLP Extraction (EPA 1311)

Sample ID: **MB-30544**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **11/25/2020**	RunNo: **63729**
Client ID: **MBLKS**	Batch ID: **30544**		Analysis Date: **11/30/2020**	SeqNo: **1279699**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Lead	ND	0.200									

Sample ID: **LCS-30544**	SampType: **LCS**	Units: **mg/L**	Prep Date: **11/25/2020**	RunNo: **63729**
Client ID: **LCSS**	Batch ID: **30544**		Analysis Date: **11/30/2020**	SeqNo: **1279702**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.76	0.100	5.000	0	95.2	65	135				
Lead	2.37	0.200	2.500	0	94.9	65	135				

Sample ID: **2011478-001ADUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **11/25/2020**	RunNo: **63729**
Client ID: **BATCH**	Batch ID: **30544**		Analysis Date: **11/30/2020**	SeqNo: **1279704**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100						0		30	
Lead	ND	0.200						0		30	

Sample ID: **2011478-001AMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **11/25/2020**	RunNo: **63729**
Client ID: **BATCH**	Batch ID: **30544**		Analysis Date: **11/30/2020**	SeqNo: **1279705**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.91	0.100	5.000	0	98.3	65	135				
Lead	2.51	0.200	2.500	0	100	65	135				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Metals (EPA 200.8) with TCLP Extraction (EPA 1311)

Sample ID: **2011478-001AMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **11/25/2020**	RunNo: **63729**
Client ID: **BATCH**	Batch ID: **30544**		Analysis Date: **11/30/2020**	SeqNo: **1279706**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.87	0.100	5.000	0	97.5	65	135	4.913	0.796	30	
Lead	2.45	0.200	2.500	0	97.8	65	135	2.505	2.40	30	

Sample ID: **MB2-30544**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **11/25/2020**	RunNo: **63729**
Client ID: **MBLKS**	Batch ID: **30544**		Analysis Date: **11/30/2020**	SeqNo: **1279718**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.100									
Lead	ND	0.200									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **MB-30299** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/5/2020** RunNo: **63191**
Client ID: **MBLKS** Batch ID: **30299** Analysis Date: **11/5/2020** SeqNo: **1268230**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	20.0		20.00		99.9	50	150				
Surr: o-Terphenyl	16.3		20.00		81.4	50	150				

Sample ID: **LCS-30299** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/5/2020** RunNo: **63191**
Client ID: **LCSS** Batch ID: **30299** Analysis Date: **11/5/2020** SeqNo: **1268231**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	479	20.0	500.0	0	95.8	73.6	116				
Surr: 2-Fluorobiphenyl	20.2		20.00		101	50	150				
Surr: o-Terphenyl	18.6		20.00		93.0	50	150				

Sample ID: **2011090-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63191**
Client ID: **BATCH** Batch ID: **30299** Analysis Date: **11/5/2020** SeqNo: **1268233**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	659	24.8	620.0	0	106	56.3	134				
Surr: 2-Fluorobiphenyl	26.5		24.80		107	50	150				
Surr: o-Terphenyl	25.2		24.80		102	50	150				

Sample ID: **2011090-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/5/2020** RunNo: **63191**
Client ID: **BATCH** Batch ID: **30299** Analysis Date: **11/5/2020** SeqNo: **1268234**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	606	24.6	616.1	0	98.3	56.3	134	659.4	8.48	30	
Surr: 2-Fluorobiphenyl	25.9		24.65		105	50	150		0		
Surr: o-Terphenyl	24.1		24.65		98.0	50	150		0		

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2011128-001ADUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/5/2020**	RunNo: **63191**
Client ID: **BATCH**	Batch ID: **30299**		Analysis Date: **11/6/2020**	SeqNo: **1268247**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.7						0		30	
Heavy Oil	ND	51.7						0		30	
Surr: 2-Fluorobiphenyl	21.6		20.66		104	50	150		0		
Surr: o-Terphenyl	17.5		20.66		84.6	50	150		0		

Sample ID: **MB-30409**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/13/2020**	RunNo: **63411**
Client ID: **MBLKS**	Batch ID: **30409**		Analysis Date: **11/13/2020**	SeqNo: **1272556**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	21.9		20.00		110	50	150				
Surr: o-Terphenyl	18.1		20.00		90.4	50	150				

Sample ID: **LCS-30409**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/13/2020**	RunNo: **63411**
Client ID: **LCSS**	Batch ID: **30409**		Analysis Date: **11/13/2020**	SeqNo: **1272557**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	492	20.0	500.0	0	98.4	73.6	116				
Surr: 2-Fluorobiphenyl	22.2		20.00		111	50	150				
Surr: o-Terphenyl	20.5		20.00		103	50	150				

Sample ID: **2011269-007ADUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/13/2020**	RunNo: **63411**
Client ID: **BATCH**	Batch ID: **30409**		Analysis Date: **11/13/2020**	SeqNo: **1272565**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	24.6						0		30	
Heavy Oil	ND	61.4						0		30	
Mineral Oil	ND	24.6						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2011269-007ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63411**
Client ID: **BATCH** Batch ID: **30409** Analysis Date: **11/13/2020** SeqNo: **1272565**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorobiphenyl	25.6		24.58		104	50	150		0		
Surr: o-Terphenyl	21.0		24.58		85.4	50	150		0		

Sample ID: **2011226-001AMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63411**
Client ID: **BATCH** Batch ID: **30409** Analysis Date: **11/13/2020** SeqNo: **1272570**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	465	18.9	472.8	0	98.4	56.3	134				
Surr: 2-Fluorobiphenyl	20.5		18.91		108	50	150				
Surr: o-Terphenyl	19.3		18.91		102	50	150				

Sample ID: **2011226-001AMSD** SampType: **MSD** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63411**
Client ID: **BATCH** Batch ID: **30409** Analysis Date: **11/14/2020** SeqNo: **1272571**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	503	20.2	504.1	0	99.8	56.3	134	465.5	7.80	30	
Surr: 2-Fluorobiphenyl	22.2		20.16		110	50	150		0		
Surr: o-Terphenyl	20.9		20.16		104	50	150		0		

Sample ID: **2011226-004ADUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63411**
Client ID: **BATCH** Batch ID: **30409** Analysis Date: **11/14/2020** SeqNo: **1272575**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	18.1						0		30	
Heavy Oil	ND	45.3						0		30	
Surr: 2-Fluorobiphenyl	19.3		18.12		107	50	150		0		
Surr: o-Terphenyl	16.0		18.12		88.4	50	150		0		

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **MB-30306** SampType: **MBLK** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **MBLKW** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268768**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	49.4									
Heavy Oil	ND	98.9									
Surr: 2-Fluorobiphenyl	57.2		79.10		72.3	50	150				
Surr: o-Terphenyl	53.6		79.10		67.8	50	150				

Sample ID: **LCS-30306** SampType: **LCS** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **LCSW** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268769**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	530	49.7	994.1	0	53.3	48.1	108				
Surr: 2-Fluorobiphenyl	60.3		79.53		75.8	50	150				
Surr: o-Terphenyl	45.8		79.53		57.6	50	150				

Sample ID: **2011045-001ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **BATCH** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268771**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	50.0						0		30	
Heavy Oil	ND	99.9						0		30	
Surr: 2-Fluorobiphenyl	66.1		79.95		82.6	50	150		0		
Surr: o-Terphenyl	55.4		79.95		69.4	50	150		0		

Sample ID: **2011092-003BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/5/2020** RunNo: **63224**
Client ID: **BATCH** Batch ID: **30306** Analysis Date: **11/6/2020** SeqNo: **1268784**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	49.9						0		30	
Heavy Oil	ND	99.7						0		30	
Surr: 2-Fluorobiphenyl	78.1		79.78		97.9	50	150		0		

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID: **2011092-003BDUP**	SampType: **DUP**			Units: **µg/L**		Prep Date: **11/5/2020**		RunNo: **63224**		
Client ID: **BATCH**	Batch ID: **30306**					Analysis Date: **11/6/2020**		SeqNo: **1268784**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: o-Terphenyl	62.7		79.78		78.6	50	150		0		

Sample ID: **2011100-001AMS**	SampType: **MS**			Units: **µg/L**		Prep Date: **11/5/2020**		RunNo: **63224**		
Client ID: **BATCH**	Batch ID: **30306**					Analysis Date: **11/7/2020**		SeqNo: **1268795**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	558	50.9	1,018	13.46	53.5	18.7	128				
Surr: 2-Fluorobiphenyl	63.7		81.44		78.2	50	150				
Surr: o-Terphenyl	45.2		81.44		55.5	50	150				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **MB-30438** SampType: **MBLK** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **MBLKS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274287**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	40.0									
2-Methylnaphthalene	ND	40.0									
1-Methylnaphthalene	ND	40.0									
Acenaphthylene	ND	40.0									
Acenaphthene	ND	40.0									
Fluorene	ND	40.0									
Phenanthrene	ND	40.0									
Anthracene	ND	40.0									
Fluoranthene	ND	40.0									
Pyrene	ND	40.0									
Benz(a)anthracene	ND	40.0									
Chrysene	ND	40.0									
Benzo(b)fluoranthene	ND	40.0									
Benzo(k)fluoranthene	ND	40.0									
Benzo(a)pyrene	ND	40.0									
Indeno(1,2,3-cd)pyrene	ND	40.0									
Dibenz(a,h)anthracene	ND	40.0									
Benzo(g,h,i)perylene	ND	40.0									
Surr: 2-Fluorobiphenyl	342		500.0		68.3	16.9	122				
Surr: Terphenyl-d14 (surr)	474		500.0		94.7	38.4	153				

Sample ID: **LCS-30438** SampType: **LCS** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **LCSS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274289**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	840	40.0	1,000	0	84.0	57.2	127				
2-Methylnaphthalene	856	40.0	1,000	0	85.6	55.1	134				
1-Methylnaphthalene	881	40.0	1,000	0	88.1	56.9	136				
Acenaphthylene	796	40.0	1,000	0	79.6	58.5	132				
Acenaphthene	812	40.0	1,000	0	81.2	57.9	132				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **LCS-30438** SampType: **LCS** Units: **µg/Kg** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **LCSS** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274289**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluorene	848	40.0	1,000	0	84.8	59.2	134				
Phenanthrene	816	40.0	1,000	0	81.6	57.1	135				
Anthracene	813	40.0	1,000	0	81.3	55.7	137				
Fluoranthene	892	40.0	1,000	0	89.2	58.1	134				
Pyrene	884	40.0	1,000	0	88.4	59.6	136				
Benz(a)anthracene	930	40.0	1,000	0	93.0	51.5	139				
Chrysene	848	40.0	1,000	0	84.8	58.3	130				
Benzo(b)fluoranthene	878	40.0	1,000	0	87.8	53.4	138				
Benzo(k)fluoranthene	866	40.0	1,000	0	86.6	50.9	140				
Benzo(a)pyrene	1,050	40.0	1,000	0	105	50.4	143				
Indeno(1,2,3-cd)pyrene	918	40.0	1,000	0	91.8	52.3	138				
Dibenz(a,h)anthracene	853	40.0	1,000	0	85.3	53	140				
Benzo(g,h,i)perylene	848	40.0	1,000	0	84.8	51.7	139				
Surr: 2-Fluorobiphenyl	403		500.0		80.7	16.9	122				
Surr: Terphenyl-d14 (surr)	522		500.0		104	38.4	153				

Sample ID: **2011090-002AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **BATCH** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1,000	57.1	1,428	0	70.0	46	106				
2-Methylnaphthalene	1,010	57.1	1,428	0	70.7	45.3	117				
1-Methylnaphthalene	1,060	57.1	1,428	0	74.1	48.6	116				
Acenaphthylene	980	57.1	1,428	0	68.6	50	114				
Acenaphthene	969	57.1	1,428	0	67.9	54.9	108				
Fluorene	1,020	57.1	1,428	0	71.7	54.3	110				
Phenanthrene	943	57.1	1,428	0	66.1	48.9	114				
Anthracene	983	57.1	1,428	0	68.9	53.1	111				
Fluoranthene	1,330	57.1	1,428	0	93.0	48.5	117				
Pyrene	1,270	57.1	1,428	0	88.6	48.5	121				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011090-002AMS** SampType: **MS** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **BATCH** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274296**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benz(a)anthracene	1,430	57.1	1,428	0	99.9	39.9	125				
Chrysene	991	57.1	1,428	0	69.4	46.8	112				
Benzo(b)fluoranthene	955	57.1	1,428	0	66.9	42.4	123				
Benzo(k)fluoranthene	1,210	57.1	1,428	0	84.7	41.7	122				
Benzo(a)pyrene	1,310	57.1	1,428	0	91.8	48.2	121				
Indeno(1,2,3-cd)pyrene	1,000	57.1	1,428	0	70.2	43.6	114				
Dibenz(a,h)anthracene	923	57.1	1,428	0	64.6	43.7	116				
Benzo(g,h,i)perylene	915	57.1	1,428	0	64.0	43.7	115				
Surr: 2-Fluorobiphenyl	453		714.1		63.5	16.9	122				
Surr: Terphenyl-d14 (surr)	669		714.1		93.7	38.4	153				

Sample ID: **2011090-002AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **BATCH** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	1,010	57.3	1,432	0	70.7	46	106	1,000	1.25	30	
2-Methylnaphthalene	1,040	57.3	1,432	0	72.8	45.3	117	1,010	3.18	30	
1-Methylnaphthalene	1,070	57.3	1,432	0	74.5	48.6	116	1,059	0.785	30	
Acenaphthylene	997	57.3	1,432	0	69.6	50	114	979.8	1.69	30	
Acenaphthene	999	57.3	1,432	0	69.7	54.9	108	969.0	3.00	30	
Fluorene	1,070	57.3	1,432	0	74.7	54.3	110	1,023	4.49	30	
Phenanthrene	955	57.3	1,432	0	66.7	48.9	114	943.4	1.24	30	
Anthracene	980	57.3	1,432	0	68.4	53.1	111	983.4	0.336	30	
Fluoranthene	1,150	57.3	1,432	0	80.1	48.5	117	1,328	14.6	30	
Pyrene	1,070	57.3	1,432	0	74.4	48.5	121	1,265	17.2	30	
Benz(a)anthracene	1,080	57.3	1,432	0	75.6	39.9	125	1,427	27.5	30	
Chrysene	1,010	57.3	1,432	0	70.7	46.8	112	991.1	2.10	30	
Benzo(b)fluoranthene	1,140	57.3	1,432	0	79.3	42.4	123	955.3	17.2	30	
Benzo(k)fluoranthene	1,050	57.3	1,432	0	73.5	41.7	122	1,209	13.8	30	
Benzo(a)pyrene	1,320	57.3	1,432	0	92.0	48.2	121	1,310	0.577	30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011090-002AMSD** SampType: **MSD** Units: **µg/Kg-dry** Prep Date: **11/17/2020** RunNo: **63484**
Client ID: **BATCH** Batch ID: **30438** Analysis Date: **11/17/2020** SeqNo: **1274297**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Indeno(1,2,3-cd)pyrene	1,280	57.3	1,432	0	89.2	43.6	114	1,003	24.0	30	
Dibenz(a,h)anthracene	1,170	57.3	1,432	0	82.0	43.7	116	922.9	24.0	30	
Benzo(g,h,i)perylene	1,170	57.3	1,432	0	82.0	43.7	115	914.5	24.9	30	
Surr: 2-Fluorobiphenyl	453		716.2		63.2	16.9	122		0		
Surr: Terphenyl-d14 (surr)	513		716.2		71.6	38.4	153		0		

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **MB-30363** SampType: **MBLK** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **MBLKW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270789**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	ND	0.101									
Naphthalene	ND	0.101									
2-Methylnaphthalene	ND	0.101									
1-Methylnaphthalene	ND	0.101									
Acenaphthylene	ND	0.101									
Acenaphthene	ND	0.101									
Fluorene	ND	0.101									
Phenanthrene	ND	0.101									
Anthracene	ND	0.101									
Fluoranthene	ND	0.101									
Pyrene	ND	0.101									
Benz(a)anthracene	ND	0.101									
Chrysene	ND	0.101									
Benzo(b)fluoranthene	ND	0.101									
Benzo(k)fluoranthene	ND	0.101									
Benzo(a)pyrene	ND	0.101									
Indeno(1,2,3-cd)pyrene	ND	0.101									
Dibenz(a,h)anthracene	ND	0.101									
Benzo(g,h,i)perylene	ND	0.101									
Surr: 2-Fluorobiphenyl	1.29		2.023		64.0	50.8	146				
Surr: Terphenyl-d14	1.49		2.023		73.7	26.1	145				

Sample ID: **LCS-30363** SampType: **LCS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **LCSW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	3.17	0.0975	3.898	0	81.3	27.8	98.4				
Naphthalene	2.55	0.0975	3.898	0	65.5	47.4	117				
2-Methylnaphthalene	2.81	0.0975	3.898	0	72.1	48.8	127				
1-Methylnaphthalene	2.95	0.0975	3.898	0	75.7	36.9	134				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **LCS-30363** SampType: **LCS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **LCSW** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270790**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthylene	3.04	0.0975	3.898	0	78.0	42.5	137				
Acenaphthene	3.28	0.0975	3.898	0	84.1	50.6	128				
Fluorene	2.99	0.0975	3.898	0	76.6	42.7	142				
Phenanthrene	3.61	0.0975	3.898	0	92.6	48.1	137				
Anthracene	4.11	0.0975	3.898	0	105	37.5	137				
Fluoranthene	4.67	0.0975	3.898	0	120	47.5	140				
Pyrene	5.78	0.0975	3.898	0	148	52.3	135				S
Benz(a)anthracene	3.95	0.0975	3.898	0	101	39.4	125				
Chrysene	3.29	0.0975	3.898	0	84.4	37.9	108				
Benzo(b)fluoranthene	3.49	0.0975	3.898	0	89.6	25.5	110				
Benzo(k)fluoranthene	3.17	0.0975	3.898	0	81.3	27.8	98.4				
Benzo(a)pyrene	3.92	0.0975	3.898	0	100	21.5	107				
Indeno(1,2,3-cd)pyrene	3.27	0.0975	3.898	0	83.9	16.2	97.5				
Dibenz(a,h)anthracene	3.04	0.0975	3.898	0	77.9	15.9	98.8				
Benzo(g,h,i)perylene	3.11	0.0975	3.898	0	79.8	15.9	99.7				
Surr: 2-Fluorobiphenyl	2.78		1.949		143	50.8	146				
Surr: Terphenyl-d14	2.21		1.949		113	26.1	145				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **2011160-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	1.80	0.0995	3.981	0	45.1	15.9	99.8				
Naphthalene	2.59	0.0995	3.981	0	65.0	38.9	124				
2-Methylnaphthalene	2.69	0.0995	3.981	0	67.5	38.3	133				
1-Methylnaphthalene	2.81	0.0995	3.981	0	70.6	36.5	133				
Acenaphthylene	2.78	0.0995	3.981	0	69.7	38.8	141				
Acenaphthene	2.92	0.0995	3.981	0	73.4	26.4	151				
Fluorene	2.58	0.0995	3.981	0	64.7	41.6	146				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011160-001BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270792**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	2.95	0.0995	3.981	0	74.0	38.1	146				
Anthracene	2.92	0.0995	3.981	0	73.2	14.8	136				
Fluoranthene	3.86	0.0995	3.981	0	96.9	15.2	155				
Pyrene	4.24	0.0995	3.981	0	107	8.41	156				
Benz(a)anthracene	3.39	0.0995	3.981	0	85.3	8.9	131				
Chrysene	2.50	0.0995	3.981	0	62.7	7.73	127				
Benzo(b)fluoranthene	2.35	0.0995	3.981	0	58.9	14.8	118				
Benzo(k)fluoranthene	1.80	0.0995	3.981	0	45.1	15.9	99.8				
Benzo(a)pyrene	2.59	0.0995	3.981	0	64.9	12.1	106				
Indeno(1,2,3-cd)pyrene	2.27	0.0995	3.981	0	57.0	6.73	97.4				
Dibenz(a,h)anthracene	2.09	0.0995	3.981	0	52.4	5	95.6				
Benzo(g,h,i)perylene	2.10	0.0995	3.981	0	52.8	2.27	93.9				
Surr: 2-Fluorobiphenyl	3.23		1.990		162	50.8	146				S
Surr: Terphenyl-d14	2.01		1.990		101	26.1	145				

NOTES:
S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID: **2011160-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270793**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(j,k)fluoranthene	2.24	0.100	4.000	0	56.1	15.9	99.8	1.795	22.2	30	
Naphthalene	2.21	0.100	4.000	0	55.2	38.9	124	2.587	15.8	30	
2-Methylnaphthalene	2.38	0.100	4.000	0	59.5	38.3	133	2.686	12.1	30	
1-Methylnaphthalene	2.51	0.100	4.000	0	62.6	36.5	133	2.810	11.5	30	
Acenaphthylene	2.48	0.100	4.000	0	61.9	38.8	141	2.776	11.4	30	
Acenaphthene	2.61	0.100	4.000	0	65.3	26.4	151	2.920	11.1	30	
Fluorene	2.87	0.100	4.000	0	71.7	41.6	146	2.577	10.7	30	
Phenanthrene	2.73	0.100	4.000	0	68.4	38.1	146	2.947	7.46	30	
Anthracene	2.73	0.100	4.000	0	68.3	14.8	136	2.916	6.49	30	
Fluoranthene	2.97	0.100	4.000	0	74.3	15.2	155	3.858	26.0	30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: **2011160-001BMSD** SampType: **MSD** Units: **µg/L** Prep Date: **11/10/2020** RunNo: **63314**
Client ID: **BATCH** Batch ID: **30363** Analysis Date: **11/11/2020** SeqNo: **1270793**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pyrene	2.88	0.100	4.000	0	72.0	8.41	156	4.245	38.4	30	R
Benz(a)anthracene	2.77	0.100	4.000	0	69.2	8.9	131	3.394	20.3	30	
Chrysene	2.24	0.100	4.000	0	55.9	7.73	127	2.496	11.0	30	
Benzo(b)fluoranthene	2.29	0.100	4.000	0	57.2	14.8	118	2.346	2.48	30	
Benzo(k)fluoranthene	2.24	0.100	4.000	0	56.1	15.9	99.8	1.795	22.2	30	
Benzo(a)pyrene	2.65	0.100	4.000	0	66.2	12.1	106	2.585	2.40	30	
Indeno(1,2,3-cd)pyrene	2.13	0.100	4.000	0	53.2	6.73	97.4	2.269	6.32	30	
Dibenz(a,h)anthracene	2.00	0.100	4.000	0	50.0	5	95.6	2.086	4.23	30	
Benzo(g,h,i)perylene	1.96	0.100	4.000	0	49.1	2.27	93.9	2.101	6.80	30	
Surr: 2-Fluorobiphenyl	1.85		2.000		92.7	50.8	146		0	0	
Surr: Terphenyl-d14	1.72		2.000		86.0	26.1	145		0	0	

NOTES:
R - High RPD observed, spike recovery is within range.

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **MB-30476** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **MBLKS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275523**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.100									
Aroclor 1221	ND	0.100									
Aroclor 1232	ND	0.100									
Aroclor 1242	ND	0.100									
Aroclor 1248	ND	0.100									
Aroclor 1254	ND	0.100									
Aroclor 1260	ND	0.100									
Aroclor 1262	ND	0.100									
Aroclor 1268	ND	0.100									
Total PCBs	ND	0.100									
Surr: Decachlorobiphenyl	35.3		50.00		70.6	6.8	211				
Surr: Tetrachloro-m-xylene	33.4		50.00		66.8	7.85	182				

Sample ID: **LCS1-30476** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **LCSS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275524**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.04	0.100	1.000	0	104	30.2	169				
Aroclor 1260	1.02	0.100	1.000	0	102	28.2	181				
Surr: Decachlorobiphenyl	41.7		50.00		83.4	6.8	211				
Surr: Tetrachloro-m-xylene	40.6		50.00		81.3	7.85	182				

Sample ID: **LCS2-30476** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/19/2020** RunNo: **63547**
Client ID: **LCSS** Batch ID: **30476** Analysis Date: **11/19/2020** SeqNo: **1275525**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	0.751	0.100	1.000	0	75.1	37.1	136				
Surr: Decachlorobiphenyl	49.5		50.00		99.0	6.8	211				
Surr: Tetrachloro-m-xylene	28.7		50.00		57.3	7.85	182				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **LCS2-30476**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **LCSS**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275525**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2011094-008AMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **SB04-3-20201104**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275539**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.26	0.126	1.264	0	99.7	48.5	157				
Aroclor 1260	1.31	0.126	1.264	0	104	48.4	164				
Surr: Decachlorobiphenyl	53.7		63.18		85.0	6.8	211				
Surr: Tetrachloro-m-xylene	44.0		63.18		69.6	7.85	182				

Sample ID: **2011094-008AMSD**	SampType: **MSD**	Units: **mg/Kg-dry**	Prep Date: **11/19/2020**	RunNo: **63547**
Client ID: **SB04-3-20201104**	Batch ID: **30476**		Analysis Date: **11/19/2020**	SeqNo: **1275540**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.10	0.122	1.224	0	90.0	48.5	157	1.260	13.4	30	
Aroclor 1260	1.19	0.122	1.224	0	97.1	48.4	164	1.312	9.89	30	
Surr: Decachlorobiphenyl	43.2		61.21		70.6	6.8	211		0		
Surr: Tetrachloro-m-xylene	31.1		61.21		50.8	7.85	182		0		

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **MB-30557**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **MBLKW**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280238**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.0993									
Aroclor 1221	ND	0.0993									
Aroclor 1232	ND	0.0993									
Aroclor 1242	ND	0.0993									
Aroclor 1248	ND	0.0993									
Aroclor 1254	ND	0.0993									
Aroclor 1260	ND	0.0993									
Aroclor 1262	ND	0.0993									
Aroclor 1268	ND	0.0993									
Total PCBs	ND	0.0993									
Surr: Decachlorobiphenyl	191		397.1		48.2	5	124				
Surr: Tetrachloro-m-xylene	174		397.1		43.8	21.2	115				

Sample ID: **LCS1-30557**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **LCSW**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280239**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.16	0.0997	1.995	0	58.3	6.74	118				
Aroclor 1260	1.48	0.0997	1.995	0	74.2	5	123				
Surr: Decachlorobiphenyl	211		399.0		52.8	5	124				
Surr: Tetrachloro-m-xylene	215		399.0		53.8	21.2	115				

Sample ID: **LCS2-30557**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **LCSW**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280240**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	1.40	0.0989	1.978	0	70.9	33.3	137				
Surr: Decachlorobiphenyl	222		395.6		56.2	5	124				
Surr: Tetrachloro-m-xylene	165		395.6		41.7	21.2	115				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: **LCS2-30557**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **LCSW**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280240**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: **2011481-001DMS**	SampType: **MS**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **BATCH**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280246**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.35	0.100	1.999	0	67.3	6.09	159				
Aroclor 1260	1.00	0.100	1.999	0	50.1	5	176				
Surr: Decachlorobiphenyl	108		399.8		27.0	5	124				
Surr: Tetrachloro-m-xylene	210		399.8		52.5	21.2	115				

Sample ID: **LCS1D-30557**	SampType: **LCSD**	Units: **µg/L**	Prep Date: **11/30/2020**	RunNo: **63753**
Client ID: **LCSW02**	Batch ID: **30557**		Analysis Date: **12/1/2020**	SeqNo: **1280248**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	0.950	0.0988	1.977	0	48.0	6.74	118	1.162	20.2	20	R
Aroclor 1260	1.31	0.0988	1.977	0	66.4	5	123	1.481	12.0	20	
Surr: Decachlorobiphenyl	157		395.3		39.7	5	124		0		
Surr: Tetrachloro-m-xylene	152		395.3		38.5	21.2	115		0		

NOTES:
R - High RPD observed, spike recovery is within range.

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-30312**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/6/2020**	RunNo: **63228**
Client ID: **LCSS**	Batch ID: **30312**		Analysis Date: **11/6/2020**	SeqNo: **1269126**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	25.6	5.00	25.00	0	103	65	135				
Surr: Toluene-d8	1.22		1.250		97.2	65	135				
Surr: 4-Bromofluorobenzene	1.30		1.250		104	65	135				

Sample ID: **MB-30312**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/6/2020**	RunNo: **63228**
Client ID: **MBLKS**	Batch ID: **30312**		Analysis Date: **11/6/2020**	SeqNo: **1269127**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: Toluene-d8	1.25		1.250		99.9	65	135				
Surr: 4-Bromofluorobenzene	1.27		1.250		102	65	135				

Sample ID: **2011094-002BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/6/2020**	RunNo: **63228**
Client ID: **SB02-2.5-20201104**	Batch ID: **30312**		Analysis Date: **11/6/2020**	SeqNo: **1269103**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	10.4						0		30	
Surr: Toluene-d8	2.61		2.609		100	65	135		0		
Surr: 4-Bromofluorobenzene	2.64		2.609		101	65	135		0		

Sample ID: **2011150-007BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/6/2020**	RunNo: **63228**
Client ID: **BATCH**	Batch ID: **30312**		Analysis Date: **11/6/2020**	SeqNo: **1269121**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	28.2						0		30	D
Surr: Toluene-d8	7.11		7.048		101	65	135		0		D
Surr: 4-Bromofluorobenzene	7.15		7.048		101	65	135		0		D

NOTES:
Diluted due to matrix.

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-30400**	SampType: **LCS**	Units: **mg/Kg**	Prep Date: **11/13/2020**	RunNo: **63406**
Client ID: **LCSS**	Batch ID: **30400**		Analysis Date: **11/13/2020**	SeqNo: **1272480**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	21.3	5.00	25.00	0	85.3	65	135				
Surr: Toluene-d8	1.22		1.250		97.5	65	135				
Surr: 4-Bromofluorobenzene	1.26		1.250		101	65	135				

Sample ID: **MB-30400**	SampType: **MBLK**	Units: **mg/Kg**	Prep Date: **11/13/2020**	RunNo: **63406**
Client ID: **MBLKS**	Batch ID: **30400**		Analysis Date: **11/13/2020**	SeqNo: **1272481**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: Toluene-d8	1.24		1.250		99.1	65	135				
Surr: 4-Bromofluorobenzene	1.16		1.250		92.5	65	135				

Sample ID: **2011226-001BDUP**	SampType: **DUP**	Units: **mg/Kg-dry**	Prep Date: **11/13/2020**	RunNo: **63406**
Client ID: **BATCH**	Batch ID: **30400**		Analysis Date: **11/13/2020**	SeqNo: **1272460**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	8.07						0		30	
Surr: Toluene-d8	1.98		2.016		98.1	65	135		0		
Surr: 4-Bromofluorobenzene	1.86		2.016		92.4	65	135		0		

Sample ID: **2011226-003BMS**	SampType: **MS**	Units: **mg/Kg-dry**	Prep Date: **11/13/2020**	RunNo: **63406**
Client ID: **BATCH**	Batch ID: **30400**		Analysis Date: **11/13/2020**	SeqNo: **1272463**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	26.7	5.90	29.48	0	90.4	65	135				
Surr: Toluene-d8	1.48		1.474		100	65	135				
Surr: 4-Bromofluorobenzene	1.45		1.474		98.6	65	135				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **2011269-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63406**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272470**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	6.69						0		30	
Surr: Toluene-d8	1.65		1.673		98.5	65	135		0		
Surr: 4-Bromofluorobenzene	1.53		1.673		91.1	65	135		0		

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **LCS-30311**	SampType: **LCS**	Units: **µg/L**	Prep Date: **11/6/2020**	RunNo: **63220**
Client ID: **LCSW**	Batch ID: **30311**		Analysis Date: **11/6/2020**	SeqNo: **1268731**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	441	50.0	500.0	0	88.3	65	135				
Surr: Toluene-d8	24.6		25.00		98.4	65	135				
Surr: 4-Bromofluorobenzene	25.1		25.00		100	65	135				

Sample ID: **MB-30311**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **11/6/2020**	RunNo: **63220**
Client ID: **MBLKW**	Batch ID: **30311**		Analysis Date: **11/6/2020**	SeqNo: **1268730**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: Toluene-d8	24.9		25.00		99.6	65	135				
Surr: 4-Bromofluorobenzene	24.8		25.00		99.1	65	135				

Sample ID: **2011094-007ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **11/6/2020**	RunNo: **63220**
Client ID: **SB04-20201104-EB**	Batch ID: **30311**		Analysis Date: **11/6/2020**	SeqNo: **1268710**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0						0		30	
Surr: Toluene-d8	25.0		25.00		99.9	65	135		0		
Surr: 4-Bromofluorobenzene	24.8		25.00		99.3	65	135		0		

Sample ID: **2011100-001BDUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **11/6/2020**	RunNo: **63220**
Client ID: **BATCH**	Batch ID: **30311**		Analysis Date: **11/6/2020**	SeqNo: **1268712**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0						0		30	
Surr: Toluene-d8	24.7		25.00		98.8	65	135		0		
Surr: 4-Bromofluorobenzene	24.8		25.00		99.2	65	135		0		

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Gasoline by NWTPH-Gx

Sample ID: **2011131-001AMS** SampType: **MS** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63220**
Client ID: **BATCH** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268724**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	467	50.0	500.0	0	93.3	65	135				
Surr: Toluene-d8	24.9		25.00		99.6	65	135				
Surr: 4-Bromofluorobenzene	24.9		25.00		99.6	65	135				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30312** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **LCSS** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268977**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.12	0.0200	1.000	0	112	26.1	178				
Chloromethane	1.01	0.0500	1.000	0	101	51.6	141				
Vinyl chloride	1.01	0.0200	1.000	0	101	66	131				
Bromomethane	0.989	0.0500	1.000	0	98.9	41	160				
Trichlorofluoromethane (CFC-11)	1.07	0.0200	1.000	0	107	61.2	145				
Chloroethane	0.885	0.0500	1.000	0	88.5	55.2	150				
1,1-Dichloroethene	1.04	0.0200	1.000	0	104	63.4	139				
Methylene chloride	1.04	0.0200	1.000	0	104	77.7	117				
trans-1,2-Dichloroethene	0.996	0.0200	1.000	0	99.6	80.5	116				
Methyl tert-butyl ether (MTBE)	0.891	0.0200	1.000	0	89.1	77.1	118				
1,1-Dichloroethane	0.971	0.0200	1.000	0	97.1	79.6	116				
cis-1,2-Dichloroethene	0.977	0.0200	1.000	0	97.7	81.8	114				
Chloroform	0.984	0.0200	1.000	0	98.4	81.7	115				
1,1,1-Trichloroethane (TCA)	0.984	0.0200	1.000	0	98.4	80.3	119				
1,1-Dichloropropene	0.997	0.0200	1.000	0	99.7	79.6	118				
Carbon tetrachloride	0.995	0.0200	1.000	0	99.5	78.6	121				
1,2-Dichloroethane (EDC)	0.956	0.0200	1.000	0	95.6	78.8	120				
Benzene	0.988	0.0200	1.000	0	98.8	79.4	116				
Trichloroethene (TCE)	0.978	0.0200	1.000	0	97.8	80.8	117				
1,2-Dichloropropane	0.963	0.0200	1.000	0	96.3	77.1	117				
Bromodichloromethane	0.961	0.0200	1.000	0	96.1	82.5	117				
Dibromomethane	0.950	0.0200	1.000	0	95.0	81.4	116				
cis-1,3-Dichloropropene	0.965	0.0200	1.000	0	96.5	77.3	119				
Toluene	1.01	0.0200	1.000	0	101	80.5	115				
trans-1,3-Dichloropropylene	0.946	0.0200	1.000	0	94.6	78.4	121				
1,1,2-Trichloroethane	0.961	0.0200	1.000	0	96.1	78.1	116				
1,3-Dichloropropane	0.951	0.0250	1.000	0	95.1	76.6	118				
Tetrachloroethene (PCE)	1.02	0.0200	1.000	0	102	81.8	116				
Dibromochloromethane	0.959	0.0200	1.000	0	95.9	81.2	117				
1,2-Dibromoethane (EDB)	0.946	0.00500	1.000	0	94.6	77.5	118				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30312** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **LCSS** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268977**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	0.994	0.0200	1.000	0	99.4	81.8	113				
1,1,1,2-Tetrachloroethane	0.979	0.0200	1.000	0	97.9	81.9	116				
Ethylbenzene	1.02	0.0250	1.000	0	102	81.6	116				
m,p-Xylene	2.03	0.0500	2.000	0	101	83.2	115				
o-Xylene	1.01	0.0250	1.000	0	101	82.5	114				
Styrene	0.997	0.0200	1.000	0	99.7	82	114				
Isopropylbenzene	1.01	0.0200	1.000	0	101	82.2	116				
Bromoform	0.977	0.0500	1.000	0	97.7	74.1	127				
1,1,2,2-Tetrachloroethane	0.942	0.0200	1.000	0	94.2	69.9	124				
n-Propylbenzene	1.03	0.0200	1.000	0	103	82.1	118				
Bromobenzene	0.979	0.0200	1.000	0	97.9	83.4	113				
1,3,5-Trimethylbenzene	1.03	0.0200	1.000	0	103	82.1	117				
2-Chlorotoluene	1.02	0.0250	1.000	0	102	82	115				
4-Chlorotoluene	1.03	0.0200	1.000	0	103	81.9	116				
tert-Butylbenzene	1.03	0.0200	1.000	0	103	81.8	117				
1,2,3-Trichloropropane	0.886	0.0250	1.000	0	88.6	72.9	124				
1,2,4-Trichlorobenzene	0.810	0.0200	1.000	0	81.0	75.8	121				
sec-Butylbenzene	1.05	0.0250	1.000	0	105	81.5	118				
4-Isopropyltoluene	1.05	0.0250	1.000	0	105	82.2	118				
1,3-Dichlorobenzene	1.00	0.0200	1.000	0	100	80.2	119				
1,4-Dichlorobenzene	1.00	0.0200	1.000	0	100	79.8	118				
n-Butylbenzene	1.03	0.0200	1.000	0	103	82.1	120				
1,2-Dichlorobenzene	0.961	0.0200	1.000	0	96.1	80.3	117				
1,2-Dibromo-3-chloropropane	0.811	0.500	1.000	0	81.1	68.7	132				
1,2,4-Trimethylbenzene	1.04	0.0200	1.000	0	104	82.1	118				
Hexachloro-1,3-butadiene	1.03	0.0250	1.000	0	103	81.4	122				
Naphthalene	0.681	0.0500	1.000	0	68.1	63.3	132				
1,2,3-Trichlorobenzene	0.762	0.0200	1.000	0	76.2	65.4	125				
Surr: Dibromofluoromethane	1.29		1.250		103	85.2	113				
Surr: Toluene-d8	1.28		1.250		102	88.5	110				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30312**	SampType: **LCS**			Units: **mg/Kg**		Prep Date: **11/6/2020**		RunNo: **63227**	
Client ID: **LCSS**	Batch ID: **30312**					Analysis Date: **11/6/2020**		SeqNo: **1268977**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	1.29		1.250		103	88.6	109				

Sample ID: **MB-30312**	SampType: **MBLK**			Units: **mg/Kg**		Prep Date: **11/6/2020**		RunNo: **63227**	
Client ID: **MBLKS**	Batch ID: **30312**					Analysis Date: **11/6/2020**		SeqNo: **1268972**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30312** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **MBLKS** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268972**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30312** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **MBLKS** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268972**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachloro-1,3-butadiene	ND	0.0250									
Naphthalene	ND	0.0500									Q
1,2,3-Trichlorobenzene	ND	0.0200									Q
Surr: Dibromofluoromethane	1.21		1.250		96.8	85.2	113				
Surr: Toluene-d8	1.24		1.250		99.5	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.21		1.250		97.1	88.6	109				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011094-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **SB02-2.5-20201104** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268952**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0417						0		30	
Chloromethane	ND	0.104						0		30	
Vinyl chloride	ND	0.0417						0		30	
Bromomethane	ND	0.104						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0417						0		30	
Chloroethane	ND	0.104						0		30	
1,1-Dichloroethene	ND	0.0417						0		30	
Methylene chloride	ND	0.0417						0		30	
trans-1,2-Dichloroethene	ND	0.0417						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0417						0		30	
1,1-Dichloroethane	ND	0.0417						0		30	
cis-1,2-Dichloroethene	ND	0.0417						0		30	
Chloroform	ND	0.0417						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0417						0		30	
1,1-Dichloropropene	ND	0.0417						0		30	
Carbon tetrachloride	ND	0.0417						0		30	
1,2-Dichloroethane (EDC)	ND	0.0417						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011094-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **SB02-2.5-20201104** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268952**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0417						0		30	
Trichloroethene (TCE)	ND	0.0417						0		30	
1,2-Dichloropropane	ND	0.0417						0		30	
Bromodichloromethane	ND	0.0417						0		30	
Dibromomethane	ND	0.0417						0		30	
cis-1,3-Dichloropropene	ND	0.0417						0		30	
Toluene	ND	0.0417						0		30	
trans-1,3-Dichloropropylene	ND	0.0417						0		30	
1,1,2-Trichloroethane	ND	0.0417						0		30	
1,3-Dichloropropane	ND	0.0522						0		30	
Tetrachloroethene (PCE)	ND	0.0417						0		30	
Dibromochloromethane	ND	0.0417						0		30	
1,2-Dibromoethane (EDB)	ND	0.0104						0		30	
Chlorobenzene	ND	0.0417						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0417						0		30	
Ethylbenzene	ND	0.0522						0		30	
m,p-Xylene	ND	0.104						0		30	
o-Xylene	ND	0.0522						0		30	
Styrene	ND	0.0417						0		30	
Isopropylbenzene	ND	0.0417						0		30	
Bromoform	ND	0.104						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0417						0		30	
n-Propylbenzene	ND	0.0417						0		30	
Bromobenzene	ND	0.0417						0		30	
1,3,5-Trimethylbenzene	ND	0.0417						0		30	
2-Chlorotoluene	ND	0.0522						0		30	
4-Chlorotoluene	ND	0.0417						0		30	
tert-Butylbenzene	ND	0.0417						0		30	
1,2,3-Trichloropropane	ND	0.0522						0		30	
1,2,4-Trichlorobenzene	ND	0.0417						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011094-002BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **SB02-2.5-20201104** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268952**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	0.0522						0		30	
4-Isopropyltoluene	ND	0.0522						0		30	
1,3-Dichlorobenzene	ND	0.0417						0		30	
1,4-Dichlorobenzene	ND	0.0417						0		30	
n-Butylbenzene	ND	0.0417						0		30	
1,2-Dichlorobenzene	ND	0.0417						0		30	
1,2-Dibromo-3-chloropropane	ND	1.04						0		30	
1,2,4-Trimethylbenzene	ND	0.0417						0		30	
Hexachloro-1,3-butadiene	ND	0.0522						0		30	
Naphthalene	ND	0.104						0		30	Q
1,2,3-Trichlorobenzene	ND	0.0417						0		30	Q
Surr: Dibromofluoromethane	2.32		2.609		88.9	85.2	113		0		
Surr: Toluene-d8	2.59		2.609		99.2	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	2.52		2.609		96.4	88.6	109		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011094-004BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **SB05-3.5-20201104** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268954**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.608	0.0257	1.284	0	47.4	9.44	188				
Chloromethane	0.928	0.0642	1.284	0	72.3	40.6	156				
Vinyl chloride	1.06	0.0257	1.284	0	82.3	52.8	150				
Bromomethane	1.12	0.0642	1.284	0	86.9	41	165				
Trichlorofluoromethane (CFC-11)	1.37	0.0257	1.284	0	106	53.7	157				
Chloroethane	1.04	0.0642	1.284	0	81.1	29.9	178				
1,1-Dichloroethene	1.34	0.0257	1.284	0	105	62.9	149				
Methylene chloride	1.36	0.0257	1.284	0	106	74.3	126				
trans-1,2-Dichloroethene	1.33	0.0257	1.284	0	103	73.1	130				
Methyl tert-butyl ether (MTBE)	1.15	0.0257	1.284	0	89.6	71.8	123				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011094-004BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **SB05-3.5-20201104** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268954**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	1.28	0.0257	1.284	0	100	73	128				
cis-1,2-Dichloroethene	1.32	0.0257	1.284	0	103	77.5	125				
Chloroform	1.33	0.0257	1.284	0	104	76.8	127				
1,1,1-Trichloroethane (TCA)	1.35	0.0257	1.284	0	105	71.4	134				
1,1-Dichloropropene	1.37	0.0257	1.284	0	107	69	133				
Carbon tetrachloride	1.34	0.0257	1.284	0	105	67.5	136				
1,2-Dichloroethane (EDC)	1.28	0.0257	1.284	0	99.6	73.9	128				
Benzene	1.34	0.0257	1.284	0	104	74.6	126				
Trichloroethene (TCE)	1.36	0.0257	1.284	0	106	72	133				
1,2-Dichloropropane	1.30	0.0257	1.284	0	101	73.5	125				
Bromodichloromethane	1.28	0.0257	1.284	0	99.7	77.1	125				
Dibromomethane	1.26	0.0257	1.284	0	98.1	79.6	122				
cis-1,3-Dichloropropene	1.26	0.0257	1.284	0	98.2	71.8	122				
Toluene	1.39	0.0257	1.284	0	108	72.6	127				
trans-1,3-Dichloropropylene	1.23	0.0257	1.284	0	95.8	71.1	125				
1,1,2-Trichloroethane	1.30	0.0257	1.284	0	101	75.6	123				
1,3-Dichloropropane	1.28	0.0321	1.284	0	99.6	74.4	122				
Tetrachloroethene (PCE)	1.42	0.0257	1.284	0	111	72.7	128				
Dibromochloromethane	1.28	0.0257	1.284	0	99.8	78.3	120				
1,2-Dibromoethane (EDB)	1.26	0.00642	1.284	0	98.1	76.1	121				
Chlorobenzene	1.38	0.0257	1.284	0	107	74.9	124				
1,1,1,2-Tetrachloroethane	1.34	0.0257	1.284	0	105	75.3	126				
Ethylbenzene	1.42	0.0321	1.284	0	111	77.3	126				
m,p-Xylene	2.81	0.0642	2.568	0	110	78.5	126				
o-Xylene	1.39	0.0321	1.284	0	108	79.4	123				
Styrene	1.38	0.0257	1.284	0	107	80	122				
Isopropylbenzene	1.41	0.0257	1.284	0	110	77.3	128				
Bromoform	1.26	0.0642	1.284	0	98.1	68.7	131				
1,1,2,2-Tetrachloroethane	1.18	0.0257	1.284	0	92.3	58.2	134				
n-Propylbenzene	1.43	0.0257	1.284	0	111	76	130				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011094-004BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **SB05-3.5-20201104** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268954**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	1.34	0.0257	1.284	0	104	80.3	123				
1,3,5-Trimethylbenzene	1.44	0.0257	1.284	0	112	75.8	128				
2-Chlorotoluene	1.41	0.0321	1.284	0	110	78.6	127				
4-Chlorotoluene	1.42	0.0257	1.284	0	110	79	126				
tert-Butylbenzene	1.43	0.0257	1.284	0	112	77.7	130				
1,2,3-Trichloropropane	1.16	0.0321	1.284	0	90.3	60.3	139				
1,2,4-Trichlorobenzene	1.01	0.0257	1.284	0	78.4	75.1	128				
sec-Butylbenzene	1.49	0.0321	1.284	0	116	76.2	132				
4-Isopropyltoluene	1.48	0.0321	1.284	0	115	77.3	130				
1,3-Dichlorobenzene	1.37	0.0257	1.284	0	107	77.2	127				
1,4-Dichlorobenzene	1.36	0.0257	1.284	0	106	76.7	125				
n-Butylbenzene	1.45	0.0257	1.284	0	113	74.8	133				
1,2-Dichlorobenzene	1.31	0.0257	1.284	0	102	77.5	125				
1,2-Dibromo-3-chloropropane	1.01	0.642	1.284	0	78.9	59.9	139				
1,2,4-Trimethylbenzene	1.45	0.0257	1.284	0	113	68.4	135				
Hexachloro-1,3-butadiene	1.48	0.0321	1.284	0	115	71	145				
Naphthalene	0.784	0.0642	1.284	0	61.0	64.3	140				S
1,2,3-Trichlorobenzene	0.895	0.0257	1.284	0	69.7	67.2	133				
Surr: Dibromofluoromethane	1.64		1.605		102	85.2	113				
Surr: Toluene-d8	1.64		1.605		102	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.64		1.605		102	88.6	109				

NOTES:
S - Outlying spike recovery observed (low bias).

Sample ID: **2011150-007BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **BATCH** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268968**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.113						0		30	D
Chloromethane	ND	0.282						0		30	D
Vinyl chloride	ND	0.113						0		30	D

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011150-007BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **BATCH** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268968**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromomethane	ND	0.282						0		30	D
Trichlorofluoromethane (CFC-11)	ND	0.113						0		30	D
Chloroethane	ND	0.282						0		30	D
1,1-Dichloroethene	ND	0.113						0		30	D
Methylene chloride	ND	0.113						0		30	D
trans-1,2-Dichloroethene	ND	0.113						0		30	D
Methyl tert-butyl ether (MTBE)	ND	0.113						0		30	D
1,1-Dichloroethane	ND	0.113						0		30	D
cis-1,2-Dichloroethene	ND	0.113						0		30	D
Chloroform	ND	0.113						0		30	D
1,1,1-Trichloroethane (TCA)	ND	0.113						0		30	D
1,1-Dichloropropene	ND	0.113						0		30	D
Carbon tetrachloride	ND	0.113						0		30	D
1,2-Dichloroethane (EDC)	ND	0.113						0		30	D
Benzene	ND	0.113						0		30	D
Trichloroethene (TCE)	ND	0.113						0		30	D
1,2-Dichloropropane	ND	0.113						0		30	D
Bromodichloromethane	ND	0.113						0		30	D
Dibromomethane	ND	0.113						0		30	D
cis-1,3-Dichloropropene	ND	0.113						0		30	D
Toluene	ND	0.113						0		30	D
trans-1,3-Dichloropropylene	ND	0.113						0		30	D
1,1,2-Trichloroethane	ND	0.113						0		30	D
1,3-Dichloropropane	ND	0.141						0		30	D
Tetrachloroethene (PCE)	ND	0.113						0		30	D
Dibromochloromethane	ND	0.113						0		30	D
1,2-Dibromoethane (EDB)	ND	0.0282						0		30	D
Chlorobenzene	ND	0.113						0		30	D
1,1,1,2-Tetrachloroethane	ND	0.113						0		30	D
Ethylbenzene	ND	0.141						0		30	D

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011150-007BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **BATCH** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268968**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
m,p-Xylene	ND	0.282						0		30	D
o-Xylene	ND	0.141						0		30	D
Styrene	ND	0.113						0		30	D
Isopropylbenzene	ND	0.113						0		30	D
Bromoform	ND	0.282						0		30	D
1,1,2,2-Tetrachloroethane	ND	0.113						0		30	D
n-Propylbenzene	ND	0.113						0		30	D
Bromobenzene	ND	0.113						0		30	D
1,3,5-Trimethylbenzene	ND	0.113						0		30	D
2-Chlorotoluene	ND	0.141						0		30	D
4-Chlorotoluene	ND	0.113						0		30	D
tert-Butylbenzene	ND	0.113						0		30	D
1,2,3-Trichloropropane	ND	0.141						0		30	D
1,2,4-Trichlorobenzene	ND	0.113						0		30	D
sec-Butylbenzene	ND	0.141						0		30	D
4-Isopropyltoluene	ND	0.141						0		30	D
1,3-Dichlorobenzene	ND	0.113						0		30	D
1,4-Dichlorobenzene	ND	0.113						0		30	D
n-Butylbenzene	ND	0.113						0		30	D
1,2-Dichlorobenzene	ND	0.113						0		30	D
1,2-Dibromo-3-chloropropane	ND	2.82						0		30	D
1,2,4-Trimethylbenzene	ND	0.113						0		30	D
Hexachloro-1,3-butadiene	ND	0.141						0		30	D
Naphthalene	0.839	0.282						0.9424	11.6	30	DQ
1,2,3-Trichlorobenzene	ND	0.113						0		30	DQ
Surr: Dibromofluoromethane	6.82		7.048		96.8	85.2	113		0		D
Surr: Toluene-d8	6.81		7.048		96.7	88.5	110		0		D
Surr: 1-Bromo-4-fluorobenzene	6.82		7.048		96.8	88.6	109		0		D

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011150-007BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/6/2020** RunNo: **63227**
Client ID: **BATCH** Batch ID: **30312** Analysis Date: **11/6/2020** SeqNo: **1268968**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria
Diluted due to matrix.

Sample ID: **CCV-30312A** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/10/2020** RunNo: **63306**
Client ID: **LCSS** Batch ID: **30312** Analysis Date: **11/10/2020** SeqNo: **1270596**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	0.926	0.0500	1.000	0	92.6	63.3	132				
Surr: Dibromofluoromethane	1.22		1.250		97.8	85.2	113				
Surr: Toluene-d8	1.23		1.250		98.6	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.26		1.250		101	88.6	109				

Sample ID: **MB-30312** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/6/2020** RunNo: **63306**
Client ID: **MBLKS** Batch ID: **30312** Analysis Date: **11/10/2020** SeqNo: **1270599**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.0500									
Surr: Dibromofluoromethane	1.16		1.250		92.8	85.2	113				
Surr: Toluene-d8	1.22		1.250		97.7	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.0	88.6	109				

Sample ID: **LCS-30400** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **LCSS** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272456**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.96	0.0200	1.000	0	196	26.1	178				S
Chloromethane	1.19	0.0500	1.000	0	119	51.6	141				
Vinyl chloride	1.10	0.0200	1.000	0	110	66	131				
Bromomethane	0.912	0.0500	1.000	0	91.2	41	160				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30400** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **LCSS** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272456**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichlorofluoromethane (CFC-11)	0.935	0.0200	1.000	0	93.5	61.2	145				
Chloroethane	0.841	0.0500	1.000	0	84.1	55.2	150				
1,1-Dichloroethene	0.939	0.0200	1.000	0	93.9	63.4	139				
Methylene chloride	0.876	0.0200	1.000	0	87.6	77.7	117				
trans-1,2-Dichloroethene	0.923	0.0200	1.000	0	92.3	80.5	116				
Methyl tert-butyl ether (MTBE)	0.972	0.0200	1.000	0	97.2	77.1	118				
1,1-Dichloroethane	0.864	0.0200	1.000	0	86.4	79.6	116				
cis-1,2-Dichloroethene	0.881	0.0200	1.000	0	88.1	81.8	114				
Chloroform	0.867	0.0200	1.000	0	86.7	81.7	115				
1,1,1-Trichloroethane (TCA)	0.878	0.0200	1.000	0	87.8	80.3	119				
1,1-Dichloropropene	0.885	0.0200	1.000	0	88.5	79.6	118				
Carbon tetrachloride	0.874	0.0200	1.000	0	87.4	78.6	121				
1,2-Dichloroethane (EDC)	0.857	0.0200	1.000	0	85.7	78.8	120				
Benzene	0.880	0.0200	1.000	0	88.0	79.4	116				
Trichloroethene (TCE)	0.887	0.0200	1.000	0	88.7	80.8	117				
1,2-Dichloropropane	0.860	0.0200	1.000	0	86.0	77.1	117				
Bromodichloromethane	0.847	0.0200	1.000	0	84.7	82.5	117				
Dibromomethane	0.901	0.0200	1.000	0	90.1	81.4	116				
cis-1,3-Dichloropropene	0.967	0.0200	1.000	0	96.7	77.3	119				
Toluene	0.894	0.0200	1.000	0	89.4	80.5	115				
trans-1,3-Dichloropropylene	0.974	0.0200	1.000	0	97.4	78.4	121				
1,1,2-Trichloroethane	0.920	0.0200	1.000	0	92.0	78.1	116				
1,3-Dichloropropane	0.900	0.0250	1.000	0	90.0	76.6	118				
Tetrachloroethene (PCE)	0.913	0.0200	1.000	0	91.3	81.8	116				
Dibromochloromethane	0.904	0.0200	1.000	0	90.4	81.2	117				
1,2-Dibromoethane (EDB)	0.930	0.00500	1.000	0	93.0	77.5	118				
Chlorobenzene	0.871	0.0200	1.000	0	87.1	81.8	113				
1,1,1,2-Tetrachloroethane	0.898	0.0200	1.000	0	89.8	81.9	116				
Ethylbenzene	0.870	0.0250	1.000	0	87.0	81.6	116				
m,p-Xylene	1.76	0.0500	2.000	0	88.0	83.2	115				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30400** SampType: **LCS** Units: **mg/Kg** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **LCSS** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272456**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
o-Xylene	0.888	0.0250	1.000	0	88.8	82.5	114				
Styrene	0.879	0.0200	1.000	0	87.9	82	114				
Isopropylbenzene	0.882	0.0200	1.000	0	88.2	82.2	116				
Bromoform	0.965	0.0500	1.000	0	96.5	74.1	127				
1,1,2,2-Tetrachloroethane	0.897	0.0200	1.000	0	89.7	69.9	124				
n-Propylbenzene	0.859	0.0200	1.000	0	85.9	82.1	118				
Bromobenzene	0.912	0.0200	1.000	0	91.2	83.4	113				
1,3,5-Trimethylbenzene	0.858	0.0200	1.000	0	85.8	82.1	117				
2-Chlorotoluene	0.868	0.0250	1.000	0	86.8	82	115				
4-Chlorotoluene	0.860	0.0200	1.000	0	86.0	81.9	116				
tert-Butylbenzene	0.866	0.0200	1.000	0	86.6	81.8	117				
1,2,3-Trichloropropane	0.900	0.0250	1.000	0	90.0	72.9	124				
1,2,4-Trichlorobenzene	0.976	0.0200	1.000	0	97.6	75.8	121				
sec-Butylbenzene	0.852	0.0250	1.000	0	85.2	81.5	118				
4-Isopropyltoluene	0.841	0.0250	1.000	0	84.1	82.2	118				
1,3-Dichlorobenzene	0.929	0.0200	1.000	0	92.9	80.2	119				
1,4-Dichlorobenzene	0.915	0.0200	1.000	0	91.5	79.8	118				
n-Butylbenzene	0.875	0.0200	1.000	0	87.5	82.1	120				
1,2-Dichlorobenzene	0.930	0.0200	1.000	0	93.0	80.3	117				
1,2-Dibromo-3-chloropropane	0.990	0.500	1.000	0	99.0	68.7	132				
1,2,4-Trimethylbenzene	0.856	0.0200	1.000	0	85.6	82.1	118				
Hexachloro-1,3-butadiene	0.881	0.0250	1.000	0	88.1	81.4	122				
Naphthalene	0.993	0.0500	1.000	0	99.3	63.3	132				
1,2,3-Trichlorobenzene	0.963	0.0200	1.000	0	96.3	65.4	125				
Surr: Dibromofluoromethane	1.25		1.250		99.9	85.2	113				
Surr: Toluene-d8	1.28		1.250		102	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	1.28		1.250		103	88.6	109				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30400** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **MBLKS** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272455**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0200									
Chloromethane	ND	0.0500									
Vinyl chloride	ND	0.0200									
Bromomethane	ND	0.0500									
Trichlorofluoromethane (CFC-11)	ND	0.0200									
Chloroethane	ND	0.0500									
1,1-Dichloroethene	ND	0.0200									
Methylene chloride	ND	0.0200									
trans-1,2-Dichloroethene	ND	0.0200									
Methyl tert-butyl ether (MTBE)	ND	0.0200									
1,1-Dichloroethane	ND	0.0200									
cis-1,2-Dichloroethene	ND	0.0200									
Chloroform	ND	0.0200									
1,1,1-Trichloroethane (TCA)	ND	0.0200									
1,1-Dichloropropene	ND	0.0200									
Carbon tetrachloride	ND	0.0200									
1,2-Dichloroethane (EDC)	ND	0.0200									
Benzene	ND	0.0200									
Trichloroethene (TCE)	ND	0.0200									
1,2-Dichloropropane	ND	0.0200									
Bromodichloromethane	ND	0.0200									
Dibromomethane	ND	0.0200									
cis-1,3-Dichloropropene	ND	0.0200									
Toluene	ND	0.0200									
trans-1,3-Dichloropropylene	ND	0.0200									
1,1,2-Trichloroethane	ND	0.0200									
1,3-Dichloropropane	ND	0.0250									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0200									
1,2-Dibromoethane (EDB)	ND	0.00500									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30400** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **MBLKS** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272455**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0200									
Ethylbenzene	ND	0.0250									
m,p-Xylene	ND	0.0500									
o-Xylene	ND	0.0250									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0200									
Bromoform	ND	0.0500									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0200									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0250									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0250									
1,2,4-Trichlorobenzene	ND	0.0200									
sec-Butylbenzene	ND	0.0250									
4-Isopropyltoluene	ND	0.0250									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachloro-1,3-butadiene	ND	0.0250									
Naphthalene	ND	0.0500									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.04		1.250		82.9	85.2	113				S
Surr: Toluene-d8	1.18		1.250		94.7	88.5	110				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30400** SampType: **MBLK** Units: **mg/Kg** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **MBLKS** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272455**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 1-Bromo-4-fluorobenzene	1.23		1.250		98.8	88.6	109				

NOTES:
S - Outlying surrogate recovery(ies) observed.

Sample ID: **2011226-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272434**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0323						0		30	
Chloromethane	ND	0.0807						0		30	
Vinyl chloride	ND	0.0323						0		30	
Bromomethane	ND	0.0807						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0323						0		30	
Chloroethane	ND	0.0807						0		30	
1,1-Dichloroethene	ND	0.0323						0		30	
Methylene chloride	ND	0.0323						0		30	
trans-1,2-Dichloroethene	ND	0.0323						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0323						0		30	
1,1-Dichloroethane	ND	0.0323						0		30	
cis-1,2-Dichloroethene	ND	0.0323						0		30	
Chloroform	ND	0.0323						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0323						0		30	
1,1-Dichloropropene	ND	0.0323						0		30	
Carbon tetrachloride	ND	0.0323						0		30	
1,2-Dichloroethane (EDC)	ND	0.0323						0		30	
Benzene	ND	0.0323						0		30	
Trichloroethene (TCE)	ND	0.0323						0		30	
1,2-Dichloropropane	ND	0.0323						0		30	
Bromodichloromethane	ND	0.0323						0		30	
Dibromomethane	ND	0.0323						0		30	
cis-1,3-Dichloropropene	ND	0.0323						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011226-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272434**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	ND	0.0323						0		30	
trans-1,3-Dichloropropylene	ND	0.0323						0		30	
1,1,2-Trichloroethane	ND	0.0323						0		30	
1,3-Dichloropropane	ND	0.0403						0		30	
Tetrachloroethene (PCE)	ND	0.0323						0		30	
Dibromochloromethane	ND	0.0323						0		30	
1,2-Dibromoethane (EDB)	ND	0.00807						0		30	
Chlorobenzene	ND	0.0323						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0323						0		30	
Ethylbenzene	ND	0.0403						0		30	
m,p-Xylene	ND	0.0807						0		30	
o-Xylene	ND	0.0403						0		30	
Styrene	ND	0.0323						0		30	
Isopropylbenzene	ND	0.0323						0		30	
Bromoform	ND	0.0807						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0323						0		30	
n-Propylbenzene	ND	0.0323						0		30	
Bromobenzene	ND	0.0323						0		30	
1,3,5-Trimethylbenzene	ND	0.0323						0		30	
2-Chlorotoluene	ND	0.0403						0		30	
4-Chlorotoluene	ND	0.0323						0		30	
tert-Butylbenzene	ND	0.0323						0		30	
1,2,3-Trichloropropane	ND	0.0403						0		30	
1,2,4-Trichlorobenzene	ND	0.0323						0		30	
sec-Butylbenzene	ND	0.0403						0		30	
4-Isopropyltoluene	ND	0.0403						0		30	
1,3-Dichlorobenzene	ND	0.0323						0		30	
1,4-Dichlorobenzene	ND	0.0323						0		30	
n-Butylbenzene	ND	0.0323						0		30	
1,2-Dichlorobenzene	ND	0.0323						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011226-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272434**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	0.807						0		30	
1,2,4-Trimethylbenzene	ND	0.0323						0		30	
Hexachloro-1,3-butadiene	ND	0.0403						0		30	
Naphthalene	ND	0.0807						0		30	
1,2,3-Trichlorobenzene	ND	0.0323						0		30	
Surr: Dibromofluoromethane	1.75		2.016		86.7	85.2	113		0		
Surr: Toluene-d8	1.91		2.016		94.6	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	1.99		2.016		98.7	88.6	109		0		

Sample ID: **2011226-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272436**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	3.26	0.0588	2.942	0	111	9.44	188				
Chloromethane	2.79	0.147	2.942	0	94.7	40.6	156				
Vinyl chloride	2.78	0.0588	2.942	0	94.5	52.8	150				
Bromomethane	2.97	0.147	2.942	0	101	41	165				
Trichlorofluoromethane (CFC-11)	2.67	0.0588	2.942	0	90.9	53.7	157				
Chloroethane	2.58	0.147	2.942	0	87.7	29.9	178				
1,1-Dichloroethene	2.67	0.0588	2.942	0	90.9	62.9	149				
Methylene chloride	2.53	0.0588	2.942	0	86.0	74.3	126				
trans-1,2-Dichloroethene	2.62	0.0588	2.942	0	89.1	73.1	130				
Methyl tert-butyl ether (MTBE)	2.85	0.0588	2.942	0	97.0	71.8	123				
1,1-Dichloroethane	2.59	0.0588	2.942	0	88.0	73	128				
cis-1,2-Dichloroethene	2.59	0.0588	2.942	0	87.9	77.5	125				
Chloroform	2.57	0.0588	2.942	0	87.2	76.8	127				
1,1,1-Trichloroethane (TCA)	2.61	0.0588	2.942	0	88.8	71.4	134				
1,1-Dichloropropene	2.68	0.0588	2.942	0	91.0	69	133				
Carbon tetrachloride	2.58	0.0588	2.942	0	87.6	67.5	136				
1,2-Dichloroethane (EDC)	2.60	0.0588	2.942	0	88.5	73.9	128				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011226-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272436**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.63	0.0588	2.942	0	89.5	74.6	126				
Trichloroethene (TCE)	2.64	0.0588	2.942	0	89.9	72	133				
1,2-Dichloropropane	2.58	0.0588	2.942	0	87.5	73.5	125				
Bromodichloromethane	2.55	0.0588	2.942	0	86.7	77.1	125				
Dibromomethane	2.68	0.0588	2.942	0	91.1	79.6	122				
cis-1,3-Dichloropropene	2.76	0.0588	2.942	0	93.7	71.8	122				
Toluene	2.68	0.0588	2.942	0	91.1	72.6	127				
trans-1,3-Dichloropropylene	2.82	0.0588	2.942	0	95.8	71.1	125				
1,1,2-Trichloroethane	2.78	0.0588	2.942	0	94.4	75.6	123				
1,3-Dichloropropane	2.74	0.0736	2.942	0	93.0	74.4	122				
Tetrachloroethene (PCE)	2.69	0.0588	2.942	0	91.5	72.7	128				
Dibromochloromethane	2.64	0.0588	2.942	0	89.6	78.3	120				
1,2-Dibromoethane (EDB)	2.78	0.0147	2.942	0	94.4	76.1	121				
Chlorobenzene	2.54	0.0588	2.942	0	86.4	74.9	124				
1,1,1,2-Tetrachloroethane	2.61	0.0588	2.942	0	88.9	75.3	126				
Ethylbenzene	2.61	0.0736	2.942	0	88.6	77.3	126				
m,p-Xylene	5.17	0.147	5.885	0	87.8	78.5	126				
o-Xylene	2.61	0.0736	2.942	0	88.8	79.4	123				
Styrene	2.56	0.0588	2.942	0	87.1	80	122				
Isopropylbenzene	2.61	0.0588	2.942	0	88.8	77.3	128				
Bromoform	2.80	0.147	2.942	0	95.2	68.7	131				
1,1,2,2-Tetrachloroethane	2.75	0.0588	2.942	0	93.3	58.2	134				
n-Propylbenzene	2.58	0.0588	2.942	0	87.7	76	130				
Bromobenzene	2.60	0.0588	2.942	0	88.4	80.3	123				
1,3,5-Trimethylbenzene	2.54	0.0588	2.942	0	86.3	75.8	128				
2-Chlorotoluene	2.52	0.0736	2.942	0	85.5	78.6	127				
4-Chlorotoluene	2.55	0.0588	2.942	0	86.6	79	126				
tert-Butylbenzene	2.55	0.0588	2.942	0	86.6	77.7	130				
1,2,3-Trichloropropane	2.75	0.0736	2.942	0	93.5	60.3	139				
1,2,4-Trichlorobenzene	2.78	0.0588	2.942	0	94.6	75.1	128				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011226-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272436**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
sec-Butylbenzene	2.53	0.0736	2.942	0	86.0	76.2	132				
4-Isopropyltoluene	2.49	0.0736	2.942	0	84.7	77.3	130				
1,3-Dichlorobenzene	2.66	0.0588	2.942	0	90.5	77.2	127				
1,4-Dichlorobenzene	2.68	0.0588	2.942	0	91.1	76.7	125				
n-Butylbenzene	2.52	0.0588	2.942	0	85.5	74.8	133				
1,2-Dichlorobenzene	2.71	0.0588	2.942	0	92.0	77.5	125				
1,2-Dibromo-3-chloropropane	2.90	1.47	2.942	0	98.6	59.9	139				
1,2,4-Trimethylbenzene	2.53	0.0588	2.942	0	85.9	68.4	135				
Hexachloro-1,3-butadiene	2.38	0.0736	2.942	0	81.0	71	145				
Naphthalene	3.06	0.147	2.942	0	104	64.3	140				
1,2,3-Trichlorobenzene	2.91	0.0588	2.942	0	98.8	67.2	133				
Surr: Dibromofluoromethane	3.74		3.678		102	85.2	113				
Surr: Toluene-d8	3.83		3.678		104	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	3.78		3.678		103	88.6	109				

Sample ID: **2011269-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272445**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0268						0		30	
Chloromethane	ND	0.0669						0		30	
Vinyl chloride	ND	0.0268						0		30	
Bromomethane	ND	0.0669						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0268						0		30	
Chloroethane	ND	0.0669						0		30	
1,1-Dichloroethene	ND	0.0268						0		30	
Methylene chloride	0.0280	0.0268						0.02512	10.9	30	
trans-1,2-Dichloroethene	ND	0.0268						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0268						0		30	
1,1-Dichloroethane	ND	0.0268						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011269-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272445**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	ND	0.0268						0		30	
Chloroform	ND	0.0268						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0268						0		30	
1,1-Dichloropropene	ND	0.0268						0		30	
Carbon tetrachloride	ND	0.0268						0		30	
1,2-Dichloroethane (EDC)	ND	0.0268						0		30	
Benzene	ND	0.0268						0		30	
Trichloroethene (TCE)	ND	0.0268						0		30	
1,2-Dichloropropane	ND	0.0268						0		30	
Bromodichloromethane	ND	0.0268						0		30	
Dibromomethane	ND	0.0268						0		30	
cis-1,3-Dichloropropene	ND	0.0268						0		30	
Toluene	ND	0.0268						0		30	
trans-1,3-Dichloropropylene	ND	0.0268						0		30	
1,1,2-Trichloroethane	ND	0.0268						0		30	
1,3-Dichloropropane	ND	0.0335						0		30	
Tetrachloroethene (PCE)	ND	0.0268						0		30	
Dibromochloromethane	ND	0.0268						0		30	
1,2-Dibromoethane (EDB)	ND	0.00669						0		30	
Chlorobenzene	ND	0.0268						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0268						0		30	
Ethylbenzene	ND	0.0335						0		30	
m,p-Xylene	ND	0.0669						0		30	
o-Xylene	ND	0.0335						0		30	
Styrene	ND	0.0268						0		30	
Isopropylbenzene	ND	0.0268						0		30	
Bromoform	ND	0.0669						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0268						0		30	
n-Propylbenzene	ND	0.0268						0		30	
Bromobenzene	ND	0.0268						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011269-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **11/13/2020** RunNo: **63405**
Client ID: **BATCH** Batch ID: **30400** Analysis Date: **11/13/2020** SeqNo: **1272445**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	0.0268						0		30	
2-Chlorotoluene	ND	0.0335						0		30	
4-Chlorotoluene	ND	0.0268						0		30	
tert-Butylbenzene	ND	0.0268						0		30	
1,2,3-Trichloropropane	ND	0.0335						0		30	
1,2,4-Trichlorobenzene	ND	0.0268						0		30	
sec-Butylbenzene	ND	0.0335						0		30	
4-Isopropyltoluene	ND	0.0335						0		30	
1,3-Dichlorobenzene	ND	0.0268						0		30	
1,4-Dichlorobenzene	ND	0.0268						0		30	
n-Butylbenzene	ND	0.0268						0		30	
1,2-Dichlorobenzene	ND	0.0268						0		30	
1,2-Dibromo-3-chloropropane	ND	0.669						0		30	
1,2,4-Trimethylbenzene	ND	0.0268						0		30	
Hexachloro-1,3-butadiene	ND	0.0335						0		30	
Naphthalene	ND	0.0669						0		30	
1,2,3-Trichlorobenzene	ND	0.0268						0		30	
Surr: Dibromofluoromethane	1.55		1.673		92.5	85.2	113		0		
Surr: Toluene-d8	1.64		1.673		98.0	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	1.63		1.673		97.2	88.6	109		0		

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30311** SampType: **LCS** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **LCSW** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268708**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	9.63	1.00	20.00	0	48.1	17.8	204				
Chloromethane	19.2	2.00	20.00	0	96.1	46.7	158				
Vinyl chloride	16.1	0.200	20.00	0	80.6	62.3	148				
Bromomethane	17.3	1.00	20.00	0	86.6	49.7	151				
Trichlorofluoromethane (CFC-11)	20.0	1.00	20.00	0	100	80.6	131				
Chloroethane	18.7	1.00	20.00	0	93.3	69.7	138				
1,1-Dichloroethene	20.0	1.00	20.00	0	99.8	77	134				
Acetone	53.6	5.00	50.00	0	107	62.9	140				
Methylene chloride	20.1	1.00	20.00	0	101	73.7	126				
trans-1,2-Dichloroethene	20.1	1.00	20.00	0	100	83	127				
Methyl tert-butyl ether (MTBE)	21.3	1.00	20.00	0	107	68.2	125				
1,1-Dichloroethane	21.5	1.00	20.00	0	108	70.3	133				
cis-1,2-Dichloroethene	20.0	1.00	20.00	0	100	83.7	122				
(MEK) 2-Butanone	50.9	2.00	50.00	0	102	62	135				
Chloroform	20.0	1.00	20.00	0	100	81.9	122				
1,1,1-Trichloroethane (TCA)	20.4	1.00	20.00	0	102	78.2	133				
1,1-Dichloropropene	20.6	1.00	20.00	0	103	84.1	127				
Carbon tetrachloride	20.2	1.00	20.00	0	101	81.8	129				
1,2-Dichloroethane (EDC)	20.3	1.00	20.00	0	102	73.3	123				
Benzene	20.2	1.00	20.00	0	101	80.5	126				
Trichloroethene (TCE)	20.6	0.500	20.00	0	103	75.5	132				
1,2-Dichloropropane	20.8	1.00	20.00	0	104	79.2	124				
Bromodichloromethane	20.0	1.00	20.00	0	100	78.4	122				
Dibromomethane	20.4	1.00	20.00	0	102	78.3	122				
cis-1,3-Dichloropropene	20.1	1.00	20.00	0	101	77.6	117				
Toluene	20.5	1.00	20.00	0	102	82.9	124				
trans-1,3-Dichloropropylene	20.3	1.00	20.00	0	101	72.5	122				
1,1,2-Trichloroethane	20.5	1.00	20.00	0	103	78.2	125				
1,3-Dichloropropane	20.5	1.00	20.00	0	103	76.7	124				
Tetrachloroethene (PCE)	20.6	1.00	20.00	0	103	90.5	121				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30311** SampType: **LCS** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **LCSW** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268708**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	20.3	1.00	20.00	0	101	77.1	122				
1,2-Dibromoethane (EDB)	20.3	0.250	20.00	0	102	77.9	122				
2-Hexanone (MBK)	51.3	1.00	50.00	0	103	61.2	134				
Chlorobenzene	18.9	1.00	20.00	0	94.7	84.3	121				
1,1,1,2-Tetrachloroethane	18.9	1.00	20.00	0	94.3	80.3	123				
Ethylbenzene	19.1	1.00	20.00	0	95.4	85.3	123				
m,p-Xylene	37.9	1.00	40.00	0	94.7	85.8	122				
o-Xylene	18.8	1.00	20.00	0	94.1	85.4	121				
Styrene	18.7	1.00	20.00	0	93.5	82	120				
Isopropylbenzene	19.0	1.00	20.00	0	95.2	87.7	123				
Bromoform	18.3	1.00	20.00	0	91.5	69.3	129				
1,1,2,2-Tetrachloroethane	18.7	1.00	20.00	0	93.6	74.4	133				
n-Propylbenzene	19.2	1.00	20.00	0	95.8	83.9	126				
Bromobenzene	18.9	1.00	20.00	0	94.6	85.1	120				
1,3,5-Trimethylbenzene	19.1	1.00	20.00	0	95.4	83.6	123				
2-Chlorotoluene	19.1	1.00	20.00	0	95.5	84.2	123				
4-Chlorotoluene	19.0	1.00	20.00	0	95.2	82.3	123				
tert-Butylbenzene	19.2	1.00	20.00	0	95.9	84.1	126				
1,2,3-Trichloropropane	18.8	1.00	20.00	0	93.9	73.6	118				
1,2,4-Trichlorobenzene	18.1	2.00	20.00	0	90.3	73.2	129				
sec-Butylbenzene	19.3	1.00	20.00	0	96.6	83.9	126				
4-Isopropyltoluene	20.3	1.00	20.00	0	101	83.3	124				
1,3-Dichlorobenzene	19.6	1.00	20.00	0	98.0	87.3	121				
1,4-Dichlorobenzene	19.4	1.00	20.00	0	97.2	87.4	119				
n-Butylbenzene	20.8	1.00	20.00	0	104	82.8	124				
1,2-Dichlorobenzene	19.6	1.00	20.00	0	98.2	87.8	119				
1,2-Dibromo-3-chloropropane	18.7	1.00	20.00	0	93.3	61.6	135				
1,2,4-Trimethylbenzene	20.0	1.00	20.00	0	100	82.1	124				
Hexachloro-1,3-butadiene	20.1	0.500	20.00	0	100	79.8	129				
Naphthalene	17.6	1.00	20.00	0	88.0	67	138				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **LCS-30311** SampType: **LCS** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **LCSW** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268708**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trichlorobenzene	17.8	4.00	20.00	0	89.1	72.3	131				
Surr: Dibromofluoromethane	24.4		25.00		97.7	84.8	113				
Surr: Toluene-d8	27.0		25.00		108	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	89.9	108				

Sample ID: **MB-30311** SampType: **MBLK** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **MBLKW** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268706**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00									Q
Chloromethane	ND	2.00									
Vinyl chloride	ND	0.200									
Bromomethane	ND	1.00									
Trichlorofluoromethane (CFC-11)	ND	1.00									
Chloroethane	ND	1.00									
1,1-Dichloroethene	ND	1.00									
Acetone	ND	5.00									
Methylene chloride	ND	1.00									
trans-1,2-Dichloroethene	ND	1.00									
Methyl tert-butyl ether (MTBE)	ND	1.00									
1,1-Dichloroethane	ND	1.00									
cis-1,2-Dichloroethene	ND	1.00									
(MEK) 2-Butanone	ND	2.00									
Chloroform	ND	1.00									
1,1,1-Trichloroethane (TCA)	ND	1.00									
1,1-Dichloropropene	ND	1.00									
Carbon tetrachloride	ND	1.00									
1,2-Dichloroethane (EDC)	ND	1.00									
Benzene	ND	1.00									
Trichloroethene (TCE)	ND	0.500									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30311** SampType: **MBLK** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **MBLKW** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268706**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	ND	1.00									
Bromodichloromethane	ND	1.00									
Dibromomethane	ND	1.00									
cis-1,3-Dichloropropene	ND	1.00									
Toluene	ND	1.00									
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	0.250									
2-Hexanone (MBK)	ND	1.00									
Chlorobenzene	ND	1.00									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **MB-30311** SampType: **MBLK** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **MBLKW** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268706**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									
Hexachloro-1,3-butadiene	ND	0.500									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	24.5		25.00		98.2	84.8	113				
Surr: Toluene-d8	24.8		25.00		99.2	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	25.2		25.00		101	89.9	108				

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011094-007ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **SB04-20201104-EB** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268683**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	11.2	5.00						10.61	5.45	30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011094-007ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **SB04-20201104-EB** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268683**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
(MEK) 2-Butanone	ND	2.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
2-Hexanone (MBK)	ND	1.00						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011094-007ADUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **SB04-20201104-EB** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268683**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	24.9		25.00		99.5	84.8	113		0		
Surr: Toluene-d8	24.8		25.00		99.1	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	25.3		25.00		101	89.9	108		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011100-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **BATCH** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268685**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011100-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **BATCH** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268685**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	2.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Acetone	ND	5.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
(MEK) 2-Butanone	ND	2.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011100-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **BATCH** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268685**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromoethane (EDB)	ND	0.250						0		30	
2-Hexanone (MBK)	ND	1.00						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	0.500						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011100-001BDUP** SampType: **DUP** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **BATCH** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268685**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	25.1		25.00		101	84.8	113		0		
Surr: Toluene-d8	25.0		25.00		99.9	88.5	110		0		
Surr: 1-Bromo-4-fluorobenzene	25.2		25.00		101	89.9	108		0		

NOTES:
Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria

Sample ID: **2011100-002BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **BATCH** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268687**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	14.3	1.00	20.00	0	71.6	17.8	204				
Chloromethane	17.2	2.00	20.00	0	85.8	46.7	158				
Vinyl chloride	18.0	0.200	20.00	0	90.1	62.3	148				
Bromomethane	16.5	1.00	20.00	0	82.7	49.7	151				
Trichlorofluoromethane (CFC-11)	20.9	1.00	20.00	0	105	80.6	131				
Chloroethane	19.9	1.00	20.00	0	99.3	69.7	138				
1,1-Dichloroethene	22.2	1.00	20.00	0	111	77	134				
Acetone	53.0	5.00	50.00	0	106	62.9	140				
Methylene chloride	21.7	1.00	20.00	0	108	73.7	126				
trans-1,2-Dichloroethene	21.6	1.00	20.00	0	108	83	127				
Methyl tert-butyl ether (MTBE)	22.1	1.00	20.00	0	110	68.2	125				
1,1-Dichloroethane	23.1	1.00	20.00	0	116	70.3	133				
cis-1,2-Dichloroethene	20.9	1.00	20.00	0	105	83.7	122				
(MEK) 2-Butanone	49.1	2.00	50.00	0	98.2	62	135				
Chloroform	21.3	1.00	20.00	0	106	81.9	122				
1,1,1-Trichloroethane (TCA)	21.9	1.00	20.00	0	109	78.2	133				
1,1-Dichloropropene	22.0	1.00	20.00	0	110	84.1	127				
Carbon tetrachloride	22.4	1.00	20.00	0	112	81.8	129				
1,2-Dichloroethane (EDC)	21.1	1.00	20.00	0	106	73.3	123				
Benzene	21.8	1.00	20.00	0	109	80.5	126				
Trichloroethene (TCE)	21.3	0.500	20.00	0	106	75.5	132				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011100-002BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **BATCH** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268687**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dichloropropane	21.6	1.00	20.00	0	108	79.2	124				
Bromodichloromethane	20.6	1.00	20.00	0	103	78.4	122				
Dibromomethane	21.2	1.00	20.00	0	106	78.3	122				
cis-1,3-Dichloropropene	19.9	1.00	20.00	0	99.7	77.6	117				
Toluene	22.0	1.00	20.00	0	110	82.9	124				
trans-1,3-Dichloropropylene	20.5	1.00	20.00	0	103	72.5	122				
1,1,2-Trichloroethane	21.3	1.00	20.00	0	106	78.2	125				
1,3-Dichloropropane	21.0	1.00	20.00	0	105	76.7	124				
Tetrachloroethene (PCE)	22.0	1.00	20.00	0	110	90.5	121				
Dibromochloromethane	21.3	1.00	20.00	0	106	77.1	122				
1,2-Dibromoethane (EDB)	20.8	0.250	20.00	0	104	77.9	122				
2-Hexanone (MBK)	50.8	1.00	50.00	0	102	61.2	134				
Chlorobenzene	21.0	1.00	20.00	0	105	84.3	121				
1,1,1,2-Tetrachloroethane	21.1	1.00	20.00	0	105	80.3	123				
Ethylbenzene	21.7	1.00	20.00	0	109	85.3	123				
m,p-Xylene	42.8	1.00	40.00	0	107	85.8	122				
o-Xylene	21.1	1.00	20.00	0	105	85.4	121				
Styrene	20.4	1.00	20.00	0	102	82	120				
Isopropylbenzene	21.6	1.00	20.00	0	108	87.7	123				
Bromoform	20.7	1.00	20.00	0	103	69.3	129				
1,1,2,2-Tetrachloroethane	21.4	1.00	20.00	0	107	74.4	133				
n-Propylbenzene	21.6	1.00	20.00	0	108	83.9	126				
Bromobenzene	20.9	1.00	20.00	0	105	85.1	120				
1,3,5-Trimethylbenzene	21.5	1.00	20.00	0	107	83.6	123				
2-Chlorotoluene	21.5	1.00	20.00	0	107	84.2	123				
4-Chlorotoluene	21.5	1.00	20.00	0	108	82.3	123				
tert-Butylbenzene	21.7	1.00	20.00	0	109	84.1	126				
1,2,3-Trichloropropane	20.7	1.00	20.00	0	103	73.6	118				
1,2,4-Trichlorobenzene	20.5	2.00	20.00	0	103	73.2	129				
sec-Butylbenzene	21.9	1.00	20.00	0	109	83.9	126				

Work Order: 2011094
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260D

Sample ID: **2011100-002BMS** SampType: **MS** Units: **µg/L** Prep Date: **11/6/2020** RunNo: **63219**
Client ID: **BATCH** Batch ID: **30311** Analysis Date: **11/6/2020** SeqNo: **1268687**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	22.3	1.00	20.00	0	111	83.3	124				
1,3-Dichlorobenzene	21.2	1.00	20.00	0	106	87.3	121				
1,4-Dichlorobenzene	21.2	1.00	20.00	0	106	87.4	119				
n-Butylbenzene	22.9	1.00	20.00	0	115	82.8	124				
1,2-Dichlorobenzene	21.2	1.00	20.00	0	106	87.8	119				
1,2-Dibromo-3-chloropropane	21.9	1.00	20.00	0	109	61.6	135				
1,2,4-Trimethylbenzene	22.5	1.00	20.00	0	112	82.1	124				
Hexachloro-1,3-butadiene	21.6	0.500	20.00	0	108	79.8	129				
Naphthalene	19.2	1.00	20.00	0	95.8	67	138				
1,2,3-Trichlorobenzene	19.9	4.00	20.00	0	99.4	72.3	131				
Surr: Dibromofluoromethane	23.7		25.00		95.0	84.8	113				
Surr: Toluene-d8	25.3		25.00		101	88.5	110				
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	89.9	108				

Sample Log-In Check List

Client Name:	**RAMBOL**	Work Order Number:	**2011094**
Logged by:	**Carissa True**	Date Received:	**11/4/2020 5:53:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No ☐	Not Present	☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☑	No ☐	NA	☐
4.	Shipping container/cooler in good condition?	Yes	☑	No ☐		
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No ☐	Not Present	☑
6.	Was an attempt made to cool the samples?	Yes	☑	No ☐	NA	☐
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☑	No ☐	NA	☐
8.	Sample(s) in proper container(s)?	Yes	☑	No ☐		
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No ☐		
10.	Are samples properly preserved?	Yes	☑	No ☐		
11.	Was preservative added to bottles?	Yes	☐	No ☑	NA	☐
12.	Is there headspace in the VOA vials?	Yes	☐	No ☑	NA	☐
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No ☐		
14.	Does paperwork match bottle labels?	Yes	☑	No ☐		
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No ☐		
16.	Is it clear what analyses were requested?	Yes	☑	No ☐		
17.	Were all holding times able to be met?	Yes	☑	No ☐		

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No ☐	NA	☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample	3.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11-4-20 Page: 1 of: 1

Laboratory Project No (internal): 2011094

Project Name: Delta Marine

Special Remarks: ~~Report to SL~~

Client: Ramboll

Project No:

Address: 901 5th Ave. Ste 2820

Collected by: S Leick

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): A. Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Report to MTCA CULs	Comments
1	SB03-5.5-20201104	11/4/20	1245	S	X			H		H		H	H	H				Hold for all analyses
2	SB02-2.5-20201104	11/4/20	1330	S	X			X		X		H	H	X				Hold for PAHs + PCBs
3	SB02-5-20201104	11/4/20	1335	S	H			H		H		H	H	H				Hold for all analyses
4	SB05-3.5-20201104	11/4/20	1455	S	X			X		X		H	H	X				Hold for PAHs + PCBs
5	SB05-6-20201104	11/4/20	1500	S	H			H		H		H	H	H				Hold for all analyses
6	SB105-3.5-20201104	11/4/20	1515	S	X			X		X		H	H	X				Hold for PAHs + PCBs
7	SB04-20201104-EB	11/4/20	1520	W	X			X		X				X				
8	SB04-3-20201104	11/4/20	1625	S	X			X		X		H	H	X				Hold for PAHs + PCBs
9	SB04-6-20201104	11/4/20	1630	S	H			H		H		H	H	H				Hold for all analyses
10	TB-20201104	11/4/20	1648	W	X													

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-around Time:
- ☑ Standard - All others
- ☑ 3 Day - TPH-dx only
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

Relinquished	Date/Time	Received	Date/Time
x Sam Teicle	11/4/20 1850	x Ryan Littrell	11/4/2020 $753
Relinquished	Date/Time	Received	Date/Time
x		x	

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11-4-20 Page: 1 of: 1

Laboratory Project No (internal): 2011094

Project Name: Delta Marine

Special Remarks:

~~Report to SL~~

X = Run per AK, Std TAT, 11/10/20 -CG

Project No:

Client: Ramboll

Address: 901 5th Ave. Ste 2820

Collected by: S Leick

City, State, Zip: Seattle, WA 98164

Location: Delta Marine

Telephone: 262-358-0557

Report To (PM): A. Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
																	Report to MTCA CULs
1	SB03-5.5-20201104	11/4/20	1245	S	X			H		H		H	H	H				Hold for all analyses
2	SB02-2.5-20201104	11/4/20	1330	S	X			X		X		H	H	X				Hold for PAHs + PCBs
3	SB02-5-20201104	11/4/20	1335	S	H			H		H		H	H	H				Hold for all analyses
4	SB05-3.5-20201104	11/4/20	1455	S	X			X		X		H	H	X				Hold for PAHs + PCBs
5	SB05-6-20201104	11/4/20	1500	S	H			H		H		H	H	H				Hold for all analyses
6	SB105-3.5-20201104	11/4/20	1515	S	X			X		X		H	H	X				Hold for PAHs + PCBs
7	SB04-20201104-EB	11/4/20	1520	W	X			X		X		X		X				
8	SB04-3-20201104	11/4/20	1625	S	X			X		X		H	H	X				Hold for PAHs + PCBs
9	SB04-6-20201104	11/4/20	1630	S	H			H		H		H	H	H				Hold for all analyses
10	TB-20201104	11/4/20	1648	W	X													

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-around Time:

- ☑ Standard - All others
- ☑ 3 Day - TPH-dx only
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

Relinquished	Date/Time	Received	Date/Time
x Sam Teicle	11/4/20 1850	x Ryan Littrell	11/4/2020 $753
Relinquished	Date/Time	Received	Date/Time
x		x	

Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11-4-20 Page: 1 of: 1

Laboratory Project No (internal): 2011094

Project Name: Delta Marine

Project No:

Special Remarks:

~~Report to SL~~

X = Run per AK, Std TAT, 11/10/20 -CG

Client: Ramboll

Address: 901 5th Ave. Ste 2820

City, State, Zip: Seattle, WA 98164

Telephone: 262-358-0557

Collected by: S Leick

Location: Delta Marine

Report To (PM): A. Kephart

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

Fax:

PM Email: AKephart@Ramboll.com

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
																		Report to MTCA CULs
1	SB03-5.5-20201104	11/4/20	1245	S	X			H		H		H	H	H				Run VOC,Gx,Dx and Metals per A.K. 11/10/20 -BB Hold for all analyses
2	SB02-2.5-20201104	11/4/20	1330	S	X			X		X		H	H	X				Hold for PAHs + PCBs
3	SB02-5-20201104	11/4/20	1335	S	H			H		H		H	H	H				Hold for all analyses
4	SB05-3.5-20201104	11/4/20	1455	S	X			X		X		H	H	X				Hold for PAHs + PCBs
5	SB05-6-20201104	11/4/20	1500	S	H			H		H		H	H	H				Hold for all analyses
6	SB105-3.5-20201104	11/4/20	1515	S	X			X		X		H	H	X				Hold for PAHs + PCBs
7	SB04-20201104-EB	11/4/20	1520	W	X			X		X		X		X				
8	SB04-3-20201104	11/4/20	1625	S	X			X		X		H	H	X				Hold for PAHs + PCBs
9	SB04-6-20201104	11/4/20	1630	S	H			H		H		H	H	H				Hold for all analyses
10	TB-20201104	11/4/20	1648	W	X													

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-around Time:

- ☑ Standard - All others
- ☑ 3 Day - TPH-dx only
- ☐ 2 Day
- ☐ Next Day
- Same Day ____ (specify)

Relinquished	Date/Time	Received	Date/Time
x Sam Teisl	11/4/20 1850	x Ryan Littrell	11/4/2020 $753
Relinquished	Date/Time	Received	Date/Time
x		x	

Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 11-4-20 Page: 1 of: 1

Laboratory Project No (internal): 2011094

Project Name: Delta Marine

Project No:

Collected by: S Leick

Location: Delta Marine

Report To (PM): A. Kephart

PM Email: AKephart@Ramboll.com

Client: Ramboll

Address: 901 5th Ave. Ste 2820

City, State, Zip: Seattle, WA 98164

Telephone: 262-358-0557

Fax:

Special Remarks:

~~Report to~~ SL

X = Run per AK, Std TAT, 11/10/20 -CG

X = off hold per AK, Std TAT, 11/16/20 -CG

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	Comments (Report to MTCA CULs)
1	SB03-5.5-20201104	11/4/20	1245	S	X			H		H		X	X	H				Run VOC,Gx,Dx and Metals per A.K. 11/10/20 -BB ~~Hold for~~ all analyses
2	SB02-2.5-20201104	11/4/20	1330	S	X			X		X		X	X	X				Hold for PAHs + PCBs
3	SB02-5-20201104	11/4/20	1335	S	H			H		H		H	H	H				Hold for all analyses
4	SB05-3.5-20201104	11/4/20	1455	S	X			X		X		X	X	X				Hold for PAHs + PCBs
5	SB05-6-20201104	11/4/20	1500	S	H			H		H		H	H	H				Hold for all analyses
6	SB105-3.5-20201104	11/4/20	1515	S	X			X		X		X	X	X				Hold for PAHs + PCBs
7	SB04-20201104-EB	11/4/20	1520	W	X			X		X		X		X				
8	SB04-3-20201104	11/4/20	1625	S	X			X		X		X	X	X				Hold for PAHs + PCBs
9	SB04-6-20201104	11/4/20	1630	S	H			H		H		H	H	H				Hold for all analyses
10	TB-20201104	11/4/20	1648	W	X													

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 (Priority Pollutants) TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☑ Standard - All others
☑ 3 Day - TPH-dx only
☐ 2 Day
☐ Next Day
Same Day ______ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11/4/20 / 1850	x [signature]	11/4/2020 1753
Relinquished x	Date/Time	Received x	Date/Time

Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 11-4-20 Page: 1 of: 1

Laboratory Project No (internal): 2011094

Project Name: Delta Marine

Project No:

Collected by: S Leick

Location: Delta Marine

Report To (PM): A. Kephart

PM Email: AKephart@Ramboll.com

Client: Ramboll

Address: 901 5th Ave. Ste 2820

City, State, Zip: Seattle, WA 98104

Telephone: 262-358-0557

Fax:

Special Remarks:
X = add per AK, Std TAT, 11/23/20 -CG
~~Report to~~ SL
X = Run per AK, Std TAT, 11/10/20 -CG
X = off hold per AK, Std TAT, 11/16/20 -CG

Sample Disposal: ☐ Return to client ☐ Disposal by lab (after 30 days)

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	TCLP Pb/As	Comments (Report to MTCA CULs)
1	SB03-5.5-20201104	11/4/20	1245	S	X			H		H		X	X	H					Run VOC,Gx,Dx and Metals per A.K. 11/10/20 -BB ~~Hold for~~ all analyses
2	SB02-2.5-20201104	11/4/20	1330	S	X			X		X		X	X	X				X	Hold for PAHs + PCBs
3	SB02-5-20201104	11/4/20	1335	S	H			H		H		H	H	X					Pb & As Hold for all analyses
4	SB05-3.5-20201104	11/4/20	1455	S	X			X		X		X	X	X					Hold for PAHs + PCBs
5	SB05-6-20201104	11/4/20	1500	S	H			H		H		H	H	H					Hold for all analyses
6	SB105-3.5-20201104	11/4/20	1515	S	X			X		X		X	X	X					Hold For PAHs + PCBs
7	SB04-20201104-EB	11/4/20	1520	W	X			X		X		X	X	X					
8	SB04-3-20201104	11/4/20	1625	S	X			X		X		X	X	X					Hold For PAHs + PCBs
9	SB04-6-20201104	11/4/20	1630	S	H			H		H		H	H	H					Hold for all analyses
10	TB-20201104	11/4/20	1648	W	X														

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 (Priority Pollutants) TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around Time:
☑ Standard - All others
☑ 3 Day - TPH-dx only
☐ 2 Day
☐ Next Day
Same Day ______ (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Sam Leick	11/4/20 / 1850	x Ryan Littrell	11/4/2020 $7.5
x		x	

COC 1.2 - 2.22.17

www.fremontanalytical.com

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Ramboll Environ
Amy Kephart
901 5th Ave., Ste. 2820
Seattle, WA 98164

RE: Delta Marine
Work Order Number: 2011098

November 12, 2020

Attention Amy Kephart:

Fremont Analytical, Inc. received 8 sample(s) on 11/5/2020 for the analyses presented in the following report.

Petroleum Fractionation by EPA Method TO-15
Volatile Organic Compounds by EPA Method TO-15

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

CC:
Sam Leick

Date: *11/12/2020*

CLIENT: Ramboll Environ
Project: Delta Marine
Work Order: 2011098

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2011098-001	SV01-20201103	11/03/2020 5:38 PM	11/05/2020 9:10 AM
2011098-002	SV04-20201104	11/04/2020 5:03 PM	11/05/2020 9:10 AM
2011098-003	SV02-20201104	11/04/2020 2:22 PM	11/05/2020 9:10 AM
2011098-004	SV11-20201103	11/03/2020 5:20 PM	11/05/2020 9:10 AM
2011098-005	SV03-20201104	11/04/2020 2:00 PM	11/05/2020 9:10 AM
2011098-006	SV06-20201104	11/04/2020 1:09 PM	11/05/2020 9:10 AM
2011098-007	SV07-20201104	11/04/2020 10:46 AM	11/05/2020 9:10 AM
2011098-008	SV05-20201104	11/04/2020 3:57 PM	11/05/2020 9:10 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2011098**
Date: **11/12/2020**

CLIENT: Ramboll Environ
Project: Delta Marine

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Air samples are reported in ppbv and ug/m3.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Standard temperature and pressure assumes 24.45 = (25C and 1 atm).

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: Ramboll Environ
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV01-20201103
Lab ID: 2011098-001A
Sample Type: Summa Canister

Date Sampled: 11/3/2020
Date Received: 11/5/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15								
	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	11/11/2020	MS
1-methyl-3-ethylbenzene	<0.221	<1.09	0.221	1.09		EPA-TO-15	11/11/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	11/11/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	11/11/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC5-8)	10.4	39.4	7.50	28.5		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC9-12)	8.16	48.0	7.50	44.2		EPA-TO-15	11/11/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	11/11/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	11/11/2020	MS
Isopentane	3.28	9.68	0.711	2.10	*	EPA-TO-15	11/11/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	11/11/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	11/11/2020	MS
Dodecane	<1.10	<7.65	1.10	7.65		EPA-TO-15	11/11/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	11/11/2020	MS
Undecane	<0.724	<5.04	0.724	5.04		EPA-TO-15	11/11/2020	MS
Octane	<0.503	<2.35	0.503	2.35		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	80.4 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
* - Flagged value is not within established control limits.

Volatile Organic Compounds by EPA Method TO-15

	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	11/11/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	11/11/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	11/11/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73	I	EPA-TO-15	11/11/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	11/11/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	11/11/2020	MS
1,2,4-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54	I	EPA-TO-15	11/11/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV01-20201103
Lab ID: 2011098-001A
Sample Type: Summa Canister

Date Sampled: 11/3/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	11/11/2020	MS
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31	I	EPA-TO-15	11/11/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	11/11/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44	I	EPA-TO-15	11/11/2020	MS
(MEK) 2-Butanone	<1.00	<2.95	1.00	2.95		EPA-TO-15	11/11/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	11/11/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Acetone	3.24	7.70	1.00	2.38		EPA-TO-15	11/11/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	11/11/2020	MS
Benzene	0.240	0.766	0.0895	0.286		EPA-TO-15	11/11/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	11/11/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01	I	EPA-TO-15	11/11/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	11/11/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	11/11/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	11/11/2020	MS
Carbon tetrachloride	0.0757	0.476	0.0657	0.413		EPA-TO-15	11/11/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	11/11/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26	I	EPA-TO-15	11/11/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	11/11/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	11/11/2020	MS
Chloromethane	0.582	1.20	0.500	1.03		EPA-TO-15	11/11/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82	I	EPA-TO-15	11/11/2020	MS
Cyclohexane	<0.400	<1.38	0.400	1.38	I	EPA-TO-15	11/11/2020	MS
Dichlorodifluoromethane (CFC-12)	0.529	2.61	0.400	1.98		EPA-TO-15	11/11/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV01-20201103
Lab ID: 2011098-001A
Sample Type: Summa Canister

Date Sampled: 11/3/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	11/11/2020	MS
Ethylbenzene	<0.400	<1.74	0.400	1.74		EPA-TO-15	11/11/2020	MS
Heptane	<0.400	<1.61	0.400	1.61		EPA-TO-15	11/11/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	11/11/2020	MS
m,p-Xylene	<0.800	<3.47	0.800	3.47		EPA-TO-15	11/11/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64	I	EPA-TO-15	11/11/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	11/11/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	11/11/2020	MS
n-Hexane	<0.400	<1.41	0.400	1.41		EPA-TO-15	11/11/2020	MS
o-Xylene	<0.400	<1.74	0.400	1.74		EPA-TO-15	11/11/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	11/11/2020	MS
Propylene	4.76	8.20	0.400	0.688	B	EPA-TO-15	11/11/2020	MS
Styrene	<0.400	<1.70	0.400	1.70		EPA-TO-15	11/11/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
Tetrachloroethene (PCE)	<0.200	<1.36	0.200	1.36	I	EPA-TO-15	11/11/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	11/11/2020	MS
Toluene	10.2	38.5	0.400	1.51	I	EPA-TO-15	11/11/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27	I	EPA-TO-15	11/11/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349	I	EPA-TO-15	11/11/2020	MS
Trichlorofluoromethane (CFC-11)	<0.400	<2.25	0.400	2.25		EPA-TO-15	11/11/2020	MS
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	11/11/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	75.8 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.

Client: Ramboll Environ
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV04-20201104
Lab ID: 2011098-002A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	1.08	5.32	0.403	1.98		EPA-TO-15	11/11/2020	MS
1-methyl-3-ethylbenzene	1.70	8.37	0.221	1.09		EPA-TO-15	11/11/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	11/11/2020	MS
2,3-Dimethylpentane	12.9	53.0	0.715	2.93		EPA-TO-15	11/11/2020	MS
p-isopropyltoluene	1.40	7.68	0.447	2.45		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC5-8)	1,940	7,370	75.0	285		EPA-TO-15	11/10/2020	MS
Aliphatic Hydrocarbon (EC9-12)	248	1,460	75.0	442		EPA-TO-15	11/10/2020	MS
Aromatic Hydrocarbon (EC9-10)	14.1	71.1	6.25	31.4		EPA-TO-15	11/11/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	11/11/2020	MS
Isopentane	<0.711	<2.10	0.711	2.10		EPA-TO-15	11/11/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	11/11/2020	MS
Butylcyclohexane	2.06	11.8	0.544	3.12		EPA-TO-15	11/11/2020	MS
Dodecane	13.8	96.2	1.10	7.65		EPA-TO-15	11/11/2020	MS
Nonane	3.05	16.0	0.487	2.55		EPA-TO-15	11/11/2020	MS
Undecane	5.29	36.8	0.724	5.04		EPA-TO-15	11/11/2020	MS
Octane	2.91	13.6	0.503	2.35		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	113 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS
Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	11/11/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	11/11/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	11/11/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	11/11/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	11/11/2020	MS
1,2,4-Trimethylbenzene	2.30	11.3	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	11/11/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	11/11/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV04-20201104
Lab ID: 2011098-002A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	11/11/2020	MS
1,3,5-Trimethylbenzene	0.622	3.06	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,3-Butadiene	2.61	5.78	0.500	1.11		EPA-TO-15	11/11/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
(MEK) 2-Butanone	16.4	48.4	1.00	2.95		EPA-TO-15	11/11/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Isopropyl Alcohol	4.59	11.3	1.00	2.46		EPA-TO-15	11/11/2020	MS
4-Methyl-2-pentanone (MIBK)	1.05	4.28	1.00	4.10		EPA-TO-15	11/11/2020	MS
Acetone	1,900	4,500	10.0	23.8	E	EPA-TO-15	11/10/2020	MS
Acrolein	1.03	2.36	0.125	0.287		EPA-TO-15	11/11/2020	MS
Benzene	0.981	3.14	0.0895	0.286		EPA-TO-15	11/11/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	11/11/2020	MS
Dichlorobromomethane	0.463	3.10	0.300	2.01		EPA-TO-15	11/11/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	11/11/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	11/11/2020	MS
Carbon disulfide	7.87	24.5	1.50	4.67		EPA-TO-15	11/11/2020	MS
Carbon tetrachloride	0.0829	0.522	0.0657	0.413		EPA-TO-15	11/11/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	11/11/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	11/11/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	11/11/2020	MS
Chloroform	0.440	2.15	0.200	0.977		EPA-TO-15	11/11/2020	MS
Chloromethane	0.745	1.54	0.500	1.03		EPA-TO-15	11/11/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	11/11/2020	MS
Cyclohexane	974	3,350	4.00	13.8	E	EPA-TO-15	11/10/2020	MS
Dichlorodifluoromethane (CFC-12)	0.499	2.47	0.400	1.98		EPA-TO-15	11/11/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	11/11/2020	MS
Ethyl acetate	8.38	30.2	1.00	3.60		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV04-20201104
Lab ID: 2011098-002A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	2.08	9.02	0.400	1.74		EPA-TO-15	11/11/2020	MS
Heptane	55.5	223	4.00	16.1		EPA-TO-15	11/10/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	11/11/2020	MS
m,p-Xylene	6.84	29.7	0.800	3.47		EPA-TO-15	11/11/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	11/11/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	11/11/2020	MS
Naphthalene	1.15	6.05	0.100	0.524		EPA-TO-15	11/11/2020	MS
n-Hexane	4.53	16.0	0.400	1.41		EPA-TO-15	11/11/2020	MS
o-Xylene	3.08	13.4	0.400	1.74		EPA-TO-15	11/11/2020	MS
4-Ethyltoluene	0.629	3.09	0.400	1.97		EPA-TO-15	11/11/2020	MS
Propylene	1,150	1,970	4.00	6.88	E	EPA-TO-15	11/10/2020	MS
Styrene	68.8	293	4.00	17.0		EPA-TO-15	11/10/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
Tetrachloroethene (PCE)	0.418	2.84	0.200	1.36		EPA-TO-15	11/11/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	11/11/2020	MS
Toluene	34.0	128	4.00	15.1		EPA-TO-15	11/10/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	11/11/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	11/11/2020	MS
Trichlorofluoromethane (CFC-11)	0.478	2.68	0.400	2.25		EPA-TO-15	11/11/2020	MS
Vinyl acetate	365	1,290	10.0	35.2	E	EPA-TO-15	11/10/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	109 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Client: Ramboll Environ
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV02-20201104
Lab ID: 2011098-003A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15								
	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,2,3-Trimethylbenzene	9.21	45.3	0.403	1.98		EPA-TO-15	11/11/2020	MS
1-methyl-3-ethylbenzene	13.3	65.4	0.221	1.09		EPA-TO-15	11/11/2020	MS
2,3-Dimethylheptane	0.503	2.64	0.427	2.24		EPA-TO-15	11/11/2020	MS
2,3-Dimethylpentane	7.76	31.8	0.715	2.93		EPA-TO-15	11/11/2020	MS
p-isopropyltoluene	1.43	7.84	0.447	2.45		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC5-8)	622	2,370	75.0	285		EPA-TO-15	11/10/2020	MS
Aliphatic Hydrocarbon (EC9-12)	96.2	566	7.50	44.2		EPA-TO-15	11/11/2020	MS
Aromatic Hydrocarbon (EC9-10)	111	560	6.25	31.4		EPA-TO-15	11/11/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	11/11/2020	MS
Isopentane	128	378	7.11	21.0	*	EPA-TO-15	11/10/2020	MS
Isopropylbenzene	0.588	2.89	0.349	1.72		EPA-TO-15	11/11/2020	MS
Butylcyclohexane	0.607	3.48	0.544	3.12		EPA-TO-15	11/11/2020	MS
Dodecane	8.96	62.5	1.10	7.65		EPA-TO-15	11/11/2020	MS
Nonane	1.52	7.97	0.487	2.55		EPA-TO-15	11/11/2020	MS
Undecane	5.27	36.7	0.724	5.04		EPA-TO-15	11/11/2020	MS
Octane	10.8	50.6	0.503	2.35		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	105 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
* - Flagged value is not within established control limits.

Volatile Organic Compounds by EPA Method TO-15

	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	11/11/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	11/11/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	11/11/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	11/11/2020	MS
1,2,4-Trichlorobenzene	0.507	3.76	0.300	2.23		EPA-TO-15	11/11/2020	MS
1,2,4-Trimethylbenzene	14.2	69.9	3.00	14.7	I	EPA-TO-15	11/10/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	11/11/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV02-20201104
Lab ID: 2011098-003A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloroethane	0.206	0.832	0.200	0.809		EPA-TO-15	11/11/2020	MS
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	11/11/2020	MS
1,3,5-Trimethylbenzene	7.51	36.9	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	11/11/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
(MEK) 2-Butanone	19.0	56.1	1.00	2.95		EPA-TO-15	11/11/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Isopropyl Alcohol	2.16	5.30	1.00	2.46		EPA-TO-15	11/11/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Acetone	145	344	10.0	23.8	I	EPA-TO-15	11/10/2020	MS
Acrolein	2.36	5.42	0.125	0.287		EPA-TO-15	11/11/2020	MS
Benzene	11.5	36.9	0.0895	0.286		EPA-TO-15	11/11/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	11/11/2020	MS
Dichlorobromomethane	0.817	5.47	0.300	2.01		EPA-TO-15	11/11/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	11/11/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	11/11/2020	MS
Carbon disulfide	17.5	54.6	1.50	4.67		EPA-TO-15	11/11/2020	MS
Carbon tetrachloride	0.0930	0.585	0.0657	0.413		EPA-TO-15	11/11/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	11/11/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	11/11/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	11/11/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	11/11/2020	MS
Chloromethane	2.91	6.01	0.500	1.03		EPA-TO-15	11/11/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	11/11/2020	MS
Cyclohexane	18.3	63.0	4.00	13.8	I	EPA-TO-15	11/10/2020	MS
Dichlorodifluoromethane (CFC-12)	0.502	2.48	0.400	1.98		EPA-TO-15	11/11/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	11/11/2020	MS

Client: Ramboll Environ
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV02-20201104
Lab ID: 2011098-003A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethyl acetate	12.1	43.8	1.00	3.60		EPA-TO-15	11/11/2020	MS
Ethylbenzene	6.95	30.2	0.400	1.74		EPA-TO-15	11/11/2020	MS
Heptane	5.71	22.9	0.400	1.61		EPA-TO-15	11/11/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	11/11/2020	MS
m,p-Xylene	38.2	166	0.800	3.47		EPA-TO-15	11/11/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	11/11/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	11/11/2020	MS
Naphthalene	1.47	7.71	0.100	0.524		EPA-TO-15	11/11/2020	MS
n-Hexane	16.1	56.9	0.400	1.41		EPA-TO-15	11/11/2020	MS
o-Xylene	14.8	64.2	0.400	1.74		EPA-TO-15	11/11/2020	MS
4-Ethyltoluene	4.16	20.4	0.400	1.97		EPA-TO-15	11/11/2020	MS
Propylene	84.1	145	4.00	6.88	I	EPA-TO-15	11/10/2020	MS
Styrene	9.26	39.4	0.400	1.70		EPA-TO-15	11/11/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
Tetrachloroethene (PCE)	<0.200	<1.36	0.200	1.36		EPA-TO-15	11/11/2020	MS
Tetrahydrofuran	2.64	7.79	0.400	1.18		EPA-TO-15	11/11/2020	MS
Toluene	31.7	119	4.00	15.1	I	EPA-TO-15	11/10/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	11/11/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	11/11/2020	MS
Trichlorofluoromethane (CFC-11)	2.01	11.3	0.400	2.25		EPA-TO-15	11/11/2020	MS
Vinyl acetate	17.9	63.2	1.00	3.52		EPA-TO-15	11/11/2020	MS
Vinyl chloride	0.373	0.953	0.107	0.274		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	98.7 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.

Client: Ramboll Environ
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV11-20201103
Lab ID: 2011098-004A
Sample Type: Summa Canister

Date Sampled: 11/3/2020
Date Received: 11/5/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	11/11/2020	MS
1-methyl-3-ethylbenzene	<0.221	<1.09	0.221	1.09		EPA-TO-15	11/11/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	11/11/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	11/11/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC5-8)	134	509	7.50	28.5		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC9-12)	<7.50	<44.2	7.50	44.2		EPA-TO-15	11/11/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	11/11/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	11/11/2020	MS
Isopentane	24.1	71.1	7.11	21.0	*	EPA-TO-15	11/10/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	11/11/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	11/11/2020	MS
Dodecane	<1.10	<7.65	1.10	7.65		EPA-TO-15	11/11/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	11/11/2020	MS
Undecane	<0.724	<5.04	0.724	5.04		EPA-TO-15	11/11/2020	MS
Octane	<0.503	<2.35	0.503	2.35		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	84.4 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
* - Flagged value is not within established control limits.

Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	11/11/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	11/11/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	11/11/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	11/11/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	11/11/2020	MS
1,2,4-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	11/11/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV11-20201103
Lab ID: 2011098-004A
Sample Type: Summa Canister

Date Sampled: 11/3/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	11/11/2020	MS
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	11/11/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	11/11/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
(MEK) 2-Butanone	1.29	3.81	1.00	2.95		EPA-TO-15	11/11/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	11/11/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Acetone	23.7	56.2	10.0	23.8		EPA-TO-15	11/10/2020	MS
Acrolein	0.862	1.98	0.125	0.287		EPA-TO-15	11/11/2020	MS
Benzene	0.259	0.826	0.0895	0.286		EPA-TO-15	11/11/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	11/11/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	11/11/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	11/11/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	11/11/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	11/11/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	11/11/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	11/11/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	11/11/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	11/11/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	11/11/2020	MS
Chloromethane	1.99	4.11	0.500	1.03		EPA-TO-15	11/11/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	11/11/2020	MS
Cyclohexane	<0.400	<1.38	0.400	1.38		EPA-TO-15	11/11/2020	MS
Dichlorodifluoromethane (CFC-12)	0.587	2.90	0.400	1.98		EPA-TO-15	11/11/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV11-20201103
Lab ID: 2011098-004A
Sample Type: Summa Canister

Date Sampled: 11/3/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethyl acetate	1.50	5.40	1.00	3.60		EPA-TO-15	11/11/2020	MS
Ethylbenzene	<0.400	<1.74	0.400	1.74		EPA-TO-15	11/11/2020	MS
Heptane	<0.400	<1.61	0.400	1.61		EPA-TO-15	11/11/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	11/11/2020	MS
m,p-Xylene	<0.800	<3.47	0.800	3.47		EPA-TO-15	11/11/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	11/11/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	11/11/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	11/11/2020	MS
n-Hexane	<0.400	<1.41	0.400	1.41		EPA-TO-15	11/11/2020	MS
o-Xylene	<0.400	<1.74	0.400	1.74		EPA-TO-15	11/11/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	11/11/2020	MS
Propylene	1.79	3.09	0.400	0.688	B	EPA-TO-15	11/11/2020	MS
Styrene	<0.400	<1.70	0.400	1.70		EPA-TO-15	11/11/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
Tetrachloroethene (PCE)	<0.200	<1.36	0.200	1.36		EPA-TO-15	11/11/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	11/11/2020	MS
Toluene	0.751	2.83	0.400	1.51		EPA-TO-15	11/11/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	11/11/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	11/11/2020	MS
Trichlorofluoromethane (CFC-11)	<0.400	<2.25	0.400	2.25		EPA-TO-15	11/11/2020	MS
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	11/11/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	79.6 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

Client: Ramboll Environ
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV03-20201104
Lab ID: 2011098-005A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15								
	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	11/11/2020	MS
1-methyl-3-ethylbenzene	0.240	1.18	0.221	1.09		EPA-TO-15	11/11/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	11/11/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	11/11/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC5-8)	59.6	227	7.50	28.5		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC9-12)	28.7	169	7.50	44.2		EPA-TO-15	11/11/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	11/11/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	11/11/2020	MS
Isopentane	40.9	121	7.11	21.0	*	EPA-TO-15	11/10/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	11/11/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	11/11/2020	MS
Dodecane	<1.10	<7.65	1.10	7.65		EPA-TO-15	11/11/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	11/11/2020	MS
Undecane	<0.724	<5.04	0.724	5.04		EPA-TO-15	11/11/2020	MS
Octane	0.587	2.74	0.503	2.35		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	83.8 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
* - Flagged value is not within established control limits.

Volatile Organic Compounds by EPA Method TO-15

	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	11/11/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	11/11/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	11/11/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	11/11/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	11/11/2020	MS
1,2,4-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	11/11/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV03-20201104
Lab ID: 2011098-005A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	11/11/2020	MS
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	11/11/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,3-Butadiene	0.739	1.63	0.500	1.11		EPA-TO-15	11/11/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
(MEK) 2-Butanone	<1.00	<2.95	1.00	2.95		EPA-TO-15	11/11/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	11/11/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Acetone	40.9	97.2	10.0	23.8		EPA-TO-15	11/10/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	11/11/2020	MS
Benzene	0.279	0.892	0.0895	0.286		EPA-TO-15	11/11/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	11/11/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	11/11/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	11/11/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	11/11/2020	MS
Carbon disulfide	2.81	8.75	1.50	4.67		EPA-TO-15	11/11/2020	MS
Carbon tetrachloride	0.0715	0.450	0.0657	0.413		EPA-TO-15	11/11/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	11/11/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	11/11/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	11/11/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	11/11/2020	MS
Chloromethane	0.557	1.15	0.500	1.03		EPA-TO-15	11/11/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	11/11/2020	MS
Cyclohexane	5.07	17.5	0.400	1.38		EPA-TO-15	11/11/2020	MS
Dichlorodifluoromethane (CFC-12)	0.505	2.50	0.400	1.98		EPA-TO-15	11/11/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV03-20201104
Lab ID: 2011098-005A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	11/11/2020	MS
Ethylbenzene	<0.400	<1.74	0.400	1.74		EPA-TO-15	11/11/2020	MS
Heptane	0.796	3.20	0.400	1.61		EPA-TO-15	11/11/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	11/11/2020	MS
m,p-Xylene	<0.800	<3.47	0.800	3.47		EPA-TO-15	11/11/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	11/11/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	11/11/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	11/11/2020	MS
n-Hexane	<0.400	<1.41	0.400	1.41		EPA-TO-15	11/11/2020	MS
o-Xylene	<0.400	<1.74	0.400	1.74		EPA-TO-15	11/11/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	11/11/2020	MS
Propylene	57.3	98.7	4.00	6.88		EPA-TO-15	11/10/2020	MS
Styrene	0.726	3.09	0.400	1.70		EPA-TO-15	11/11/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
Tetrachloroethene (PCE)	<0.200	<1.36	0.200	1.36		EPA-TO-15	11/11/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	11/11/2020	MS
Toluene	3.46	13.0	0.400	1.51		EPA-TO-15	11/11/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	11/11/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	11/11/2020	MS
Trichlorofluoromethane (CFC-11)	0.449	2.52	0.400	2.25		EPA-TO-15	11/11/2020	MS
Vinyl acetate	4.83	17.0	1.00	3.52		EPA-TO-15	11/11/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	79.0 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

Client: Ramboll Environ
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV06-20201104
Lab ID: 2011098-006A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15								
	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	11/11/2020	MS
1-methyl-3-ethylbenzene	0.620	3.05	0.221	1.09		EPA-TO-15	11/11/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	11/11/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	11/11/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC5-8)	186	707	7.50	28.5		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC9-12)	207	1,220	7.50	44.2		EPA-TO-15	11/11/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	11/11/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	11/11/2020	MS
Isopentane	9.70	28.6	0.711	2.10	*	EPA-TO-15	11/11/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	11/11/2020	MS
Butylcyclohexane	1.04	5.98	0.544	3.12		EPA-TO-15	11/11/2020	MS
Dodecane	5.96	41.5	1.10	7.65		EPA-TO-15	11/11/2020	MS
Nonane	0.534	2.80	0.487	2.55		EPA-TO-15	11/11/2020	MS
Undecane	2.31	16.1	0.724	5.04		EPA-TO-15	11/11/2020	MS
Octane	5.47	25.6	0.503	2.35		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	88.6 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
* - Flagged value is not within established control limits.

Volatile Organic Compounds by EPA Method TO-15

	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	11/12/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06	I	EPA-TO-15	11/12/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07	I	EPA-TO-15	11/12/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73	I	EPA-TO-15	11/12/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	11/12/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	11/12/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23	I	EPA-TO-15	11/12/2020	MS
1,2,4-Trimethylbenzene	1.40	6.90	0.300	1.47	I	EPA-TO-15	11/12/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54	I	EPA-TO-15	11/12/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40	I	EPA-TO-15	11/12/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV06-20201104
Lab ID: 2011098-006A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	11/12/2020	MS
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31	I	EPA-TO-15	11/12/2020	MS
1,3,5-Trimethylbenzene	0.393	1.93	0.300	1.47	I	EPA-TO-15	11/12/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	11/12/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80	I	EPA-TO-15	11/12/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80	I	EPA-TO-15	11/12/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44	I	EPA-TO-15	11/12/2020	MS
(MEK) 2-Butanone	2.18	6.43	1.00	2.95		EPA-TO-15	11/12/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10	I	EPA-TO-15	11/12/2020	MS
Isopropyl Alcohol	1.46	3.59	1.00	2.46		EPA-TO-15	11/12/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10	I	EPA-TO-15	11/12/2020	MS
Acetone	18.0	42.6	1.00	2.38		EPA-TO-15	11/12/2020	MS
Acrolein	1.44	3.30	0.125	0.287		EPA-TO-15	11/12/2020	MS
Benzene	0.912	2.91	0.0895	0.286		EPA-TO-15	11/12/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59	I	EPA-TO-15	11/12/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01	I	EPA-TO-15	11/12/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07	I	EPA-TO-15	11/12/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	11/12/2020	MS
Carbon disulfide	4.25	13.2	1.50	4.67		EPA-TO-15	11/12/2020	MS
Carbon tetrachloride	0.0800	0.503	0.0657	0.413		EPA-TO-15	11/12/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921	I	EPA-TO-15	11/12/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26	I	EPA-TO-15	11/12/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	11/12/2020	MS
Chloroform	0.258	1.26	0.200	0.977		EPA-TO-15	11/12/2020	MS
Chloromethane	0.526	1.09	0.500	1.03		EPA-TO-15	11/12/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/12/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82	I	EPA-TO-15	11/12/2020	MS
Cyclohexane	1.86	6.40	0.400	1.38	I	EPA-TO-15	11/12/2020	MS
Dichlorodifluoromethane (CFC-12)	0.478	2.37	0.400	1.98		EPA-TO-15	11/12/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	11/12/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV06-20201104
Lab ID: 2011098-006A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	11/12/2020	MS
Ethylbenzene	1.11	4.80	0.400	1.74	I	EPA-TO-15	11/12/2020	MS
Heptane	1.52	6.09	0.400	1.61	I	EPA-TO-15	11/12/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7	I	EPA-TO-15	11/12/2020	MS
m,p-Xylene	3.61	15.7	0.800	3.47	I	EPA-TO-15	11/12/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64	I	EPA-TO-15	11/12/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	11/12/2020	MS
Naphthalene	0.172	0.903	0.100	0.524	I	EPA-TO-15	11/12/2020	MS
n-Hexane	2.66	9.37	0.400	1.41		EPA-TO-15	11/12/2020	MS
o-Xylene	1.46	6.35	0.400	1.74	I	EPA-TO-15	11/12/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97	I	EPA-TO-15	11/12/2020	MS
Propylene	13.3	22.9	0.400	0.688	B	EPA-TO-15	11/12/2020	MS
Styrene	0.561	2.39	0.400	1.70	I	EPA-TO-15	11/12/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/12/2020	MS
Tetrachloroethene (PCE)	<0.200	<1.36	0.200	1.36	I	EPA-TO-15	11/12/2020	MS
Tetrahydrofuran	0.499	1.47	0.400	1.18		EPA-TO-15	11/12/2020	MS
Toluene	6.35	23.9	0.400	1.51	I	EPA-TO-15	11/12/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/12/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27	I	EPA-TO-15	11/12/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349	I	EPA-TO-15	11/12/2020	MS
Trichlorofluoromethane (CFC-11)	9.80	55.1	0.400	2.25		EPA-TO-15	11/12/2020	MS
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	11/12/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	11/12/2020	MS
Surr: 4-Bromofluorobenzene	95.6 %Rec	--	70-130	--	I	EPA-TO-15	11/12/2020	MS

NOTES:
I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV07-20201104
Lab ID: 2011098-007A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	11/11/2020	MS
1-methyl-3-ethylbenzene	<0.221	<1.09	0.221	1.09		EPA-TO-15	11/11/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	11/11/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	11/11/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC5-8)	34.0	129	7.50	28.5		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC9-12)	15.0	88.2	7.50	44.2		EPA-TO-15	11/11/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	11/11/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	11/11/2020	MS
Isopentane	8.26	24.4	0.711	2.10	*	EPA-TO-15	11/11/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	11/11/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	11/11/2020	MS
Dodecane	<1.10	<7.65	1.10	7.65		EPA-TO-15	11/11/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	11/11/2020	MS
Undecane	<0.724	<5.04	0.724	5.04		EPA-TO-15	11/11/2020	MS
Octane	<0.503	<2.35	0.503	2.35		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	80.0 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
* - Flagged value is not within established control limits.

Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	11/11/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	11/11/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	11/11/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	11/11/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	11/11/2020	MS
1,2,4-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	11/11/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV07-20201104
Lab ID: 2011098-007A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	11/11/2020	MS
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	11/11/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	11/11/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
(MEK) 2-Butanone	<1.00	<2.95	1.00	2.95		EPA-TO-15	11/11/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	11/11/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Acetone	8.14	19.3	1.00	2.38		EPA-TO-15	11/11/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	11/11/2020	MS
Benzene	0.0913	0.292	0.0895	0.286		EPA-TO-15	11/11/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	11/11/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	11/11/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	11/11/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	11/11/2020	MS
Carbon disulfide	2.76	8.60	1.50	4.67		EPA-TO-15	11/11/2020	MS
Carbon tetrachloride	0.0750	0.472	0.0657	0.413		EPA-TO-15	11/11/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	11/11/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	11/11/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	11/11/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	11/11/2020	MS
Chloromethane	0.683	1.41	0.500	1.03		EPA-TO-15	11/11/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	11/11/2020	MS
Cyclohexane	0.411	1.42	0.400	1.38		EPA-TO-15	11/11/2020	MS
Dichlorodifluoromethane (CFC-12)	0.483	2.39	0.400	1.98		EPA-TO-15	11/11/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV07-20201104
Lab ID: 2011098-007A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	11/11/2020	MS
Ethylbenzene	<0.400	<1.74	0.400	1.74		EPA-TO-15	11/11/2020	MS
Heptane	<0.400	<1.61	0.400	1.61		EPA-TO-15	11/11/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	11/11/2020	MS
m,p-Xylene	<0.800	<3.47	0.800	3.47		EPA-TO-15	11/11/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	11/11/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	11/11/2020	MS
Naphthalene	0.552	2.89	0.100	0.524		EPA-TO-15	11/11/2020	MS
n-Hexane	<0.400	<1.41	0.400	1.41		EPA-TO-15	11/11/2020	MS
o-Xylene	<0.400	<1.74	0.400	1.74		EPA-TO-15	11/11/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	11/11/2020	MS
Propylene	9.31	16.0	0.400	0.688	B	EPA-TO-15	11/11/2020	MS
Styrene	<0.400	<1.70	0.400	1.70		EPA-TO-15	11/11/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
Tetrachloroethene (PCE)	0.215	1.46	0.200	1.36		EPA-TO-15	11/11/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	11/11/2020	MS
Toluene	1.85	6.98	0.400	1.51		EPA-TO-15	11/11/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	11/11/2020	MS
Trichloroethene (TCE)	0.108	0.579	0.0649	0.349		EPA-TO-15	11/11/2020	MS
Trichlorofluoromethane (CFC-11)	<0.400	<2.25	0.400	2.25		EPA-TO-15	11/11/2020	MS
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	11/11/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	75.5 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

Client: Ramboll Environ
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV05-20201104
Lab ID: 2011098-008A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15								
	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	11/11/2020	MS
1-methyl-3-ethylbenzene	0.397	1.95	0.221	1.09		EPA-TO-15	11/11/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	11/11/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	11/11/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC5-8)	160	609	7.50	28.5		EPA-TO-15	11/11/2020	MS
Aliphatic Hydrocarbon (EC9-12)	353	2,080	75.0	442		EPA-TO-15	11/11/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	11/11/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	11/11/2020	MS
Isopentane	27.0	79.7	7.11	21.0	*	EPA-TO-15	11/11/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	11/11/2020	MS
Butylcyclohexane	1.70	9.77	0.544	3.12		EPA-TO-15	11/11/2020	MS
Dodecane	11.6	81.0	1.10	7.65		EPA-TO-15	11/11/2020	MS
Nonane	0.569	2.98	0.487	2.55		EPA-TO-15	11/11/2020	MS
Undecane	4.46	31.1	0.724	5.04		EPA-TO-15	11/11/2020	MS
Octane	3.03	14.2	0.503	2.35		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	91.2 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

NOTES:
* - Flagged value is not within established control limits.

Volatile Organic Compounds by EPA Method TO-15								
	(ppbv)	(ug/m³)	(ppbv)	(ug/m³)				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	11/11/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	11/11/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	11/11/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	11/11/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	11/11/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	11/11/2020	MS
1,2,4-Trimethylbenzene	0.631	3.10	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	11/11/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV05-20201104
Lab ID: 2011098-008A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	11/11/2020	MS
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	11/11/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	11/11/2020	MS
1,3-Butadiene	3.23	7.16	0.500	1.11		EPA-TO-15	11/11/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	11/11/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
(MEK) 2-Butanone	3.03	8.94	1.00	2.95		EPA-TO-15	11/11/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	11/11/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	11/11/2020	MS
Acetone	26.3	62.4	10.0	23.8		EPA-TO-15	11/11/2020	MS
Acrolein	0.474	1.09	0.125	0.287		EPA-TO-15	11/11/2020	MS
Benzene	0.901	2.88	0.0895	0.286		EPA-TO-15	11/11/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	11/11/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	11/11/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	11/11/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	11/11/2020	MS
Carbon disulfide	18.0	56.0	1.50	4.67		EPA-TO-15	11/11/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	11/11/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	11/11/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	11/11/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	11/11/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	11/11/2020	MS
Chloromethane	2.68	5.54	0.500	1.03		EPA-TO-15	11/11/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	11/11/2020	MS
Cyclohexane	2.99	10.3	0.400	1.38		EPA-TO-15	11/11/2020	MS
Dichlorodifluoromethane (CFC-12)	<0.400	<1.98	0.400	1.98		EPA-TO-15	11/11/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	11/11/2020	MS

Client: **Ramboll Environ**
WorkOrder: 2011098
Project: Delta Marine

Client Sample ID: SV05-20201104
Lab ID: 2011098-008A
Sample Type: Summa Canister

Date Sampled: 11/4/2020
Date Received: 11/5/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	11/11/2020	MS
Ethylbenzene	0.430	1.87	0.400	1.74		EPA-TO-15	11/11/2020	MS
Heptane	0.972	3.90	0.400	1.61		EPA-TO-15	11/11/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	11/11/2020	MS
m,p-Xylene	0.959	4.16	0.800	3.47		EPA-TO-15	11/11/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	11/11/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	11/11/2020	MS
Naphthalene	0.647	3.39	0.100	0.524		EPA-TO-15	11/11/2020	MS
n-Hexane	2.01	7.08	0.400	1.41		EPA-TO-15	11/11/2020	MS
o-Xylene	0.454	1.97	0.400	1.74		EPA-TO-15	11/11/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	11/11/2020	MS
Propylene	70.0	121	4.00	6.88		EPA-TO-15	11/11/2020	MS
Styrene	0.955	4.07	0.400	1.70		EPA-TO-15	11/11/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	11/11/2020	MS
Tetrachloroethene (PCE)	<0.200	<1.36	0.200	1.36		EPA-TO-15	11/11/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	11/11/2020	MS
Toluene	2.21	8.31	0.400	1.51		EPA-TO-15	11/11/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	11/11/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	11/11/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	11/11/2020	MS
Trichlorofluoromethane (CFC-11)	<0.400	<2.25	0.400	2.25		EPA-TO-15	11/11/2020	MS
Vinyl acetate	3.76	13.2	1.00	3.52		EPA-TO-15	11/11/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	11/11/2020	MS
Surr: 4-Bromofluorobenzene	86.1 %Rec	--	70-130	--		EPA-TO-15	11/11/2020	MS

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID: **LCS-R63345** SampType: **LCS** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63345**
Client ID: **LCSW** Batch ID: **R63345** Analysis Date: **11/10/2020** SeqNo: **1271321**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trimethylbenzene	1.75	0.403	2.000	0	87.7	70	130				
1-methyl-3-ethylbenzene	1.83	0.221	2.000	0	91.4	70	130				
2,3-Dimethylheptane	1.76	0.427	2.000	0	88.1	70	130				
2,3-Dimethylpentane	1.89	0.715	2.000	0	94.7	70	130				
Aliphatic Hydrocarbon (EC5-8)	12.4	7.50	12.00	0	104	70	130				
Aliphatic Hydrocarbon (EC9-12)	10.4	7.50	12.00	0	86.9	70	130				
Aromatic Hydrocarbon (EC9-10)	8.85	6.25	10.00	0	88.5	70	130				
Butylcyclohexane	1.78	0.544	2.000	0	89.1	70	130				
Decane	1.84	0.416	2.000	0	92.1	70	130				
Dodecane	2.01	1.10	2.000	0	101	70	130				
Isopentane	3.49	0.711	2.000	0	174	70	130				S
Isopropylbenzene	1.85	0.349	2.000	0	92.4	70	130				
Nonane	1.83	0.487	2.000	0	91.4	70	130				
Octane	1.91	0.503	2.000	0	95.4	70	130				
p-isopropyltoluene	1.69	0.447	2.000	0	84.6	70	130				
Undecane	2.15	0.724	2.000	0	108	70	130				
Surr: 4-Bromofluorobenzene	3.90		4.000		97.6	70	130				

NOTES:
S - Outlying spike recovery observed (high bias). Detections will be qualified with a *.

Sample ID: **MB-R63345** SampType: **MBLK** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63345**
Client ID: **MBLKW** Batch ID: **R63345** Analysis Date: **11/10/2020** SeqNo: **1271322**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trimethylbenzene	ND	0.403									
1-methyl-3-ethylbenzene	ND	0.221									
2,3-Dimethylheptane	ND	0.427									
2,3-Dimethylpentane	ND	0.715									
Aliphatic Hydrocarbon (EC5-8)	ND	7.50									
Aliphatic Hydrocarbon (EC9-12)	ND	7.50									
Aromatic Hydrocarbon (EC9-10)	ND	6.25									

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID: **MB-R63345** SampType: **MBLK** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63345**
Client ID: **MBLKW** Batch ID: **R63345** Analysis Date: **11/10/2020** SeqNo: **1271322**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Butylcyclohexane	ND	0.544									
Decane	ND	0.416									
Dodecane	ND	1.10									
Isopentane	ND	0.711									
Isopropylbenzene	ND	0.349									
Nonane	ND	0.487									
Octane	ND	0.503									
p-isopropyltoluene	ND	0.447									
Undecane	ND	0.724									
Surr: 4-Bromofluorobenzene	3.25		4.000		81.1	70	130				

Sample ID: **2011098-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **11/11/2020** RunNo: **63345**
Client ID: **SV01-20201103** Batch ID: **R63345** Analysis Date: **11/11/2020** SeqNo: **1271310**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trimethylbenzene	ND	0.403						0		25	
1-methyl-3-ethylbenzene	ND	0.221						0		25	
2,3-Dimethylheptane	ND	0.427						0		25	
2,3-Dimethylpentane	ND	0.715						0		25	
Aliphatic Hydrocarbon (EC5-8)	13.9	7.50						10.36	29.1	25	
Aliphatic Hydrocarbon (EC9-12)	10.0	7.50						8.155	20.6	25	
Aromatic Hydrocarbon (EC9-10)	ND	6.25						0		25	
Butylcyclohexane	ND	0.544						0		25	
Decane	ND	0.416						0		25	
Dodecane	ND	1.10						0		25	
Isopentane	4.88	0.711						3.279	39.2	25	R*
Isopropylbenzene	ND	0.349						0		25	
Nonane	ND	0.487						0		25	
Octane	ND	0.503						0		25	
p-isopropyltoluene	ND	0.447						0		25	

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID: **2011098-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **11/11/2020** RunNo: **63345**
Client ID: **SV01-20201103** Batch ID: **R63345** Analysis Date: **11/11/2020** SeqNo: **1271310**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Undecane	ND	0.724						0		25	
Surr: 4-Bromofluorobenzene	3.21		4.000		80.3	70	130		0		

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63339** SampType: **LCS** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63339**
Client ID: **LCSW** Batch ID: **R63339** Analysis Date: **11/10/2020** SeqNo: **1271189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	2.18	0.400	2.000	0	109	70	130				B
Dichlorodifluoromethane (CFC-12)	2.16	0.400	2.000	0	108	70	130				
Chloromethane	2.27	0.500	2.000	0	113	70	130				
Dichlorotetrafluoroethane (CFC-114)	2.12	0.400	2.000	0	106	70	130				
Vinyl chloride	2.20	0.107	2.000	0	110	70	130				
1,3-Butadiene	2.22	0.500	2.000	0	111	70	130				
Bromomethane	2.11	0.500	2.000	0	106	70	130				
Trichlorofluoromethane (CFC-11)	2.22	0.400	2.000	0	111	70	130				
Chloroethane	2.23	0.400	2.000	0	111	70	130				
Acrolein	2.17	0.125	2.000	0	109	70	130				
1,1-Dichloroethene (DCE)	2.14	0.400	2.000	0	107	70	130				
Acetone	2.35	1.00	2.000	0	117	70	130				
Isopropyl Alcohol	2.46	1.00	2.000	0	123	70	130				
Methylene chloride	2.19	2.00	2.000	0	109	70	130				
Carbon disulfide	2.07	1.50	2.000	0	104	70	130				
trans-1,2-Dichloroethene	2.17	0.200	2.000	0	108	70	130				
Methyl tert-butyl ether (MTBE)	1.96	0.400	2.000	0	97.8	70	130				
n-Hexane	2.13	0.400	2.000	0	107	70	130				
1,1-Dichloroethane	2.17	0.200	2.000	0	108	70	130				
Vinyl acetate	2.44	1.00	2.000	0	122	70	130				
cis-1,2-Dichloroethene	2.03	0.200	2.000	0	101	70	130				
(MEK) 2-Butanone	2.05	1.00	2.000	0	102	70	130				
Ethyl acetate	2.40	1.00	2.000	0	120	70	130				
Chloroform	2.11	0.200	2.000	0	106	70	130				
Tetrahydrofuran	2.03	0.400	2.000	0	102	70	130				
1,1,1-Trichloroethane	2.19	0.400	2.000	0	109	70	130				
Carbon tetrachloride	2.22	0.0657	2.000	0	111	70	130				
1,2-Dichloroethane	2.19	0.200	2.000	0	109	70	130				
Benzene	2.08	0.0895	2.000	0	104	70	130				
Cyclohexane	2.18	0.400	2.000	0	109	70	130				

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63339** SampType: **LCS** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63339**
Client ID: **LCSW** Batch ID: **R63339** Analysis Date: **11/10/2020** SeqNo: **1271189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	2.05	0.0649	2.000	0	103	70	130				
1,2-Dichloropropane	1.98	0.500	2.000	0	98.8	70	130				
Methyl methacrylate	2.03	0.400	2.000	0	101	70	130				
Dichlorobromomethane	2.18	0.300	2.000	0	109	70	130				
1,4-Dioxane	1.92	0.400	2.000	0	95.9	70	130				
cis-1,3-dichloropropene	2.07	0.400	2.000	0	104	70	130				
Toluene	2.00	0.400	2.000	0	100	70	130				
trans-1,3-dichloropropene	2.05	0.500	2.000	0	102	70	130				
1,1,2-Trichloroethane (TCA)	1.93	0.500	2.000	0	96.4	70	130				
Tetrachloroethene (PCE)	1.96	0.200	2.000	0	97.9	70	130				
Dibromochloromethane	1.93	0.500	2.000	0	96.7	70	130				
1,2-Dibromoethane (EDB)	1.84	0.200	2.000	0	92.0	70	130				
Chlorobenzene	1.93	0.200	2.000	0	96.7	70	130				
Ethylbenzene	2.00	0.400	2.000	0	100	70	130				
m,p-Xylene	3.75	0.800	4.000	0	93.9	70	130				
o-Xylene	1.91	0.400	2.000	0	95.4	70	130				
Styrene	2.03	0.400	2.000	0	102	70	130				
Bromoform	1.89	0.200	2.000	0	94.3	70	130				
1,1,2,2-Tetrachloroethane	1.92	0.300	2.000	0	96.0	70	130				
1,3,5-Trimethylbenzene	1.89	0.300	2.000	0	94.7	70	130				
1,2,4-Trimethylbenzene	1.88	0.300	2.000	0	94.0	70	130				
Benzyl chloride	1.82	0.500	2.000	0	90.9	70	130				
4-Ethyltoluene	1.88	0.400	2.000	0	93.9	70	130				
1,3-Dichlorobenzene	1.85	0.300	2.000	0	92.3	70	130				
1,4-Dichlorobenzene	1.82	0.300	2.000	0	91.0	70	130				
1,2-Dichlorobenzene	1.86	0.400	2.000	0	93.2	70	130				
1,2,4-Trichlorobenzene	1.93	0.300	2.000	0	96.3	70	130				
Hexachlorobutadiene	1.89	1.00	2.000	0	94.6	70	130				
Naphthalene	1.84	0.100	2.000	0	91.8	70	130				
2-Hexanone	2.01	1.00	2.000	0	101	70	130				

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63339** SampType: **LCS** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63339**
Client ID: **LCSW** Batch ID: **R63339** Analysis Date: **11/10/2020** SeqNo: **1271189**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Methyl-2-pentanone (MIBK)	1.95	1.00	2.000	0	97.5	70	130				
CFC-113	2.06	0.400	2.000	0	103	70	130				
Heptane	1.98	0.400	2.000	0	99.1	70	130				
Surr: 4-Bromofluorobenzene	3.87		4.000		96.7	70	130				

Sample ID: **MB-R63339** SampType: **MBLK** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63339**
Client ID: **MBLKW** Batch ID: **R63339** Analysis Date: **11/10/2020** SeqNo: **1271158**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	0.493	0.400									
Dichlorodifluoromethane (CFC-12)	ND	0.400									
Chloromethane	ND	0.500									
Dichlorotetrafluoroethane (CFC-114)	ND	0.400									
Vinyl chloride	ND	0.107									
1,3-Butadiene	ND	0.500									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.400									
Chloroethane	ND	0.400									
Acrolein	ND	0.125									
1,1-Dichloroethene (DCE)	ND	0.400									
Acetone	ND	1.00									
Isopropyl Alcohol	ND	1.00									
Methylene chloride	ND	2.00									
Carbon disulfide	ND	1.50									
trans-1,2-Dichloroethene	ND	0.200									
Methyl tert-butyl ether (MTBE)	ND	0.400									
n-Hexane	ND	0.400									
1,1-Dichloroethane	ND	0.200									
Vinyl acetate	ND	1.00									
cis-1,2-Dichloroethene	ND	0.200									

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **MB-R63339** SampType: **MBLK** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63339**
Client ID: **MBLKW** Batch ID: **R63339** Analysis Date: **11/10/2020** SeqNo: **1271158**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
(MEK) 2-Butanone	ND	1.00									
Ethyl acetate	ND	1.00									
Chloroform	ND	0.200									
Tetrahydrofuran	ND	0.400									
1,1,1-Trichloroethane	ND	0.400									
Carbon tetrachloride	ND	0.0657									
1,2-Dichloroethane	ND	0.200									
Benzene	ND	0.0895									
Cyclohexane	ND	0.400									
Trichloroethene (TCE)	ND	0.0649									
1,2-Dichloropropane	ND	0.500									
Methyl methacrylate	ND	0.400									
Dichlorobromomethane	ND	0.300									
1,4-Dioxane	ND	0.400									
cis-1,3-dichloropropene	ND	0.400									
Toluene	ND	0.400									
trans-1,3-dichloropropene	ND	0.500									
1,1,2-Trichloroethane (TCA)	ND	0.500									
Tetrachloroethene (PCE)	ND	0.200									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.200									
Ethylbenzene	ND	0.400									
m,p-Xylene	ND	0.800									
o-Xylene	ND	0.400									
Styrene	ND	0.400									
Bromoform	ND	0.200									
1,1,2,2-Tetrachloroethane	ND	0.300									
1,3,5-Trimethylbenzene	ND	0.300									
1,2,4-Trimethylbenzene	ND	0.300									

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **MB-R63339** SampType: **MBLK** Units: **ppbv** Prep Date: **11/10/2020** RunNo: **63339**
Client ID: **MBLKW** Batch ID: **R63339** Analysis Date: **11/10/2020** SeqNo: **1271158**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzyl chloride	ND	0.500									
4-Ethyltoluene	ND	0.400									
1,3-Dichlorobenzene	ND	0.300									
1,4-Dichlorobenzene	ND	0.300									
1,2-Dichlorobenzene	ND	0.400									
1,2,4-Trichlorobenzene	ND	0.300									
Hexachlorobutadiene	ND	1.00									
Naphthalene	ND	0.100									
2-Hexanone	ND	1.00									
4-Methyl-2-pentanone (MIBK)	ND	1.00									
CFC-113	ND	0.400									
Heptane	ND	0.400									
Surr: 4-Bromofluorobenzene	3.06		4.000		76.5	70	130				

Sample ID: **2011098-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **11/11/2020** RunNo: **63339**
Client ID: **SV01-20201103** Batch ID: **R63339** Analysis Date: **11/11/2020** SeqNo: **1271168**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	7.27	0.400						4.764	41.6	25	RB
Dichlorodifluoromethane (CFC-12)	0.544	0.400						0.5285	2.82	25	
Chloromethane	0.598	0.500						0.5820	2.64	25	
Dichlorotetrafluoroethane (CFC-114)	ND	0.400						0		25	
Vinyl chloride	ND	0.107						0		25	
1,3-Butadiene	ND	0.500						0		25	
Bromomethane	ND	0.500						0		25	
Trichlorofluoromethane (CFC-11)	ND	0.400						0		25	
Chloroethane	ND	0.400						0		25	
Acrolein	ND	0.125						0		25	
1,1-Dichloroethene (DCE)	ND	0.400						0		25	
Acetone	4.81	1.00						3.240	38.9	25	R

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **2011098-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **11/11/2020** RunNo: **63339**
Client ID: **SV01-20201103** Batch ID: **R63339** Analysis Date: **11/11/2020** SeqNo: **1271168**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropyl Alcohol	ND	1.00						0		25	
Methylene chloride	ND	2.00						0		25	
Carbon disulfide	ND	1.50						0		25	
trans-1,2-Dichloroethene	ND	0.200						0		25	
Methyl tert-butyl ether (MTBE)	ND	0.400						0		25	
n-Hexane	ND	0.400						0		25	
1,1-Dichloroethane	ND	0.200						0		25	
Vinyl acetate	ND	1.00						0		25	
cis-1,2-Dichloroethene	ND	0.200						0		25	
(MEK) 2-Butanone	ND	1.00						0		25	
Ethyl acetate	ND	1.00						0		25	
Chloroform	ND	0.200						0		25	
Tetrahydrofuran	ND	0.400						0		25	
1,1,1-Trichloroethane	ND	0.400						0		25	
Carbon tetrachloride	0.0748	0.0657						0.07570	1.22	25	
1,2-Dichloroethane	ND	0.200						0		25	
Benzene	0.192	0.0895						0.2396	22.1	25	
Cyclohexane	ND	0.400						0		25	I
Trichloroethene (TCE)	ND	0.0649						0		25	I
1,2-Dichloropropane	ND	0.500						0		25	I
Methyl methacrylate	ND	0.400						0		25	I
Dichlorobromomethane	ND	0.300						0		25	I
1,4-Dioxane	ND	0.400						0		25	I
cis-1,3-dichloropropene	ND	0.400						0		25	I
Toluene	10.3	0.400						10.21	0.675	25	I
trans-1,3-dichloropropene	ND	0.500						0		25	I
1,1,2-Trichloroethane (TCA)	ND	0.500						0		25	I
Tetrachloroethene (PCE)	ND	0.200						0		25	I
Dibromochloromethane	ND	0.500						0		25	I
1,2-Dibromoethane (EDB)	ND	0.200						0		25	I

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **2011098-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **11/11/2020** RunNo: **63339**
Client ID: **SV01-20201103** Batch ID: **R63339** Analysis Date: **11/11/2020** SeqNo: **1271168**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.200						0		25	
Ethylbenzene	ND	0.400						0		25	
m,p-Xylene	ND	0.800						0		25	
o-Xylene	ND	0.400						0		25	
Styrene	ND	0.400						0		25	
Bromoform	ND	0.200						0		25	
1,1,2,2-Tetrachloroethane	ND	0.300						0		25	
1,3,5-Trimethylbenzene	ND	0.300						0		25	
1,2,4-Trimethylbenzene	ND	0.300						0		25	
Benzyl chloride	ND	0.500						0		25	
4-Ethyltoluene	ND	0.400						0		25	
1,3-Dichlorobenzene	ND	0.300						0		25	
1,4-Dichlorobenzene	ND	0.300						0		25	
1,2-Dichlorobenzene	ND	0.400						0		25	
1,2,4-Trichlorobenzene	ND	0.300						0		25	
Hexachlorobutadiene	ND	1.00						0		25	
Naphthalene	ND	0.100						0		25	
2-Hexanone	ND	1.00						0		25	
4-Methyl-2-pentanone (MIBK)	ND	1.00						0		25	
CFC-113	ND	0.400						0		25	
Heptane	ND	0.400						0		25	
Surr: 4-Bromofluorobenzene	3.03		4.000		75.7	70	130		0		

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.
I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.
B - Detection in sample is 10x greater than detection in Method Blank. No further action required.

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63358** SampType: **LCS** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **LCSW** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271542**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	1.94	0.400	2.000	0	97.0	70	130				B
Dichlorodifluoromethane (CFC-12)	1.88	0.400	2.000	0	94.2	70	130				
Chloromethane	2.09	0.500	2.000	0	104	70	130				
Dichlorotetrafluoroethane (CFC-114)	1.93	0.400	2.000	0	96.3	70	130				
Vinyl chloride	2.05	0.107	2.000	0	103	70	130				
1,3-Butadiene	2.17	0.500	2.000	0	108	70	130				
Bromomethane	2.02	0.500	2.000	0	101	70	130				
Trichlorofluoromethane (CFC-11)	1.87	0.400	2.000	0	93.5	70	130				
Chloroethane	2.10	0.400	2.000	0	105	70	130				
Acrolein	2.24	0.125	2.000	0	112	70	130				
1,1-Dichloroethene (DCE)	2.11	0.400	2.000	0	105	70	130				
Acetone	1.99	1.00	2.000	0	99.3	70	130				
Isopropyl Alcohol	2.09	1.00	2.000	0	104	70	130				
Methylene chloride	2.00	2.00	2.000	0	100	70	130				
Carbon disulfide	2.04	1.50	2.000	0	102	70	130				
trans-1,2-Dichloroethene	2.06	0.200	2.000	0	103	70	130				
Methyl tert-butyl ether (MTBE)	2.00	0.400	2.000	0	100	70	130				
n-Hexane	2.11	0.400	2.000	0	105	70	130				
1,1-Dichloroethane	2.01	0.200	2.000	0	101	70	130				
Vinyl acetate	1.98	1.00	2.000	0	99.2	70	130				
cis-1,2-Dichloroethene	2.11	0.200	2.000	0	106	70	130				
(MEK) 2-Butanone	1.99	1.00	2.000	0	99.3	70	130				
Ethyl acetate	2.16	1.00	2.000	0	108	70	130				
Chloroform	1.97	0.200	2.000	0	98.7	70	130				
Tetrahydrofuran	1.98	0.400	2.000	0	98.8	70	130				
1,1,1-Trichloroethane	1.91	0.400	2.000	0	95.7	70	130				
Carbon tetrachloride	1.88	0.0657	2.000	0	93.8	70	130				
1,2-Dichloroethane	1.96	0.200	2.000	0	98.2	70	130				
Benzene	2.09	0.0895	2.000	0	104	70	130				
Cyclohexane	2.05	0.400	2.000	0	103	70	130				

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63358** SampType: **LCS** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **LCSW** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271542**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	1.98	0.0649	2.000	0	98.9	70	130				
1,2-Dichloropropane	2.01	0.500	2.000	0	100	70	130				
Methyl methacrylate	1.99	0.400	2.000	0	99.6	70	130				
Dichlorobromomethane	1.90	0.300	2.000	0	94.8	70	130				
1,4-Dioxane	1.86	0.400	2.000	0	93.2	70	130				
cis-1,3-dichloropropene	1.88	0.400	2.000	0	94.2	70	130				
Toluene	2.02	0.400	2.000	0	101	70	130				
trans-1,3-dichloropropene	1.84	0.500	2.000	0	92.1	70	130				
1,1,2-Trichloroethane (TCA)	1.93	0.500	2.000	0	96.4	70	130				
Tetrachloroethene (PCE)	1.93	0.200	2.000	0	96.6	70	130				
Dibromochloromethane	1.88	0.500	2.000	0	94.0	70	130				
1,2-Dibromoethane (EDB)	1.94	0.200	2.000	0	96.8	70	130				
Chlorobenzene	1.96	0.200	2.000	0	97.8	70	130				
Ethylbenzene	1.95	0.400	2.000	0	97.3	70	130				
m,p-Xylene	4.13	0.800	4.000	0	103	70	130				
o-Xylene	1.93	0.400	2.000	0	96.7	70	130				
Styrene	1.94	0.400	2.000	0	96.8	70	130				
Bromoform	1.89	0.200	2.000	0	94.4	70	130				
1,1,2,2-Tetrachloroethane	1.91	0.300	2.000	0	95.4	70	130				
1,3,5-Trimethylbenzene	1.99	0.300	2.000	0	99.5	70	130				
1,2,4-Trimethylbenzene	1.72	0.300	2.000	0	86.1	70	130				
Benzyl chloride	1.58	0.500	2.000	0	79.2	70	130				
4-Ethyltoluene	1.99	0.400	2.000	0	99.7	70	130				
1,3-Dichlorobenzene	1.82	0.300	2.000	0	90.8	70	130				
1,4-Dichlorobenzene	1.87	0.300	2.000	0	93.5	70	130				
1,2-Dichlorobenzene	1.82	0.400	2.000	0	90.9	70	130				
1,2,4-Trichlorobenzene	1.70	0.300	2.000	0	85.2	70	130				
Hexachlorobutadiene	1.76	1.00	2.000	0	87.8	70	130				
Naphthalene	1.66	0.100	2.000	0	83.1	70	130				
2-Hexanone	1.84	1.00	2.000	0	91.9	70	130				

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63358** SampType: **LCS** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **LCSW** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271542**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Methyl-2-pentanone (MIBK)	1.96	1.00	2.000	0	97.9	70	130				
CFC-113	1.99	0.400	2.000	0	99.7	70	130				
Heptane	2.13	0.400	2.000	0	107	70	130				
Surr: 4-Bromofluorobenzene	3.86		4.000		96.6	70	130				

Sample ID: **MB-R63358** SampType: **MBLK** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **MBLKW** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271543**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	1.81	0.400									
Dichlorodifluoromethane (CFC-12)	ND	0.400									
Chloromethane	ND	0.500									
Dichlorotetrafluoroethane (CFC-114)	ND	0.400									
Vinyl chloride	ND	0.107									
1,3-Butadiene	ND	0.500									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.400									
Chloroethane	ND	0.400									
Acrolein	ND	0.125									
1,1-Dichloroethene (DCE)	ND	0.400									
Acetone	ND	1.00									
Isopropyl Alcohol	ND	1.00									
Methylene chloride	ND	2.00									
Carbon disulfide	ND	1.50									
trans-1,2-Dichloroethene	ND	0.200									
Methyl tert-butyl ether (MTBE)	ND	0.400									
n-Hexane	ND	0.400									
1,1-Dichloroethane	ND	0.200									
Vinyl acetate	ND	1.00									
cis-1,2-Dichloroethene	ND	0.200									

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **MB-R63358** SampType: **MBLK** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **MBLKW** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271543**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
(MEK) 2-Butanone	ND	1.00									
Ethyl acetate	ND	1.00									
Chloroform	ND	0.200									
Tetrahydrofuran	ND	0.400									
1,1,1-Trichloroethane	ND	0.400									
Carbon tetrachloride	ND	0.0657									
1,2-Dichloroethane	ND	0.200									
Benzene	ND	0.0895									
Cyclohexane	ND	0.400									
Trichloroethene (TCE)	ND	0.0649									
1,2-Dichloropropane	ND	0.500									
Methyl methacrylate	ND	0.400									
Dichlorobromomethane	ND	0.300									
1,4-Dioxane	ND	0.400									
cis-1,3-dichloropropene	ND	0.400									
Toluene	ND	0.400									
trans-1,3-dichloropropene	ND	0.500									
1,1,2-Trichloroethane (TCA)	ND	0.500									
Tetrachloroethene (PCE)	ND	0.200									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.200									
Ethylbenzene	ND	0.400									
m,p-Xylene	ND	0.800									
o-Xylene	ND	0.400									
Styrene	ND	0.400									
Bromoform	ND	0.200									
1,1,2,2-Tetrachloroethane	ND	0.300									
1,3,5-Trimethylbenzene	ND	0.300									
1,2,4-Trimethylbenzene	ND	0.300									

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **MB-R63358** SampType: **MBLK** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **MBLKW** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271543**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzyl chloride	ND	0.500									
4-Ethyltoluene	ND	0.400									
1,3-Dichlorobenzene	ND	0.300									
1,4-Dichlorobenzene	ND	0.300									
1,2-Dichlorobenzene	ND	0.400									
1,2,4-Trichlorobenzene	ND	0.300									
Hexachlorobutadiene	ND	1.00									
Naphthalene	ND	0.100									
2-Hexanone	ND	1.00									
4-Methyl-2-pentanone (MIBK)	ND	1.00									
CFC-113	ND	0.400									
Heptane	ND	0.400									
Surr: 4-Bromofluorobenzene	3.68		4.000		92.1	70	130				

Sample ID: **2011184-004AREP** SampType: **REP** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **BATCH** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271545**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	290	0.400						249.4	14.9	25	BIE
Dichlorodifluoromethane (CFC-12)	ND	0.400						0.4007	33.3	25	I
Chloromethane	1.35	0.500						1.236	8.96	25	I
Dichlorotetrafluoroethane (CFC-114)	ND	0.400						0		25	I
Vinyl chloride	0.143	0.107						0.1768	21.0	25	I
1,3-Butadiene	4.73	0.500						4.241	10.9	25	I
Bromomethane	ND	0.500						0		25	I
Trichlorofluoromethane (CFC-11)	ND	0.400						0		25	I
Chloroethane	ND	0.400						0		25	I
Acrolein	9.13	0.125						9.248	1.31	25	I
1,1-Dichloroethene (DCE)	ND	0.400						0		25	I
Acetone	560	1.00						549.6	1.91	25	IE

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **2011184-004AREP** SampType: **REP** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **BATCH** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271545**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropyl Alcohol	3.19	1.00						2.756	14.7	25	I
Methylene chloride	5.52	2.00						5.283	4.44	25	I
Carbon disulfide	5.53	1.50						5.374	2.85	25	I
trans-1,2-Dichloroethene	ND	0.200						0		25	I
Methyl tert-butyl ether (MTBE)	ND	0.400						0		25	I
n-Hexane	1.06	0.400						0.9730	8.97	25	I
1,1-Dichloroethane	ND	0.200						0		25	I
Vinyl acetate	ND	1.00						0		25	I
cis-1,2-Dichloroethene	ND	0.200						0		25	I
(MEK) 2-Butanone	15.3	1.00						14.31	6.54	25	I
Ethyl acetate	6.80	1.00						6.451	5.28	25	I
Chloroform	0.261	0.200						0.2533	2.85	25	I
Tetrahydrofuran	0.656	0.400						0.6240	5.08	25	I
1,1,1-Trichloroethane	ND	0.400						0		25	I
Carbon tetrachloride	ND	0.0657						0		25	I
1,2-Dichloroethane	0.267	0.200						0.2674	0.105	25	I
Benzene	7.48	0.0895						7.012	6.42	25	I
Cyclohexane	ND	0.400						0		25	I
Trichloroethene (TCE)	ND	0.0649						0		25	I
1,2-Dichloropropane	ND	0.500						0		25	I
Methyl methacrylate	1.58	0.400						1.516	4.34	25	I
Dichlorobromomethane	ND	0.300						0		25	I
1,4-Dioxane	ND	0.400						0		25	I
cis-1,3-dichloropropene	ND	0.400						0		25	I
Toluene	14.8	0.400						14.59	1.36	25	I
trans-1,3-dichloropropene	ND	0.500						0		25	I
1,1,2-Trichloroethane (TCA)	ND	0.500						0		25	I
Tetrachloroethene (PCE)	ND	0.200						0.3266	144	25	RI
Dibromochloromethane	ND	0.500						0		25	I
1,2-Dibromoethane (EDB)	ND	0.200						0		25	I

Work Order: 2011098
CLIENT: Ramboll Environ
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **2011184-004AREP** SampType: **REP** Units: **ppbv** Prep Date: **11/12/2020** RunNo: **63358**
Client ID: **BATCH** Batch ID: **R63358** Analysis Date: **11/12/2020** SeqNo: **1271545**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.200						0		25	I
Ethylbenzene	3.77	0.400						3.643	3.41	25	I
m,p-Xylene	6.79	0.800						6.500	4.35	25	I
o-Xylene	2.80	0.400						2.723	2.66	25	I
Styrene	2.67	0.400						2.498	6.69	25	I
Bromoform	ND	0.200						0		25	I
1,1,2,2-Tetrachloroethane	ND	0.300						0		25	I
1,3,5-Trimethylbenzene	0.344	0.300						0.3383	1.61	25	I
1,2,4-Trimethylbenzene	1.69	0.300						1.641	2.85	25	I
Benzyl chloride	ND	0.500						0		25	I
4-Ethyltoluene	ND	0.400						0		25	I
1,3-Dichlorobenzene	ND	0.300						0		25	I
1,4-Dichlorobenzene	ND	0.300						0		25	I
1,2-Dichlorobenzene	ND	0.400						0		25	I
1,2,4-Trichlorobenzene	ND	0.300						0		25	I
Hexachlorobutadiene	ND	1.00						0		25	I
Naphthalene	0.120	0.100						0.1424	17.5	25	I
2-Hexanone	ND	1.00						0		25	I
4-Methyl-2-pentanone (MIBK)	ND	1.00						0		25	I
CFC-113	ND	0.400						0		25	I
Heptane	2.47	0.400						2.241	9.59	25	I
Surr: 4-Bromofluorobenzene	4.05		4.000		101	70	130		0		I

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.
I - Indicates an analyte with an internal standard that does not meet established acceptance criteria.
E - Estimated value. The amount exceeds the linear working range of the instrument.
B - Detection in sample is 10x greater than detection in Method Blank. No further action required.

Sample Log-In Check List

Client Name:	**EIC**	Work Order Number:	**2011098**
Logged by:	**Gabrielle Coeuille**	Date Received:	**11/5/2020 9:10:00 AM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes	☑	No	☐	Not Present ☐
2.	How was the sample delivered?	Client				

Log In

3.	Coolers are present?	Yes	☐	No	☑	NA ☐
		Air samples				
4.	Shipping container/cooler in good condition?	Yes	☑	No	☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	☐	No	☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes	☐	No	☐	NA ☑
7.	Were all items received at a temperature of >2°C to 6°C *	Yes	☐	No	☐	NA ☑
8.	Sample(s) in proper container(s)?	Yes	☑	No	☐	
9.	Sufficient sample volume for indicated test(s)?	Yes	☑	No	☐	
10.	Are samples properly preserved?	Yes	☑	No	☐	
11.	Was preservative added to bottles?	Yes	☐	No	☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes	☐	No	☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes	☑	No	☐	
14.	Does paperwork match bottle labels?	Yes	☑	No	☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes	☑	No	☐	
16.	Is it clear what analyses were requested?	Yes	☑	No	☐	
17.	Were all holding times able to be met?	Yes	☑	No	☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes	☐	No	☐	NA ☑

Person Notified:		Date:	
By Whom:		Via:	☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:			
Client Instructions:			

19. Additional remarks:

Item Information

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Air Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 1 of: 3

Laboratory Project No (Internal): 2011098

Project Name: Delta Marine

Special Remarks:

Project No:

Client: Ramboll

Location: Delta Marine

Address: 901 5th Ave Suite 2820

Collected by: SLeick

City, State, Zip: Seattle, WA 98164

Reports to (PM): AKephart

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

Telephone: 262-358-0557

Email (PM): AKephart@Ramboll.com

Fax:

	Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure ("Hg)	Sample End Date & Time	Field Final Sample Pressure ("Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C		Comments	Internal: Final Pressure ("Hg)
1	SV01-20201103	5024 DD1	SV	1L	~5min	11-3-20 1738	-30	11-3-20 1143	-4 ~~-48~~	X						X					-4
2		4880 T1		1L	~5min														SL	can not used	-30
3	SV04-20201104	4682 F22		1L	~5min	11-4-20 1703	-30	11-4-20 1708	-4	X						X					-2
4	SV02-20201104	11012 F34	SV	1L	~5min	11-4-20 1422	-29	11-4-20 1427	-2	X						X					-2
5		11029 F17		1L	~5min															can not used	-30

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-Around Time:
☒ Standard ☐ Next Day ☐ 3 Day ☐ Same Day ☐ 2 Day specify

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sam Leick	Sam Leick	11-4-20/1850	x	11/5/20	@ 0910
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Air Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 2 of: 3

Laboratory Project No (Internal): 2011098

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Suite 2820

Location:

City, State, Zip: Seattle, WA 98164

Collected by: Sleick

Telephone: 262-358-0557

Reports to (PM): AKephart

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

Fax:

Email (PM): AKephart@ramboll.com

	Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure ("Hg)	Sample End Date & Time	Field Final Sample Pressure ("Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C		Comments	Internal: Final Pressure ("Hg)
1	SV11-20201103	11013 / F13	SV	1L	~5min	11-3-20 1720	-30	11-3-20 1725	-2	X						X					-4
2		10995 / R1		1L	~5min		-30													cannot used	-30
3	SV03-20201104	4680 / Q1	SV	1L	~5min	11-4-20 1400	-30	11-4-20 1405	-3	X						X					-2
4	SV06-20201104	4906 / F2	SV	1L	~5min	11/4/20 1309	-30	11-4-20 1314	-4	X						X					-4
5		4684 / F26		1L	~5min															cannot used	-30

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

Turn-Around Time:
☒ Standard ☐ Next Day ☐ 3 Day ☐ Same Day ☐ 2 Day ☐ specify

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sara Leido	Sam Leick	11/4/20 1850	x	11/5/20	@ 0910
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Air Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 11/4/20 Page: 3 of: 3

Project Name: Delta Marina

Laboratory Project No (Internal): 204098

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave Suite 2820

Location:

City, State, Zip: Seattle, WA 98164

Collected by: Sleick

Telephone: 262-358-0551

Reports to (PM): AKephart

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

Fax:

Email (PM): AKephart@Ramboll.com

Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure (" Hg)	Sample End Date & Time	Field Final Sample Pressure (" Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C		Comments	Internal: Final Pressure ("Hg)
1 SV07-20201104	4691 / F35	SV	1L	~5min	11-4-20 0946	<-30	11-4-20 1051	-2	X						X					-2
2 SV05-20201104	3486 / F7	SV	1L	~5min	11-4-20 1557	<-30	11-4-20 1603	-5	X						X					-4
3																				
4																				
5																				

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

Turn-Around Time:
☒ Standard ☐ Next Day ☐ 3 Day ☐ Same Day ☐ 2 Day (specify)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sam Leick	Sam Leick	11/4/20 1850	x	11/5/20	@ 0910
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

COC Air 1.5 - 8.19.20

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Ramboll
Amy Kephart
901 5th Ave., Ste. 2820
Seattle, WA 98164

RE: Delta Marine
Work Order Number: 2012110

December 11, 2020

Attention Amy Kephart:

Fremont Analytical, Inc. received 11 sample(s) on 12/7/2020 for the analyses presented in the following report.

Petroleum Fractionation by EPA Method TO-15
Volatile Organic Compounds by EPA Method TO-15

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

CC:
Sam Leick

Date: *12/11/2020*

CLIENT: Ramboll
Project: Delta Marine
Work Order: 2012110

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2012110-001	SSV-03-20201207	12/07/2020 10:12 AM	12/07/2020 2:39 PM
2012110-002	SSV-104-20201207	12/07/2020 10:53 AM	12/07/2020 2:39 PM
2012110-003	SSV-01-20201207	12/07/2020 9:32 AM	12/07/2020 2:39 PM
2012110-004	SSV-05-20201207	12/07/2020 12:05 PM	12/07/2020 2:39 PM
2012110-005	SSV-08-20201207	12/07/2020 1:03 PM	12/07/2020 2:39 PM
2012110-006	SSV-02-20201207	12/07/2020 9:16 AM	12/07/2020 2:39 PM
2012110-007	SSV-04-20201207	12/07/2020 10:47 AM	12/07/2020 2:39 PM
2012110-008	SSV-104-20201207	12/07/2020 11:03 AM	12/07/2020 2:39 PM
2012110-009	SSV-09-20201207	12/07/2020 1:18 PM	12/07/2020 2:39 PM
2012110-010	SSV-06-20201207	12/07/2020 12:23 PM	12/07/2020 2:39 PM
2012110-011	SSV-07-20201207	12/07/2020 12:43 PM	12/07/2020 2:39 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2012110**
Date: **12/11/2020**

CLIENT: Ramboll
Project: Delta Marine

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Air samples are reported in ppbv and ug/m3.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Standard temperature and pressure assumes 24.45 = (25C and 1 atm).

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
DUP - Sample Duplicate
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-03-20201207
Lab ID: 2012110-001A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	0.329	1.62	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	36.9	151	7.15	29.3		EPA-TO-15	12/10/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	1,670	6,360	75.0	285		EPA-TO-15	12/10/2020	MS
Aliphatic Hydrocarbon (EC9-12)	<7.50	<44.2	7.50	44.2		EPA-TO-15	12/09/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	12/09/2020	MS
Decane	0.569	3.31	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	16.7	49.3	7.11	21.0		EPA-TO-15	12/10/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	2.38	16.6	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	1.03	7.19	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	1.43	6.66	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	89.3 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	0.427	2.33	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	0.464	2.28	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	0.205	0.829	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-03-20201207
Lab ID: 2012110-001A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,3-Butadiene	0.869	1.92	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	<1.00	<2.95	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	2.51	6.16	1.00	2.46		EPA-TO-15	12/09/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Acetone	76.6	182	10.0	23.8		EPA-TO-15	12/10/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	0.483	1.54	0.0895	0.286		EPA-TO-15	12/09/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	1.21	8.13	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	12/09/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	9.58	33.0	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.543	2.68	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	15.0	54.0	1.00	3.60		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-03-20201207
Lab ID: 2012110-001A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	0.683	2.97	0.400	1.74		EPA-TO-15	12/09/2020	MS
Heptane	9.42	37.8	0.400	1.61		EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	12/09/2020	MS
m,p-Xylene	1.83	7.94	0.800	3.47		EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	12/09/2020	MS
n-Hexane	27.3	96.4	4.00	14.1		EPA-TO-15	12/10/2020	MS
o-Xylene	0.582	2.53	0.400	1.74		EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	12/09/2020	MS
Propylene	4.92	8.48	0.400	0.688		EPA-TO-15	12/09/2020	MS
Styrene	2.39	10.2	0.400	1.70		EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	0.294	1.99	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	15.8	59.4	4.00	15.1		EPA-TO-15	12/10/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	2.43	13.0	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	0.438	2.46	0.400	2.25		EPA-TO-15	12/09/2020	MS
Vinyl acetate	42.6	150	10.0	35.2		EPA-TO-15	12/10/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	87.9 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-104-20201207
Lab ID: 2012110-002A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	<0.221	<1.09	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	12/09/2020	MS
p-isopropyltoluene	1.20	6.59	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	146	555	7.50	28.5		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC9-12)	309	1,820	75.0	442		EPA-TO-15	12/10/2020	MS
Aromatic Hydrocarbon (EC9-10)	13.5	67.9	62.5	314	J.	EPA-TO-15	12/10/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	54.3	160	7.11	21.0		EPA-TO-15	12/10/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	1.11	6.38	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	2.41	16.8	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	<0.724	<5.04	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	<0.503	<2.35	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	81.1 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-104-20201207
Lab ID: 2012110-002A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	<1.00	<2.95	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	12/09/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Acetone	319	757	10.0	23.8	E	EPA-TO-15	12/10/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	<0.0895	<0.286	0.0895	0.286		EPA-TO-15	12/09/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	12/09/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	0.674	2.32	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.569	2.82	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-104-20201207
Lab ID: 2012110-002A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	<0.400	<1.74	0.400	1.74		EPA-TO-15	12/09/2020	MS
Heptane	<0.400	<1.61	0.400	1.61		EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	12/09/2020	MS
m,p-Xylene	<0.800	<3.47	0.800	3.47		EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	12/09/2020	MS
n-Hexane	<0.400	<1.41	0.400	1.41		EPA-TO-15	12/09/2020	MS
o-Xylene	<0.400	<1.74	0.400	1.74		EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	12/09/2020	MS
Propylene	1.46	2.51	0.400	0.688		EPA-TO-15	12/09/2020	MS
Styrene	1.76	7.49	0.400	1.70		EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	0.329	2.23	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	0.759	2.86	0.400	1.51		EPA-TO-15	12/09/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	0.526	2.95	0.400	2.25		EPA-TO-15	12/09/2020	MS
Vinyl acetate	<1.00	<3.52	1.00	3.52		EPA-TO-15	12/09/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	79.9 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-01-20201207
Lab ID: 2012110-003A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	0.417	2.05	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	0.391	1.92	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	2.33	9.54	0.715	2.93		EPA-TO-15	12/09/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	426	1,620	7.50	28.5		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC9-12)	123	726	7.50	44.2		EPA-TO-15	12/09/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	12/09/2020	MS
Decane	2.41	14.0	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	13.5	39.7	0.711	2.10		EPA-TO-15	12/09/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	0.889	5.10	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	<1.10	<7.65	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	0.650	3.41	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	1.06	7.41	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	0.506	2.36	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	99.7 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	0.471	2.32	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-01-20201207
Lab ID: 2012110-003A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	<1.00	<2.95	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	12/09/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Acetone	11.1	26.3	1.00	2.38		EPA-TO-15	12/09/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	0.579	1.85	0.0895	0.286		EPA-TO-15	12/09/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	7.67	15.8	0.500	1.03		EPA-TO-15	12/09/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	0.928	3.19	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.522	2.58	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-01-20201207
Lab ID: 2012110-003A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	<0.400	<1.74	0.400	1.74		EPA-TO-15	12/09/2020	MS
Heptane	0.914	3.67	0.400	1.61		EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	12/09/2020	MS
m,p-Xylene	<0.800	<3.47	0.800	3.47		EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	11.4	39.7	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	12/09/2020	MS
n-Hexane	1.64	5.78	0.400	1.41		EPA-TO-15	12/09/2020	MS
o-Xylene	<0.400	<1.74	0.400	1.74		EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	12/09/2020	MS
Propylene	10.2	17.5	0.400	0.688		EPA-TO-15	12/09/2020	MS
Styrene	<0.400	<1.70	0.400	1.70		EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	0.692	4.70	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	1.29	4.86	0.400	1.51		EPA-TO-15	12/09/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	0.282	1.52	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	<0.400	<2.25	0.400	2.25		EPA-TO-15	12/09/2020	MS
Vinyl acetate	1.83	6.44	1.00	3.52		EPA-TO-15	12/09/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	98.2 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-05-20201207
Lab ID: 2012110-004A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	0.307	1.51	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	12/09/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	84.4	321	7.50	28.5		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC9-12)	9.51	56.0	7.50	44.2		EPA-TO-15	12/09/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	12/09/2020	MS
Decane	<0.416	<2.42	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	10.6	31.4	0.711	2.10		EPA-TO-15	12/09/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	3.08	21.4	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	<0.724	<5.04	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	<0.503	<2.35	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	86.3 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	0.419	2.06	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-05-20201207
Lab ID: 2012110-004A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	<1.00	<2.95	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	1.64	4.04	1.00	2.46		EPA-TO-15	12/09/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Acetone	22.2	52.8	10.0	23.8		EPA-TO-15	12/10/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	0.153	0.489	0.0895	0.286		EPA-TO-15	12/09/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	12/09/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	1.52	5.22	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.604	2.99	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-05-20201207
Lab ID: 2012110-004A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	<0.400	<1.74	0.400	1.74		EPA-TO-15	12/09/2020	MS
Heptane	<0.400	<1.61	0.400	1.61		EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	12/09/2020	MS
m,p-Xylene	1.26	5.45	0.800	3.47		EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	12/09/2020	MS
n-Hexane	0.485	1.71	0.400	1.41		EPA-TO-15	12/09/2020	MS
o-Xylene	<0.400	<1.74	0.400	1.74		EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	12/09/2020	MS
Propylene	8.20	14.1	0.400	0.688		EPA-TO-15	12/09/2020	MS
Styrene	1.10	4.68	0.400	1.70		EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	<0.200	<1.36	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	1.91	7.18	0.400	1.51		EPA-TO-15	12/09/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	4.84	27.2	0.400	2.25		EPA-TO-15	12/09/2020	MS
Vinyl acetate	1.10	3.87	1.00	3.52		EPA-TO-15	12/09/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	85.0 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-08-20201207
Lab ID: 2012110-005A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	0.535	2.63	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	0.952	3.90	0.715	2.93		EPA-TO-15	12/09/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	432	1,640	75.0	285		EPA-TO-15	12/10/2020	MS
Aliphatic Hydrocarbon (EC9-12)	22.1	130	7.50	44.2		EPA-TO-15	12/09/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	12/09/2020	MS
Decane	0.529	3.08	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	26.6	78.3	7.11	21.0		EPA-TO-15	12/10/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	2.65	18.4	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	1.07	7.44	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	1.86	8.70	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	97.3 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	0.562	3.07	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	0.577	2.84	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-08-20201207
Lab ID: 2012110-005A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,3-Butadiene	0.596	1.32	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	1.54	4.53	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	5.38	13.2	1.00	2.46		EPA-TO-15	12/09/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Acetone	249	591	10.0	23.8	E	EPA-TO-15	12/10/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	0.179	0.571	0.0895	0.286		EPA-TO-15	12/09/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	1.07	2.22	0.500	1.03		EPA-TO-15	12/09/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	3.45	11.9	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.706	3.49	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-08-20201207
Lab ID: 2012110-005A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	0.484	2.10	0.400	1.74		EPA-TO-15	12/09/2020	MS
Heptane	1.55	6.24	0.400	1.61		EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	12/09/2020	MS
m,p-Xylene	1.97	8.57	0.800	3.47		EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	12/09/2020	MS
n-Hexane	<0.400	<1.41	0.400	1.41		EPA-TO-15	12/09/2020	MS
o-Xylene	0.601	2.61	0.400	1.74		EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	12/09/2020	MS
Propylene	3.32	5.71	0.400	0.688		EPA-TO-15	12/09/2020	MS
Styrene	9.30	39.6	0.400	1.70		EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	0.472	3.20	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	8.07	30.4	0.400	1.51		EPA-TO-15	12/09/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	28.6	161	0.800	4.49		EPA-TO-15	12/10/2020	MS
Vinyl acetate	1.04	3.67	1.00	3.52		EPA-TO-15	12/09/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	95.8 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-02-20201207
Lab ID: 2012110-006A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	5.15	25.3	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	3.53	17.4	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	11.3	59.4	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	14.5	59.4	0.715	2.93		EPA-TO-15	12/09/2020	MS
p-isopropyltoluene	2.13	11.7	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	2,110	8,030	75.0	285		EPA-TO-15	12/10/2020	MS
Aliphatic Hydrocarbon (EC9-12)	970	5,710	75.0	442		EPA-TO-15	12/10/2020	MS
Aromatic Hydrocarbon (EC9-10)	22.9	115	62.5	314	J.	EPA-TO-15	12/10/2020	MS
Decane	5.30	30.9	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	92.3	272	7.11	21.0		EPA-TO-15	12/10/2020	MS
Isopropylbenzene	0.888	4.36	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	6.75	38.7	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	3.93	27.4	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	5.13	26.9	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	5.49	38.2	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	23.9	111	5.03	23.5		EPA-TO-15	12/10/2020	MS
Surr: 4-Bromofluorobenzene	97.6 %Rec	--	70-130	--		EPA-TO-15	12/10/2020	MS
Volatile Organic Compounds by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	1.07	5.82	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06	I	EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07	I	EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	1.58	6.27	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23	I	EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	2.57	12.6	0.300	1.47	I	EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40	I	EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	0.246	0.998	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-02-20201207
Lab ID: 2012110-006A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	4.44	21.8	0.300	1.47	I	EPA-TO-15	12/09/2020	MS
1,3-Butadiene	2.77	6.14	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80	I	EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80	I	EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	6.26	18.5	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10	I	EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	1.23	3.01	1.00	2.46		EPA-TO-15	12/09/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10	I	EPA-TO-15	12/09/2020	MS
Acetone	189	450	10.0	23.8		EPA-TO-15	12/10/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	15.9	50.7	0.895	2.86		EPA-TO-15	12/10/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59	I	EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	1.42	9.50	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07	I	EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	0.460	2.12	0.200	0.921	I	EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	39.9	82.5	5.00	10.3		EPA-TO-15	12/10/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	15.3	52.8	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.524	2.59	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	23.2	83.5	10.0	36.0		EPA-TO-15	12/10/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-02-20201207
Lab ID: 2012110-006A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	5.12	22.3	0.400	1.74	I	EPA-TO-15	12/09/2020	MS
Heptane	50.6	203	0.400	1.61	I	EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7	I	EPA-TO-15	12/09/2020	MS
m,p-Xylene	9.96	43.2	0.800	3.47	I	EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524	I	EPA-TO-15	12/09/2020	MS
n-Hexane	70.8	249	4.00	14.1		EPA-TO-15	12/10/2020	MS
o-Xylene	6.79	29.5	0.400	1.74	I	EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	1.25	6.15	0.400	1.97	I	EPA-TO-15	12/09/2020	MS
Propylene	198	340	4.00	6.88		EPA-TO-15	12/10/2020	MS
Styrene	2.87	12.2	0.400	1.70	I	EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	11.5	78.0	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	19.3	72.7	4.00	15.1		EPA-TO-15	12/10/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	1.67	8.98	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	8.41	47.2	0.400	2.25		EPA-TO-15	12/09/2020	MS
Vinyl acetate	42.2	148	10.0	35.2		EPA-TO-15	12/10/2020	MS
Vinyl chloride	0.263	0.672	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	136 %Rec	--	70-130	--	SI	EPA-TO-15	12/09/2020	MS

NOTES:
I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.
S - Outlying surrogate recovery(ies) observed.

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-04-20201207
Lab ID: 2012110-007A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	0.385	1.89	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	12/09/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	156	593	7.50	28.5		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC9-12)	32.3	191	7.50	44.2		EPA-TO-15	12/09/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	12/09/2020	MS
Decane	1.16	6.75	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	101	298	7.11	21.0		EPA-TO-15	12/09/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	2.86	19.9	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	<0.724	<5.04	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	1.79	8.36	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	97.6 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	12/10/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	12/10/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	12/10/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/10/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/10/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/10/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	12/10/2020	MS
1,2,4-Trimethylbenzene	0.486	2.39	0.300	1.47		EPA-TO-15	12/10/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/10/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	12/10/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	12/10/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-04-20201207
Lab ID: 2012110-007A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/10/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/10/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	12/10/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/10/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/10/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/10/2020	MS
(MEK) 2-Butanone	2.05	6.04	1.00	2.95		EPA-TO-15	12/10/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/10/2020	MS
Isopropyl Alcohol	1.58	3.89	1.00	2.46		EPA-TO-15	12/10/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/10/2020	MS
Acetone	805	1,910	10.0	23.8	E	EPA-TO-15	12/09/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/10/2020	MS
Benzene	0.286	0.912	0.0895	0.286		EPA-TO-15	12/10/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	12/10/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	12/10/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	12/10/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/10/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/10/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/10/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	12/10/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/10/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/10/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/10/2020	MS
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	12/10/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/10/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/10/2020	MS
Cyclohexane	13.4	46.3	0.400	1.38		EPA-TO-15	12/10/2020	MS
Dichlorodifluoromethane (CFC-12)	0.555	2.74	0.400	1.98		EPA-TO-15	12/10/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/10/2020	MS
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	12/10/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-04-20201207
Lab ID: 2012110-007A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	0.478	2.07	0.400	1.74		EPA-TO-15	12/10/2020	MS
Heptane	1.03	4.15	0.400	1.61		EPA-TO-15	12/10/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	12/10/2020	MS
m,p-Xylene	1.71	7.41	0.800	3.47		EPA-TO-15	12/10/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/10/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/10/2020	MS
Naphthalene	1.13	5.95	0.100	0.524		EPA-TO-15	12/10/2020	MS
n-Hexane	<0.400	<1.41	0.400	1.41		EPA-TO-15	12/10/2020	MS
o-Xylene	0.547	2.38	0.400	1.74		EPA-TO-15	12/10/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	12/10/2020	MS
Propylene	13.7	23.5	0.400	0.688	B	EPA-TO-15	12/10/2020	MS
Styrene	7.86	33.5	0.400	1.70		EPA-TO-15	12/10/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/10/2020	MS
Tetrachloroethene (PCE)	0.318	2.16	0.200	1.36		EPA-TO-15	12/10/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/10/2020	MS
Toluene	4.55	17.1	0.400	1.51		EPA-TO-15	12/10/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/10/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/10/2020	MS
Trichloroethene (TCE)	0.105	0.563	0.0649	0.349		EPA-TO-15	12/10/2020	MS
Trichlorofluoromethane (CFC-11)	0.554	3.11	0.400	2.25		EPA-TO-15	12/10/2020	MS
Vinyl acetate	8.69	30.6	1.00	3.52		EPA-TO-15	12/10/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/10/2020	MS
Surr: 4-Bromofluorobenzene	84.1 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	96.2 %Rec	--	70-130	--		EPA-TO-15	12/10/2020	MS

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.
B - Detection in sample is 10x greater than detection in Method Blank. No further action required.

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-09-20201207
Lab ID: 2012110-009A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	0.425	2.09	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	12/09/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	112	428	7.50	28.5		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC9-12)	34.2	201	7.50	44.2		EPA-TO-15	12/09/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	12/09/2020	MS
Decane	0.600	3.49	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	15.4	45.6	0.711	2.10		EPA-TO-15	12/09/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	2.56	17.8	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	1.09	7.56	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	1.42	6.65	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	96.4 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15								
	(ppbv)	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	0.528	2.60	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-09-20201207
Lab ID: 2012110-009A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	2.42	7.14	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	4.29	10.5	2.00	4.92		EPA-TO-15	12/10/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Acetone	139	330	10.0	23.8		EPA-TO-15	12/10/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	0.648	2.07	0.0895	0.286		EPA-TO-15	12/09/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	0.233	1.07	0.200	0.921		EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	12/09/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	2.51	8.63	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.517	2.56	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-09-20201207
Lab ID: 2012110-009A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	0.483	2.10	0.400	1.74		EPA-TO-15	12/09/2020	MS
Heptane	0.873	3.50	0.400	1.61		EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	12/09/2020	MS
m,p-Xylene	1.74	7.55	0.800	3.47		EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	1.10	5.79	0.100	0.524		EPA-TO-15	12/09/2020	MS
n-Hexane	0.717	2.53	0.400	1.41		EPA-TO-15	12/09/2020	MS
o-Xylene	0.586	2.54	0.400	1.74		EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	12/09/2020	MS
Propylene	6.33	10.9	0.400	0.688		EPA-TO-15	12/09/2020	MS
Styrene	6.60	28.1	0.400	1.70		EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	0.314	2.13	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	4.26	16.0	0.400	1.51		EPA-TO-15	12/09/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	0.415	2.33	0.400	2.25		EPA-TO-15	12/09/2020	MS
Vinyl acetate	1.38	4.88	1.00	3.52		EPA-TO-15	12/09/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	94.9 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-06-20201207
Lab ID: 2012110-010A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	0.317	1.56	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	<0.427	<2.24	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	<0.715	<2.93	0.715	2.93		EPA-TO-15	12/09/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	75.8	288	7.50	28.5		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC9-12)	<7.50	<44.2	7.50	44.2		EPA-TO-15	12/09/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	12/09/2020	MS
Decane	0.470	2.74	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	7.12	21.0	0.711	2.10		EPA-TO-15	12/09/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	<1.10	<7.65	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	0.788	5.49	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	1.39	6.49	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	91.3 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	0.688	3.75	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06		EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07		EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23		EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	0.435	2.14	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40		EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-06-20201207
Lab ID: 2012110-010A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47		EPA-TO-15	12/09/2020	MS
1,3-Butadiene	<0.500	<1.11	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80		EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	1.68	4.95	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	<1.00	<2.46	1.00	2.46		EPA-TO-15	12/09/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10		EPA-TO-15	12/09/2020	MS
Acetone	28.4	67.3	10.0	23.8		EPA-TO-15	12/10/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	0.301	0.963	0.0895	0.286		EPA-TO-15	12/09/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59		EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	<0.300	<2.01	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07		EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921		EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	12/09/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	3.21	11.1	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.495	2.45	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	<1.00	<3.60	1.00	3.60		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-06-20201207
Lab ID: 2012110-010A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	0.435	1.89	0.400	1.74		EPA-TO-15	12/09/2020	MS
Heptane	0.549	2.21	0.400	1.61		EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7		EPA-TO-15	12/09/2020	MS
m,p-Xylene	1.64	7.10	0.800	3.47		EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524		EPA-TO-15	12/09/2020	MS
n-Hexane	<0.400	<1.41	0.400	1.41		EPA-TO-15	12/09/2020	MS
o-Xylene	0.450	1.95	0.400	1.74		EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97		EPA-TO-15	12/09/2020	MS
Propylene	27.0	46.5	4.00	6.88		EPA-TO-15	12/10/2020	MS
Styrene	2.85	12.1	0.400	1.70		EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	0.457	3.10	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	3.14	11.8	0.400	1.51		EPA-TO-15	12/09/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	0.326	1.75	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	2.63	14.8	0.400	2.25		EPA-TO-15	12/09/2020	MS
Vinyl acetate	1.46	5.14	1.00	3.52		EPA-TO-15	12/09/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	89.9 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-07-20201207
Lab ID: 2012110-011A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Analyte	Concentration		Reporting Limit		Qual	Method	Date/Analyst	
Petroleum Fractionation by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,2,3-Trimethylbenzene	<0.403	<1.98	0.403	1.98		EPA-TO-15	12/09/2020	MS
1-methyl-3-ethylbenzene	0.463	2.28	0.221	1.09		EPA-TO-15	12/09/2020	MS
2,3-Dimethylheptane	0.479	2.51	0.427	2.24		EPA-TO-15	12/09/2020	MS
2,3-Dimethylpentane	55.0	225	7.15	29.3		EPA-TO-15	12/10/2020	MS
p-isopropyltoluene	<0.447	<2.45	0.447	2.45		EPA-TO-15	12/09/2020	MS
Aliphatic Hydrocarbon (EC5-8)	2,060	7,830	75.0	285		EPA-TO-15	12/10/2020	MS
Aliphatic Hydrocarbon (EC9-12)	35.8	211	7.50	44.2		EPA-TO-15	12/09/2020	MS
Aromatic Hydrocarbon (EC9-10)	<6.25	<31.4	6.25	31.4		EPA-TO-15	12/09/2020	MS
Decane	0.895	5.21	0.416	2.42		EPA-TO-15	12/09/2020	MS
Isopentane	48.8	144	7.11	21.0		EPA-TO-15	12/10/2020	MS
Isopropylbenzene	<0.349	<1.72	0.349	1.72		EPA-TO-15	12/09/2020	MS
Butylcyclohexane	<0.544	<3.12	0.544	3.12		EPA-TO-15	12/09/2020	MS
Dodecane	2.28	15.9	1.10	7.65		EPA-TO-15	12/09/2020	MS
Nonane	<0.487	<2.55	0.487	2.55		EPA-TO-15	12/09/2020	MS
Undecane	0.804	5.60	0.724	5.04		EPA-TO-15	12/09/2020	MS
Octane	5.41	25.3	0.503	2.35		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	93.3 %Rec	--	70-130	--		EPA-TO-15	12/09/2020	MS
Volatile Organic Compounds by EPA Method TO-15	**(ppbv)**	**(ug/m³)**	**(ppbv)**	**(ug/m³)**				
1,1,1-Trichloroethane	<0.400	<2.18	0.400	2.18		EPA-TO-15	12/09/2020	MS
1,1,2,2-Tetrachloroethane	<0.300	<2.06	0.300	2.06	I	EPA-TO-15	12/09/2020	MS
CFC-113	<0.400	<3.07	0.400	3.07	I	EPA-TO-15	12/09/2020	MS
1,1,2-Trichloroethane (TCA)	<0.500	<2.73	0.500	2.73		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethane	<0.200	<0.810	0.200	0.810		EPA-TO-15	12/09/2020	MS
1,1-Dichloroethene (DCE)	<0.400	<1.59	0.400	1.59		EPA-TO-15	12/09/2020	MS
1,2,4-Trichlorobenzene	<0.300	<2.23	0.300	2.23	I	EPA-TO-15	12/09/2020	MS
1,2,4-Trimethylbenzene	0.534	2.62	0.300	1.47	I	EPA-TO-15	12/09/2020	MS
1,2-Dibromoethane (EDB)	<0.200	<1.54	0.200	1.54		EPA-TO-15	12/09/2020	MS
1,2-Dichlorobenzene	<0.400	<2.40	0.400	2.40	I	EPA-TO-15	12/09/2020	MS
1,2-Dichloroethane	<0.200	<0.809	0.200	0.809		EPA-TO-15	12/09/2020	MS

Client: Ramboll
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-07-20201207
Lab ID: 2012110-011A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
1,2-Dichloropropane	<0.500	<2.31	0.500	2.31		EPA-TO-15	12/09/2020	MS
1,3,5-Trimethylbenzene	<0.300	<1.47	0.300	1.47	I	EPA-TO-15	12/09/2020	MS
1,3-Butadiene	2.98	6.59	0.500	1.11		EPA-TO-15	12/09/2020	MS
1,3-Dichlorobenzene	<0.300	<1.80	0.300	1.80	I	EPA-TO-15	12/09/2020	MS
1,4-Dichlorobenzene	<0.300	<1.80	0.300	1.80	I	EPA-TO-15	12/09/2020	MS
1,4-Dioxane	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
(MEK) 2-Butanone	3.85	11.4	1.00	2.95		EPA-TO-15	12/09/2020	MS
2-Hexanone	<1.00	<4.10	1.00	4.10	I	EPA-TO-15	12/09/2020	MS
Isopropyl Alcohol	2.19	5.39	1.00	2.46		EPA-TO-15	12/09/2020	MS
4-Methyl-2-pentanone (MIBK)	<1.00	<4.10	1.00	4.10	I	EPA-TO-15	12/09/2020	MS
Acetone	54.4	129	1.00	2.38	E	EPA-TO-15	12/09/2020	MS
Acrolein	<0.125	<0.287	0.125	0.287		EPA-TO-15	12/09/2020	MS
Benzene	0.641	2.05	0.0895	0.286		EPA-TO-15	12/09/2020	MS
Benzyl chloride	<0.500	<2.59	0.500	2.59	I	EPA-TO-15	12/09/2020	MS
Dichlorobromomethane	0.539	3.61	0.300	2.01		EPA-TO-15	12/09/2020	MS
Bromoform	<0.200	<2.07	0.200	2.07	I	EPA-TO-15	12/09/2020	MS
Bromomethane	<0.500	<1.94	0.500	1.94		EPA-TO-15	12/09/2020	MS
Carbon disulfide	<1.50	<4.67	1.50	4.67		EPA-TO-15	12/09/2020	MS
Carbon tetrachloride	<0.0657	<0.413	0.0657	0.413		EPA-TO-15	12/09/2020	MS
Chlorobenzene	<0.200	<0.921	0.200	0.921	I	EPA-TO-15	12/09/2020	MS
Dibromochloromethane	<0.500	<4.26	0.500	4.26		EPA-TO-15	12/09/2020	MS
Chloroethane	<0.400	<1.06	0.400	1.06		EPA-TO-15	12/09/2020	MS
Chloroform	<0.200	<0.977	0.200	0.977		EPA-TO-15	12/09/2020	MS
Chloromethane	<0.500	<1.03	0.500	1.03		EPA-TO-15	12/09/2020	MS
cis-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
cis-1,3-dichloropropene	<0.400	<1.82	0.400	1.82		EPA-TO-15	12/09/2020	MS
Cyclohexane	16.3	56.1	0.400	1.38		EPA-TO-15	12/09/2020	MS
Dichlorodifluoromethane (CFC-12)	0.541	2.68	0.400	1.98		EPA-TO-15	12/09/2020	MS
Dichlorotetrafluoroethane (CFC-114)	<0.400	<2.80	0.400	2.80		EPA-TO-15	12/09/2020	MS
Ethyl acetate	2.00	7.22	1.00	3.60		EPA-TO-15	12/09/2020	MS

Client: **Ramboll**
WorkOrder: 2012110
Project: Delta Marine

Client Sample ID: SSV-07-20201207
Lab ID: 2012110-011A
Sample Type: Summa Canister

Date Sampled: 12/7/2020
Date Received: 12/7/2020

Volatile Organic Compounds by EPA Method TO-15

Analyte	Concentration (ppbv)	Concentration (ug/m³)	Reporting Limit (ppbv)	Reporting Limit (ug/m³)	Qual	Method	Date/Analyst	
Ethylbenzene	0.718	3.12	0.400	1.74	I	EPA-TO-15	12/09/2020	MS
Heptane	1.81	7.26	0.400	1.61	I	EPA-TO-15	12/09/2020	MS
Hexachlorobutadiene	<1.00	<10.7	1.00	10.7	I	EPA-TO-15	12/09/2020	MS
m,p-Xylene	1.99	8.66	0.800	3.47	I	EPA-TO-15	12/09/2020	MS
Methyl methacrylate	<0.400	<1.64	0.400	1.64		EPA-TO-15	12/09/2020	MS
Methylene chloride	<2.00	<6.95	2.00	6.95		EPA-TO-15	12/09/2020	MS
Naphthalene	<0.100	<0.524	0.100	0.524	I	EPA-TO-15	12/09/2020	MS
n-Hexane	4.96	17.5	0.400	1.41		EPA-TO-15	12/09/2020	MS
o-Xylene	0.791	3.44	0.400	1.74	I	EPA-TO-15	12/09/2020	MS
4-Ethyltoluene	<0.400	<1.97	0.400	1.97	I	EPA-TO-15	12/09/2020	MS
Propylene	110	190	0.400	0.688	E	EPA-TO-15	12/09/2020	MS
Styrene	6.09	26.0	0.400	1.70	I	EPA-TO-15	12/09/2020	MS
Methyl tert-butyl ether (MTBE)	<0.400	<1.44	0.400	1.44		EPA-TO-15	12/09/2020	MS
Tetrachloroethene (PCE)	<0.200	<1.36	0.200	1.36		EPA-TO-15	12/09/2020	MS
Tetrahydrofuran	<0.400	<1.18	0.400	1.18		EPA-TO-15	12/09/2020	MS
Toluene	16.8	63.2	0.400	1.51		EPA-TO-15	12/09/2020	MS
trans-1,2-Dichloroethene	<0.200	<0.793	0.200	0.793		EPA-TO-15	12/09/2020	MS
trans-1,3-dichloropropene	<0.500	<2.27	0.500	2.27		EPA-TO-15	12/09/2020	MS
Trichloroethene (TCE)	<0.0649	<0.349	0.0649	0.349		EPA-TO-15	12/09/2020	MS
Trichlorofluoromethane (CFC-11)	<0.400	<2.25	0.400	2.25		EPA-TO-15	12/09/2020	MS
Vinyl acetate	32.6	115	1.00	3.52	E	EPA-TO-15	12/09/2020	MS
Vinyl chloride	<0.107	<0.274	0.107	0.274		EPA-TO-15	12/09/2020	MS
Surr: 4-Bromofluorobenzene	91.8 %Rec	--	70-130	--	I	EPA-TO-15	12/09/2020	MS

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.
I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID: **LCS-R64002** SampType: **LCS** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **64002**
Client ID: **LCSW** Batch ID: **R64002** Analysis Date: **12/9/2020** SeqNo: **1285511**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (EC9-12)	11.8	7.50	12.00	0	98.6	70	130				
Aromatic Hydrocarbon (EC9-10)	10.9	6.25	10.00	0	109	70	130				
Isopentane	2.48	0.711	2.000	0	124	70	130				
Surr: 4-Bromofluorobenzene	3.80		4.000		94.9	70	130				

Sample ID: **MB-R64002** SampType: **MBLK** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **64002**
Client ID: **MBLKW** Batch ID: **R64002** Analysis Date: **12/9/2020** SeqNo: **1285512**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (EC9-12)	ND	7.50									
Aromatic Hydrocarbon (EC9-10)	ND	6.25									
Isopentane	ND	0.711									
Surr: 4-Bromofluorobenzene	3.26		4.000		81.6	70	130				

Sample ID: **LCS-R63971** SampType: **LCS** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63971**
Client ID: **LCSW** Batch ID: **R63971** Analysis Date: **12/9/2020** SeqNo: **1284884**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trimethylbenzene	1.82	0.403	2.000	0	91.1	70	130				
1-methyl-3-ethylbenzene	1.91	0.221	2.000	0	95.4	70	130				
2,3-Dimethylheptane	1.74	0.427	2.000	0	87.2	70	130				
2,3-Dimethylpentane	2.14	0.715	2.000	0	107	70	130				
Aliphatic Hydrocarbon (EC5-8)	14.4	7.50	12.00	0	120	70	130				
Aliphatic Hydrocarbon (EC9-12)	11.7	7.50	12.00	0	97.1	70	130				
Aromatic Hydrocarbon (EC9-10)	9.11	6.25	10.00	0	91.1	70	130				
Butylcyclohexane	1.80	0.544	2.000	0	90.2	70	130				
Decane	1.77	0.416	2.000	0	88.4	70	130				
Dodecane	2.11	1.10	2.000	0	105	70	130				
Isopentane	1.71	0.711	2.000	0	85.7	70	130				

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID: **LCS-R63971** SampType: **LCS** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63971**
Client ID: **LCSW** Batch ID: **R63971** Analysis Date: **12/9/2020** SeqNo: **1284884**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	1.80	0.349	2.000	0	89.8	70	130				
Nonane	1.72	0.487	2.000	0	85.9	70	130				
Octane	2.05	0.503	2.000	0	103	70	130				
p-isopropyltoluene	1.78	0.447	2.000	0	88.8	70	130				
Undecane	1.94	0.724	2.000	0	96.8	70	130				
Surr: 4-Bromofluorobenzene	3.88		4.000		97.1	70	130				

Sample ID: **MB-R63971** SampType: **MBLK** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63971**
Client ID: **MBLKW** Batch ID: **R63971** Analysis Date: **12/9/2020** SeqNo: **1284885**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trimethylbenzene	ND	0.403									
1-methyl-3-ethylbenzene	ND	0.221									
2,3-Dimethylheptane	ND	0.427									
2,3-Dimethylpentane	ND	0.715									
Aliphatic Hydrocarbon (EC5-8)	ND	7.50									
Aliphatic Hydrocarbon (EC9-12)	ND	7.50									
Aromatic Hydrocarbon (EC9-10)	ND	6.25									
Butylcyclohexane	ND	0.544									
Decane	ND	0.416									
Dodecane	ND	1.10									
Isopentane	ND	0.711									
Isopropylbenzene	ND	0.349									
Nonane	ND	0.487									
Octane	ND	0.503									
p-isopropyltoluene	ND	0.447									
Undecane	ND	0.724									
Surr: 4-Bromofluorobenzene	3.34		4.000		83.5	70	130				

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID: **2012110-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63971**
Client ID: **SSV-03-20201207** Batch ID: **R63971** Analysis Date: **12/9/2020** SeqNo: **1284901**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,3-Trimethylbenzene	ND	0.403						0		25	
1-methyl-3-ethylbenzene	0.324	0.221						0.3290	1.58	25	
2,3-Dimethylheptane	ND	0.427						0		25	
2,3-Dimethylpentane	53.1	0.715						53.77	1.16	25	E
Aliphatic Hydrocarbon (EC5-8)	847	7.50						839.9	0.874	25	E
Aliphatic Hydrocarbon (EC9-12)	ND	7.50						0		25	
Aromatic Hydrocarbon (EC9-10)	ND	6.25						0		25	
Butylcyclohexane	ND	0.544						0		25	
Decane	0.543	0.416						0.5688	4.68	25	
Dodecane	2.57	1.10						2.380	7.60	25	
Isopentane	27.9	0.711						24.39	13.5	25	E
Isopropylbenzene	ND	0.349						0		25	
Nonane	ND	0.487						0		25	
Octane	1.45	0.503						1.426	1.37	25	
p-isopropyltoluene	ND	0.447						0		25	
Undecane	0.737	0.724						1.032	33.4	25	
Surr: 4-Bromofluorobenzene	3.41		4.000		85.3	70	130		0		

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **2012110-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **64002**
Client ID: **SSV-03-20201207** Batch ID: **R64002** Analysis Date: **12/9/2020** SeqNo: **1285516**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (EC9-12)	ND	7.50						0		25	
Aromatic Hydrocarbon (EC9-10)	ND	6.25						0		25	
Isopentane	16.1	0.711						13.84	14.9	25	
Surr: 4-Bromofluorobenzene	3.51		4.000		87.6	70	130		0		

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID: **LCS-R63996** SampType: **LCS** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63996**
Client ID: **LCSW** Batch ID: **R63996** Analysis Date: **12/10/2020** SeqNo: **1285390**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,3-Dimethylpentane	2.02	0.715	2.000	0	101	70	130				
Aliphatic Hydrocarbon (EC5-8)	13.3	7.50	12.00	0	110	70	130				
Aliphatic Hydrocarbon (EC9-12)	11.0	7.50	12.00	0	91.7	70	130				
Aromatic Hydrocarbon (EC9-10)	9.11	6.25	10.00	0	91.1	70	130				
Isopentane	1.49	0.711	2.000	0	74.4	70	130				
Octane	1.79	0.503	2.000	0	89.4	70	130				
Surr: 4-Bromofluorobenzene	3.96		4.000		99.0	70	130				

Sample ID: **MB-R63966** SampType: **MBLK** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63996**
Client ID: **MBLKW** Batch ID: **R63996** Analysis Date: **12/10/2020** SeqNo: **1285400**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,3-Dimethylpentane	ND	0.715									
Aliphatic Hydrocarbon (EC5-8)	ND	7.50									
Aliphatic Hydrocarbon (EC9-12)	ND	7.50									
Aromatic Hydrocarbon (EC9-10)	ND	6.25									
Isopentane	ND	0.711									
Octane	ND	0.503									
Surr: 4-Bromofluorobenzene	3.41		4.000		85.4	70	130				

Sample ID: **2012051-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63996**
Client ID: **BATCH** Batch ID: **R63996** Analysis Date: **12/10/2020** SeqNo: **1285402**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,3-Dimethylpentane	ND	0.715						0		25	H
Aliphatic Hydrocarbon (EC5-8)	720	7.50						774.7	7.29	25	EH
Aliphatic Hydrocarbon (EC9-12)	64.9	7.50						71.50	9.75	25	H
Aromatic Hydrocarbon (EC9-10)	15.6	6.25						15.88	1.76	25	H
Isopentane	51.2	0.711						26.63	63.1	25	REH

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Petroleum Fractionation by EPA Method TO-15

Sample ID: **2012051-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63996**
Client ID: **BATCH** Batch ID: **R63996** Analysis Date: **12/10/2020** SeqNo: **1285402**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Octane	ND	0.503						0		25	H
Surr: 4-Bromofluorobenzene	4.02		4.000		101	70	130		0		H

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.
E - Estimated value. The amount exceeds the linear working range of the instrument.

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63957** SampType: **LCS** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63957**
Client ID: **LCSW** Batch ID: **R63957** Analysis Date: **12/9/2020** SeqNo: **1284627**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	2.03	0.400	2.000	0	101	70	130				
Dichlorodifluoromethane (CFC-12)	2.15	0.400	2.000	0	107	70	130				
Chloromethane	2.19	0.500	2.000	0	109	70	130				
Dichlorotetrafluoroethane (CFC-114)	1.93	0.400	2.000	0	96.7	70	130				
Vinyl chloride	2.23	0.107	2.000	0	112	70	130				
1,3-Butadiene	2.33	0.500	2.000	0	116	70	130				
Bromomethane	2.33	0.500	2.000	0	116	70	130				
Trichlorofluoromethane (CFC-11)	2.26	0.400	2.000	0	113	70	130				
Chloroethane	2.42	0.400	2.000	0	121	70	130				
Acrolein	2.30	0.125	2.000	0	115	70	130				
1,1-Dichloroethene (DCE)	2.21	0.400	2.000	0	111	70	130				
Acetone	2.10	1.00	2.000	0	105	70	130				
Isopropyl Alcohol	2.12	1.00	2.000	0	106	70	130				
Methylene chloride	2.19	2.00	2.000	0	109	70	130				
Carbon disulfide	2.13	1.50	2.000	0	106	70	130				
trans-1,2-Dichloroethene	2.18	0.200	2.000	0	109	70	130				
Methyl tert-butyl ether (MTBE)	1.95	0.400	2.000	0	97.6	70	130				
n-Hexane	2.02	0.400	2.000	0	101	70	130				
1,1-Dichloroethane	2.18	0.200	2.000	0	109	70	130				
Vinyl acetate	1.66	1.00	2.000	0	83.0	70	130				
cis-1,2-Dichloroethene	2.13	0.200	2.000	0	106	70	130				
(MEK) 2-Butanone	2.12	1.00	2.000	0	106	70	130				
Ethyl acetate	2.14	1.00	2.000	0	107	70	130				
Chloroform	2.12	0.200	2.000	0	106	70	130				
Tetrahydrofuran	1.87	0.400	2.000	0	93.3	70	130				
1,1,1-Trichloroethane	2.05	0.400	2.000	0	103	70	130				
Carbon tetrachloride	2.10	0.0657	2.000	0	105	70	130				
1,2-Dichloroethane	2.02	0.200	2.000	0	101	70	130				
Benzene	2.09	0.0895	2.000	0	105	70	130				
Cyclohexane	2.06	0.400	2.000	0	103	70	130				

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63957** SampType: **LCS** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63957**
Client ID: **LCSW** Batch ID: **R63957** Analysis Date: **12/9/2020** SeqNo: **1284627**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	2.01	0.0649	2.000	0	101	70	130				
1,2-Dichloropropane	2.10	0.500	2.000	0	105	70	130				
Methyl methacrylate	1.72	0.400	2.000	0	85.8	70	130				
Dichlorobromomethane	2.18	0.300	2.000	0	109	70	130				
1,4-Dioxane	1.83	0.400	2.000	0	91.5	70	130				
cis-1,3-dichloropropene	2.07	0.400	2.000	0	103	70	130				
Toluene	1.92	0.400	2.000	0	95.9	70	130				
trans-1,3-dichloropropene	1.85	0.500	2.000	0	92.4	70	130				
1,1,2-Trichloroethane (TCA)	2.07	0.500	2.000	0	104	70	130				
Tetrachloroethene (PCE)	1.83	0.200	2.000	0	91.6	70	130				
Dibromochloromethane	2.02	0.500	2.000	0	101	70	130				
1,2-Dibromoethane (EDB)	1.95	0.200	2.000	0	97.3	70	130				
Chlorobenzene	1.87	0.200	2.000	0	93.4	70	130				
Ethylbenzene	1.90	0.400	2.000	0	94.9	70	130				
m,p-Xylene	3.66	0.800	4.000	0	91.6	70	130				
o-Xylene	1.90	0.400	2.000	0	95.0	70	130				
Styrene	1.74	0.400	2.000	0	86.9	70	130				
Bromoform	1.88	0.200	2.000	0	93.9	70	130				
1,1,2,2-Tetrachloroethane	1.94	0.300	2.000	0	97.2	70	130				
1,3,5-Trimethylbenzene	1.65	0.300	2.000	0	82.5	70	130				
1,2,4-Trimethylbenzene	1.63	0.300	2.000	0	81.5	70	130				
Benzyl chloride	1.59	0.500	2.000	0	79.4	70	130				
4-Ethyltoluene	1.65	0.400	2.000	0	82.3	70	130				
1,3-Dichlorobenzene	1.67	0.300	2.000	0	83.5	70	130				
1,4-Dichlorobenzene	1.57	0.300	2.000	0	78.4	70	130				
1,2-Dichlorobenzene	1.64	0.400	2.000	0	81.9	70	130				
1,2,4-Trichlorobenzene	1.66	0.300	2.000	0	83.1	70	130				
Hexachlorobutadiene	1.67	1.00	2.000	0	83.3	70	130				
Naphthalene	1.66	0.100	2.000	0	82.8	70	130				
2-Hexanone	1.74	1.00	2.000	0	86.8	70	130				

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63957**	SampType: **LCS**	Units: **ppbv**	Prep Date: **12/9/2020**	RunNo: **63957**
Client ID: **LCSW**	Batch ID: **R63957**		Analysis Date: **12/9/2020**	SeqNo: **1284627**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Methyl-2-pentanone (MIBK)	1.84	1.00	2.000	0	91.8	70	130				
CFC-113	2.14	0.400	2.000	0	107	70	130				
Heptane	2.14	0.400	2.000	0	107	70	130				
Surr: 4-Bromofluorobenzene	4.01		4.000		100	70	130				

Sample ID: **MB-R63957**	SampType: **MBLK**	Units: **ppbv**	Prep Date: **12/9/2020**	RunNo: **63957**
Client ID: **MBLKW**	Batch ID: **R63957**		Analysis Date: **12/9/2020**	SeqNo: **1284648**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	ND	0.400									
Dichlorodifluoromethane (CFC-12)	ND	0.400									
Chloromethane	ND	0.500									
Dichlorotetrafluoroethane (CFC-114)	ND	0.400									
Vinyl chloride	ND	0.107									
1,3-Butadiene	ND	0.500									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.400									
Chloroethane	ND	0.400									
Acrolein	ND	0.125									
1,1-Dichloroethene (DCE)	ND	0.400									
Acetone	ND	1.00									
Isopropyl Alcohol	ND	1.00									
Methylene chloride	ND	2.00									
Carbon disulfide	ND	1.50									
trans-1,2-Dichloroethene	ND	0.200									
Methyl tert-butyl ether (MTBE)	ND	0.400									
n-Hexane	ND	0.400									
1,1-Dichloroethane	ND	0.200									
Vinyl acetate	ND	1.00									
cis-1,2-Dichloroethene	ND	0.200									

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **MB-R63957** SampType: **MBLK** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63957**
Client ID: **MBLKW** Batch ID: **R63957** Analysis Date: **12/9/2020** SeqNo: **1284648**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
(MEK) 2-Butanone	ND	1.00									
Ethyl acetate	ND	1.00									
Chloroform	ND	0.200									
Tetrahydrofuran	ND	0.400									
1,1,1-Trichloroethane	ND	0.400									
Carbon tetrachloride	ND	0.0657									
1,2-Dichloroethane	ND	0.200									
Benzene	ND	0.0895									
Cyclohexane	ND	0.400									
Trichloroethene (TCE)	ND	0.0649									
1,2-Dichloropropane	ND	0.500									
Methyl methacrylate	ND	0.400									
Dichlorobromomethane	ND	0.300									
1,4-Dioxane	ND	0.400									
cis-1,3-dichloropropene	ND	0.400									
Toluene	ND	0.400									
trans-1,3-dichloropropene	ND	0.500									
1,1,2-Trichloroethane (TCA)	ND	0.500									
Tetrachloroethene (PCE)	ND	0.200									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.200									
Ethylbenzene	ND	0.400									
m,p-Xylene	ND	0.800									
o-Xylene	ND	0.400									
Styrene	ND	0.400									
Bromoform	ND	0.200									
1,1,2,2-Tetrachloroethane	ND	0.300									
1,3,5-Trimethylbenzene	ND	0.300									
1,2,4-Trimethylbenzene	ND	0.300									

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **MB-R63957** SampType: **MBLK** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63957**
Client ID: **MBLKW** Batch ID: **R63957** Analysis Date: **12/9/2020** SeqNo: **1284648**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzyl chloride	ND	0.500									
4-Ethyltoluene	ND	0.400									
1,3-Dichlorobenzene	ND	0.300									
1,4-Dichlorobenzene	ND	0.300									
1,2-Dichlorobenzene	ND	0.400									
1,2,4-Trichlorobenzene	ND	0.300									
Hexachlorobutadiene	ND	1.00									
Naphthalene	ND	0.100									
2-Hexanone	ND	1.00									
4-Methyl-2-pentanone (MIBK)	ND	1.00									
CFC-113	ND	0.400									
Heptane	ND	0.400									
Surr: 4-Bromofluorobenzene	3.13		4.000		78.1	70	130				

Sample ID: **2012110-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63957**
Client ID: **SSV-03-20201207** Batch ID: **R63957** Analysis Date: **12/9/2020** SeqNo: **1284632**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	5.01	0.400						4.925	1.65	25	
Dichlorodifluoromethane (CFC-12)	0.506	0.400						0.5427	7.09	25	
Chloromethane	ND	0.500						0		25	
Dichlorotetrafluoroethane (CFC-114)	ND	0.400						0		25	
Vinyl chloride	ND	0.107						0		25	
1,3-Butadiene	0.843	0.500						0.8689	2.98	25	
Bromomethane	ND	0.500						0		25	
Trichlorofluoromethane (CFC-11)	0.437	0.400						0.4379	0.224	25	
Chloroethane	ND	0.400						0		25	
Acrolein	ND	0.125						0		25	
1,1-Dichloroethene (DCE)	ND	0.400						0		25	
Acetone	152	1.00						159.3	4.99	25	E

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **2012110-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63957**
Client ID: **SSV-03-20201207** Batch ID: **R63957** Analysis Date: **12/9/2020** SeqNo: **1284632**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropyl Alcohol	2.35	1.00						2.505	6.20	25	
Methylene chloride	ND	2.00						0		25	
Carbon disulfide	ND	1.50						0		25	
trans-1,2-Dichloroethene	ND	0.200						0		25	
Methyl tert-butyl ether (MTBE)	ND	0.400						0		25	
n-Hexane	44.7	0.400						47.42	5.98	25	E
1,1-Dichloroethane	ND	0.200						0		25	
Vinyl acetate	59.6	1.00						63.40	6.20	25	E
cis-1,2-Dichloroethene	ND	0.200						0		25	
(MEK) 2-Butanone	ND	1.00						0		25	
Ethyl acetate	13.8	1.00						14.98	8.11	25	
Chloroform	ND	0.200						0		25	
Tetrahydrofuran	ND	0.400						0		25	
1,1,1-Trichloroethane	0.438	0.400						0.4268	2.62	25	
Carbon tetrachloride	ND	0.0657						0		25	
1,2-Dichloroethane	ND	0.200						0.2047	14.5	25	
Benzene	0.421	0.0895						0.4834	13.8	25	
Cyclohexane	9.57	0.400						9.581	0.130	25	
Trichloroethene (TCE)	2.51	0.0649						2.425	3.45	25	
1,2-Dichloropropane	ND	0.500						0		25	
Methyl methacrylate	ND	0.400						0		25	
Dichlorobromomethane	1.19	0.300						1.214	2.31	25	
1,4-Dioxane	ND	0.400						0		25	
cis-1,3-dichloropropene	ND	0.400						0		25	
Toluene	31.3	0.400						31.81	1.59	25	E
trans-1,3-dichloropropene	ND	0.500						0		25	
1,1,2-Trichloroethane (TCA)	ND	0.500						0		25	
Tetrachloroethene (PCE)	0.240	0.200						0.2936	20.1	25	
Dibromochloromethane	ND	0.500						0		25	
1,2-Dibromoethane (EDB)	ND	0.200						0		25	

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **2012110-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/9/2020** RunNo: **63957**
Client ID: **SSV-03-20201207** Batch ID: **R63957** Analysis Date: **12/9/2020** SeqNo: **1284632**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.200						0		25	
Ethylbenzene	0.675	0.400						0.6829	1.19	25	
m,p-Xylene	1.69	0.800						1.829	7.90	25	
o-Xylene	0.560	0.400						0.5815	3.72	25	
Styrene	2.39	0.400						2.394	0.0773	25	
Bromoform	ND	0.200						0		25	
1,1,2,2-Tetrachloroethane	ND	0.300						0		25	
1,3,5-Trimethylbenzene	ND	0.300						0		25	
1,2,4-Trimethylbenzene	0.422	0.300						0.4644	9.57	25	
Benzyl chloride	ND	0.500						0		25	
4-Ethyltoluene	ND	0.400						0		25	
1,3-Dichlorobenzene	ND	0.300						0		25	
1,4-Dichlorobenzene	ND	0.300						0		25	
1,2-Dichlorobenzene	ND	0.400						0		25	
1,2,4-Trichlorobenzene	ND	0.300						0		25	
Hexachlorobutadiene	ND	1.00						0		25	
Naphthalene	ND	0.100						0		25	
2-Hexanone	ND	1.00						0		25	
4-Methyl-2-pentanone (MIBK)	ND	1.00						0		25	
CFC-113	ND	0.400						0		25	
Heptane	9.03	0.400						9.422	4.25	25	
Surr: 4-Bromofluorobenzene	3.36		4.000		84.0	70	130		0		

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **LCS-R63972** SampType: **LCS** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **LCSW** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284960**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	2.05	0.400	2.000	0	102	70	130				B
Dichlorodifluoromethane (CFC-12)	2.28	0.400	2.000	0	114	70	130				

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63972** SampType: **LCS** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **LCSW** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284960**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	2.29	0.500	2.000	0	115	70	130				
Dichlorotetrafluoroethane (CFC-114)	2.11	0.400	2.000	0	106	70	130				
Vinyl chloride	2.29	0.107	2.000	0	115	70	130				
1,3-Butadiene	2.15	0.500	2.000	0	107	70	130				
Bromomethane	2.55	0.500	2.000	0	128	70	130				
Trichlorofluoromethane (CFC-11)	2.37	0.400	2.000	0	118	70	130				
Chloroethane	2.89	0.400	2.000	0	144	70	130				S
Acrolein	2.50	0.125	2.000	0	125	70	130				
1,1-Dichloroethene (DCE)	2.25	0.400	2.000	0	112	70	130				
Acetone	2.22	1.00	2.000	0	111	70	130				
Isopropyl Alcohol	2.28	1.00	2.000	0	114	70	130				
Methylene chloride	2.32	2.00	2.000	0	116	70	130				
Carbon disulfide	2.22	1.50	2.000	0	111	70	130				
trans-1,2-Dichloroethene	2.36	0.200	2.000	0	118	70	130				
Methyl tert-butyl ether (MTBE)	2.10	0.400	2.000	0	105	70	130				
n-Hexane	2.01	0.400	2.000	0	101	70	130				
1,1-Dichloroethane	2.24	0.200	2.000	0	112	70	130				
Vinyl acetate	1.73	1.00	2.000	0	86.3	70	130				
cis-1,2-Dichloroethene	2.04	0.200	2.000	0	102	70	130				
(MEK) 2-Butanone	2.17	1.00	2.000	0	108	70	130				
Ethyl acetate	2.28	1.00	2.000	0	114	70	130				
Chloroform	2.23	0.200	2.000	0	112	70	130				
Tetrahydrofuran	2.04	0.400	2.000	0	102	70	130				
1,1,1-Trichloroethane	2.19	0.400	2.000	0	110	70	130				
Carbon tetrachloride	2.02	0.0657	2.000	0	101	70	130				
1,2-Dichloroethane	2.09	0.200	2.000	0	105	70	130				
Benzene	2.13	0.0895	2.000	0	106	70	130				
Cyclohexane	2.09	0.400	2.000	0	104	70	130				
Trichloroethene (TCE)	2.14	0.0649	2.000	0	107	70	130				
1,2-Dichloropropane	2.17	0.500	2.000	0	108	70	130				

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63972** SampType: **LCS** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **LCSW** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284960**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl methacrylate	1.73	0.400	2.000	0	86.6	70	130				
Dichlorobromomethane	2.21	0.300	2.000	0	110	70	130				
1,4-Dioxane	2.04	0.400	2.000	0	102	70	130				
cis-1,3-dichloropropene	2.15	0.400	2.000	0	108	70	130				
Toluene	1.95	0.400	2.000	0	97.3	70	130				
trans-1,3-dichloropropene	1.90	0.500	2.000	0	94.8	70	130				
1,1,2-Trichloroethane (TCA)	2.02	0.500	2.000	0	101	70	130				
Tetrachloroethene (PCE)	1.82	0.200	2.000	0	91.2	70	130				
Dibromochloromethane	1.90	0.500	2.000	0	95.1	70	130				
1,2-Dibromoethane (EDB)	1.83	0.200	2.000	0	91.7	70	130				
Chlorobenzene	1.93	0.200	2.000	0	96.4	70	130				
Ethylbenzene	1.93	0.400	2.000	0	96.7	70	130				
m,p-Xylene	3.69	0.800	4.000	0	92.2	70	130				
o-Xylene	1.90	0.400	2.000	0	94.8	70	130				
Styrene	1.75	0.400	2.000	0	87.3	70	130				
Bromoform	2.01	0.200	2.000	0	101	70	130				
1,1,2,2-Tetrachloroethane	2.00	0.300	2.000	0	100	70	130				
1,3,5-Trimethylbenzene	1.79	0.300	2.000	0	89.4	70	130				
1,2,4-Trimethylbenzene	1.74	0.300	2.000	0	87.2	70	130				
Benzyl chloride	1.78	0.500	2.000	0	88.8	70	130				
4-Ethyltoluene	1.76	0.400	2.000	0	87.9	70	130				
1,3-Dichlorobenzene	1.83	0.300	2.000	0	91.7	70	130				
1,4-Dichlorobenzene	1.69	0.300	2.000	0	84.5	70	130				
1,2-Dichlorobenzene	1.84	0.400	2.000	0	92.0	70	130				
1,2,4-Trichlorobenzene	1.96	0.300	2.000	0	97.8	70	130				
Hexachlorobutadiene	1.78	1.00	2.000	0	88.8	70	130				
Naphthalene	1.88	0.100	2.000	0	94.2	70	130				
2-Hexanone	2.01	1.00	2.000	0	100	70	130				
4-Methyl-2-pentanone (MIBK)	2.07	1.00	2.000	0	104	70	130				
CFC-113	2.16	0.400	2.000	0	108	70	130				

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **LCS-R63972** SampType: **LCS** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **LCSW** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284960**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Heptane	2.08	0.400	2.000	0	104	70	130				
Surr: 4-Bromofluorobenzene	4.12		4.000		103	70	130				

NOTES:
S - Outlying spike recovery observed (high bias). Samples are non-detect for this analyte; no further action required.

Sample ID: **MB-R63972** SampType: **MBLK** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **MBLKW** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284961**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	0.567	0.400									
Dichlorodifluoromethane (CFC-12)	ND	0.400									
Chloromethane	ND	0.500									
Dichlorotetrafluoroethane (CFC-114)	ND	0.400									
Vinyl chloride	ND	0.107									
1,3-Butadiene	ND	0.500									
Bromomethane	ND	0.500									
Trichlorofluoromethane (CFC-11)	ND	0.400									
Chloroethane	ND	0.400									
Acrolein	ND	0.125									
1,1-Dichloroethene (DCE)	ND	0.400									
Acetone	ND	1.00									
Isopropyl Alcohol	ND	1.00									
Methylene chloride	ND	2.00									
Carbon disulfide	ND	1.50									
trans-1,2-Dichloroethene	ND	0.200									
Methyl tert-butyl ether (MTBE)	ND	0.400									
n-Hexane	ND	0.400									
1,1-Dichloroethane	ND	0.200									
Vinyl acetate	ND	1.00									
cis-1,2-Dichloroethene	ND	0.200									
(MEK) 2-Butanone	ND	1.00									

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **MB-R63972** SampType: **MBLK** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **MBLKW** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284961**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethyl acetate	ND	1.00									
Chloroform	ND	0.200									
Tetrahydrofuran	ND	0.400									
1,1,1-Trichloroethane	ND	0.400									
Carbon tetrachloride	ND	0.0657									
1,2-Dichloroethane	ND	0.200									
Benzene	ND	0.0895									
Cyclohexane	ND	0.400									
Trichloroethene (TCE)	ND	0.0649									
1,2-Dichloropropane	ND	0.500									
Methyl methacrylate	ND	0.400									
Dichlorobromomethane	ND	0.300									
1,4-Dioxane	ND	0.400									
cis-1,3-dichloropropene	ND	0.400									
Toluene	ND	0.400									
trans-1,3-dichloropropene	ND	0.500									
1,1,2-Trichloroethane (TCA)	ND	0.500									
Tetrachloroethene (PCE)	ND	0.200									
Dibromochloromethane	ND	0.500									
1,2-Dibromoethane (EDB)	ND	0.200									
Chlorobenzene	ND	0.200									
Ethylbenzene	ND	0.400									
m,p-Xylene	ND	0.800									
o-Xylene	ND	0.400									
Styrene	ND	0.400									
Bromoform	ND	0.200									
1,1,2,2-Tetrachloroethane	ND	0.300									
1,3,5-Trimethylbenzene	ND	0.300									
1,2,4-Trimethylbenzene	ND	0.300									
Benzyl chloride	ND	0.500									

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **MB-R63972** SampType: **MBLK** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **MBLKW** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284961**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Ethyltoluene	ND	0.400									
1,3-Dichlorobenzene	ND	0.300									
1,4-Dichlorobenzene	ND	0.300									
1,2-Dichlorobenzene	ND	0.400									
1,2,4-Trichlorobenzene	ND	0.300									
Hexachlorobutadiene	ND	1.00									
Naphthalene	ND	0.100									
2-Hexanone	ND	1.00									
4-Methyl-2-pentanone (MIBK)	ND	1.00									
CFC-113	ND	0.400									
Heptane	ND	0.400									
Surr: 4-Bromofluorobenzene	3.27		4.000		81.8	70	130				

Sample ID: **2012051-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **BATCH** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284963**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	3,520	0.400						4,337	20.9	25	BEH
Dichlorodifluoromethane (CFC-12)	ND	0.400						0		25	H
Chloromethane	1.76	0.500						2.033	14.6	25	H
Dichlorotetrafluoroethane (CFC-114)	ND	0.400						0		25	H
Vinyl chloride	0.251	0.107						0.3153	22.8	25	H
1,3-Butadiene	ND	0.500						0		25	H
Bromomethane	ND	0.500						0		25	H
Trichlorofluoromethane (CFC-11)	ND	0.400						0		25	H
Chloroethane	ND	0.400						0		25	H
Acrolein	ND	0.125						0		25	H
1,1-Dichloroethene (DCE)	ND	0.400						0		25	H
Acetone	229	1.00						256.8	11.5	25	EH
Isopropyl Alcohol	1.79	1.00						2.070	14.6	25	H

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **2012051-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **BATCH** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284963**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	7.75	2.00						9.178	16.9	25	H
Carbon disulfide	ND	1.50						0		25	H
trans-1,2-Dichloroethene	ND	0.200						0		25	H
Methyl tert-butyl ether (MTBE)	ND	0.400						0		25	H
n-Hexane	0.738	0.400						0.9326	23.3	25	H
1,1-Dichloroethane	ND	0.200						0		25	H
Vinyl acetate	2.98	1.00						3.372	12.2	25	H
cis-1,2-Dichloroethene	ND	0.200						0		25	H
(MEK) 2-Butanone	1.73	1.00						1.865	7.81	25	H
Ethyl acetate	ND	1.00						0		25	H
Chloroform	ND	0.200						0		25	H
Tetrahydrofuran	2.15	0.400						2.331	8.26	25	H
1,1,1-Trichloroethane	ND	0.400						0		25	H
Carbon tetrachloride	ND	0.0657						0		25	H
1,2-Dichloroethane	ND	0.200						0		25	H
Benzene	0.426	0.0895						0.4466	4.74	25	H
Cyclohexane	0.960	0.400						0.9370	2.44	25	H
Trichloroethene (TCE)	ND	0.0649						0		25	H
1,2-Dichloropropane	ND	0.500						0		25	H
Methyl methacrylate	ND	0.400						0		25	H
Dichlorobromomethane	ND	0.300						0		25	H
1,4-Dioxane	ND	0.400						0		25	H
cis-1,3-dichloropropene	ND	0.400						0		25	H
Toluene	1.37	0.400						1.309	4.35	25	H
trans-1,3-dichloropropene	ND	0.500						0		25	H
1,1,2-Trichloroethane (TCA)	ND	0.500						0		25	H
Tetrachloroethene (PCE)	0.660	0.200						0.6774	2.55	25	H
Dibromochloromethane	ND	0.500						0		25	H
1,2-Dibromoethane (EDB)	ND	0.200						0		25	H
Chlorobenzene	ND	0.200						0		25	H

Work Order: 2012110
CLIENT: Ramboll
Project: Delta Marine

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method TO-15

Sample ID: **2012051-001AREP** SampType: **REP** Units: **ppbv** Prep Date: **12/10/2020** RunNo: **63972**
Client ID: **BATCH** Batch ID: **R63972** Analysis Date: **12/10/2020** SeqNo: **1284963**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	ND	0.400						0		25	H
m,p-Xylene	ND	0.800						0		25	H
o-Xylene	ND	0.400						0		25	H
Styrene	ND	0.400						0		25	H
Bromoform	ND	0.200						0		25	H
1,1,2,2-Tetrachloroethane	ND	0.300						0		25	H
1,3,5-Trimethylbenzene	0.431	0.300						0.4429	2.84	25	H
1,2,4-Trimethylbenzene	2.45	0.300						2.436	0.381	25	H
Benzyl chloride	ND	0.500						0		25	H
4-Ethyltoluene	0.630	0.400						0.6135	2.60	25	H
1,3-Dichlorobenzene	ND	0.300						0		25	H
1,4-Dichlorobenzene	ND	0.300						0		25	H
1,2-Dichlorobenzene	ND	0.400						0		25	H
1,2,4-Trichlorobenzene	ND	0.300						0		25	H
Hexachlorobutadiene	ND	1.00						0		25	H
Naphthalene	1.88	0.100						1.848	1.49	25	H
2-Hexanone	ND	1.00						0		25	H
4-Methyl-2-pentanone (MIBK)	ND	1.00						0		25	H
CFC-113	ND	0.400						0		25	H
Heptane	0.624	0.400						0.5988	4.10	25	H
Surr: 4-Bromofluorobenzene	3.86		4.000		96.4	70	130		0		H

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.
B - Detection in sample is 10x greater than detection in Method Blank. No further action required.

Sample Log-In Check List

Client Name:	**RAMBOL**	Work Order Number:	**2012110**
Logged by:	**Clare Griggs**	Date Received:	**12/7/2020 2:39:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☐	No ☑	NA ☐
		Air Samples		
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Present ☑
6.	Was an attempt made to cool the samples?	Yes ☐	No ☐	NA ☑
7.	Were all items received at a temperature of >2°C to 6°C *	Yes ☐	No ☐	NA ☑
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☑	No ☐	NA ☐

Person Notified:	Amy Kephart / Sam Leick	Date:	12/7/2020
By Whom:	Clare Griggs	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Confirming COC.		
Client Instructions:	See revised COC.		

19. Additional remarks:

Item Information

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Air Chain of Custody Record & Laboratory Services Agreement

Date: 12/7/20 Page: 1 of: 3

Laboratory Project No (Internal): 2012110

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Suite 2820

Location: Delta Marine

City, State, Zip: Seattle, WA 98160

Collected by: SL

Telephone: 206-336-16064

Reports to (PM): AKephart + SLeick @Ramboll.com

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

Fax:

Email (PM): AKephart@Ramboll.com, SLeick@Ramboll.com

	Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure ("Hg)	Sample End Date & Time	Field Final Sample Pressure ("Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C		Comments	Internal: Final Pressure ("Hg)
1	SSV-03-20201207	4906 / C549	S	1L	~200m l/min	12-7-20 10:12	-30	12-7-20 10:18	-5	X						X					-2
2	SSV-104-20201207	3486 / DD1	S	1L	~200m l/min	12-7-20 10:53	-30	12-7-20 10:55	-5	X						X				Pressure went from -30 to -5 in 2 minutes.	-2
3	SSV-01-20201207	11025 / F25	S	1L	~200m l/min	12-7-20 9:32	-30	12-7-20 9:37	-4	X						X					-2
4	SSV-05-20201207	5025 / F2	S	1L	~200m l/min	12-7-20 12:05	-30	12-7-20 12:11	-5	X						X					-5
5	SSV-08-20201207	10376 / F7	S	1L	~200m l/min	12-7-20 1303	-30	12-7-20 1308	-5	X						X					-5

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

Turn-Around Time:

☐ Standard ☐ Next Day

☒ 3 Day ☐ Same Day

☐ 2 Day specify

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sam Jereb	Sam Leick	12-7-20/1420	x Claire Anderson	Claire Anderson	1439 12/7/20
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Air Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 12/7/20 Page: 2 of: 3

Laboratory Project No (Internal): 2012110

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Suite 2820

Location: Delta Marine, Seattle

City, State, Zip: Seattle, WA 98160

Collected by: SL

Telephone: 206-336-1064

Reports to (PM): AKephart + SLeick

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

Fax:

Email (PM): AKephart@Ramboll.com, SLeick@Ramboll.com

	Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure ("Hg)	Sample End Date & Time	Field Final Sample Pressure ("Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C	Comments	Internal: Final Pressure ("Hg)
1	Not Used	11019 / F34		1L	~200m l/min														SL	
2	SSV02-20201207	11013 / F17	S	1L	~200m l/min	12-7-20 0916	-30	12-7-20 0921	-3											-3
3	SSV04-20201207	4682 / F22	S	1L	~200m l/min	12-7-20 1047	-30	12-7-20 1053	-1											-1
4	SSV104-20201207	5024 / F5	S	1L	~200m l/min	12-7-20 1103	-30	12-7-20 1104	-1										Same as serial #3486	-1
5	SSV-09-20201207	3487 / G1	S	1L	~200m l/min	12-7-20 1318	-30	12-7-20 1323	-2											-2

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-Around Time:

☐ Standard ☐ Next Day

☒ 3 Day ☐ Same Day

☐ 2 Day ☐ specify

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sam Leick	Sam Leick	12-7-20/1420	x Claire Anderson	Claire Anderson	1439 12/7/20
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Air Chain of Custody Record & Laboratory Services Agreement

Date: 12/7/20 Page: 3 of: 3

Laboratory Project No (Internal): 2012110

Special Remarks:

Client: Ramboll

Address: 901 5th Ave, Suite 2820

City, State, Zip: Seattle, WA 98164

Telephone: 206 329-0604

Fax:

Project Name: Delta Marine

Project No:

Location: Delta Marine, Seattle, WA

Collected by: SL

Reports to (PM): AKephart, SLeick

Email (PM): AKephart@Ramboll.com, SLeick@Ramboll.com

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

	Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure (" Hg)	Sample End Date & Time	Field Final Sample Pressure (" Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C		Comments	Internal: Final Pressure ("Hg)
1	SSV-06-20201207	11018 Canister F35 Flow Reg	S	1L	~200m l/min	12/7/20 12:23 Date Time	-30 Pressure	12/7/20 12:29 Date Time	-5 Pressure	X						X					-5
2	SSV-07-20201207	11012 Canister F4 Flow Reg	S	1L	~200m l/min	12/7/20 12:43 Date Time	-30 Pressure	12/7/20 12:49 Date Time	-3 Pressure	X						X					-3
3		Canister Flow Reg				Date Time	Pressure	Date Time	Pressure												
4		Canister Flow Reg				Date Time	Pressure	Date Time	Pressure												
5		Canister Flow Reg				Date Time	Pressure	Date Time	Pressure												

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-Around Time:

☐ Standard ☐ Next Day

☒ 3 Day ☐ Same Day

☐ 2 Day ____ specify

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sam Leick	Sam Leick	12-7-20/1426	x Clare Anderson	Clare Anderson	1439 12/7/20
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Air Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (Internal): 2012110

Date: 12/7/20 Page: 1 of: 3

Project Name: Delta Marine

Special Remarks:

Client: Ramboll

Project No:

Address: 901 5th Ave, Suite 2820

Location: Delta Marine

City, State, Zip: Seattle, WA 98164

Collected by: SL

Telephone: 206-336-16064

Reports to (PM): AKephart + SLeick @Ramboll.com

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

Fax:

Email (PM): AKephart@Ramboll.com, SLeick@Ramboll.com

	Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure ("Hg)	Sample End Date & Time	Field Final Sample Pressure ("Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C		Comments	Internal: Final Pressure ("Hg)
1	SSV-03-20201207	4906 / C549	S	1L	~200m l/min	12-7-20 10:12	-30	12-7-20 10:18	-5	X						X					-2
2	SSV-104-20201207	3486 / DD1	S	1L	~200m l/min	12-7-20 10:53	-30	12-7-20 10:55	-5	X						X				Pressure went from -30 to -5 in 2 minutes.	-2
3	SSV-01-20201207	11025 / F25	S	1L	~200m l/min	12-7-20 9:32	-30	12-7-20 9:37	-4	X						X					-2
4	SSV-05-20201207	5025 / F2	S	1L	~200m l/min	12-7-20 12:05	-30	12-7-20 12:11	-5	X						X					-5
5	SSV-08-20201207	10376 / F7	S	1L	~200m l/min	12-7-20 1303	-30	12-7-20 1308	-5	X						X					-5

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

Turn-Around Time:

☐ Standard ☐ Next Day

☒ 3 Day ☐ Same Day

☐ 2 Day specify

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sam Jereb	Sam Leick	12-7-20/1420	x Clair Anderson	Claire Anderson	1439 12/7/20
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Air Chain of Custody Record & Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 12/7/20 Page: 2 of: 3

Laboratory Project No (Internal): 2012110

Project Name: Delta Marine

Special Remarks:

edits per SL 12/7/20 -CG

Client: Ramboll

Project No:

Address: 901 5th Ave, Suite 2820

Location: Delta Marine, Seattle

City, State, Zip: Seattle, WA 98160

Collected by: SL

Telephone: 206-336-1064

Reports to (PM): AKeehart + SLeick

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

Fax:

Email (PM): AKeehart@Ramboll.com, SLeick@Ramboll.com

	Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure ("Hg)	Sample End Date & Time	Field Final Sample Pressure ("Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C	Comments	Internal: Final Pressure ("Hg)
1	Not Used	11019 / F34		1L	~200m l/min														SL	
2	SSV02-20201207	11013 / F17	S	1L	~200m l/min	12-7-20 9:16	-30	12-7-20 09:21	-3	X						X				-3
3	SSV04-20201207	4682 / F22	S	1L	~200m l/min	12-7-20 10:47	-30	12-7-20 10:53	-1	X						X				-1
4	SSV104-20201207	5024 / F5	S	1L	~200m l/min	12-7-20 11:03	-30	12-7-20 11:04	-1										Same as serial #3486	-1
5	SSV-09-20201207	3487 / G1	S	1L	~200m l/min	12-7-20 13:18	-30	12-7-20 13:23	-2	X						X				-2

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-Around Time:

☐ Standard ☐ Next Day
☒ 3 Day ☐ Same Day
☐ 2 Day specify

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sam Leick	Sam Leick	12-7-20/1420	x Claire Anderson	Claire Anderson	1439 12/7/20
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		

Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Air Chain of Custody Record & Laboratory Services Agreement

Date: 12/7/20 Page: 3 of: 3

Laboratory Project No (Internal): 201210

Special Remarks:

Client: Ramboll

Address: 901 5th Ave, Suite 2820

City, State, Zip: Seattle, WA 98164

Telephone: 206 329-0604

Fax:

Project Name: Delta Marine

Project No:

Location: Delta Marine, Seattle, WA

Collected by: SL

Reports to (PM): AKephart, SLeick

Email (PM): AKephart@Ramboll.com, SLeick@Ramboll.com

Air samples are disposed of one week after report is submitted to client unless otherwise requested. ☐ OK to Dispose ☐ Hold (fees may apply)

	Sample Name	Canister / Flow Reg Serial #	Sample Type (Matrix) *	Container Type **	Expected Fill Time / Flow Rate	Sample Start Date & Time	Field Initial Sample Pressure (" Hg)	Sample End Date & Time	Field Final Sample Pressure (" Hg)	Analysis: VOCs TO15 SCAN	VOCs TO15 SCAN LL	VOCs TO15 SIM	Siloxanes TO15	Sulfur TO15	Sulfur Ext. TO15	APH TO15	Helium	Major Gases 3C	Comments	Internal: Final Pressure ("Hg)
1	SSV-06-20201207	11018 Canister F35 Flow Reg	S	1L	~200m l/min	12/7/20 12:23	-30 Pressure	12/7/20 12:29	-5 Pressure	X						X				-5
2	SSV-07-20201207	11012 Canister F4 Flow Reg	S	1L	~200m l/min	12/7/20 12:43	-30 Pressure	12/7/20 12:49	-3 Pressure	X						X				-3
3		Canister Flow Reg				Date Time	Pressure	Date Time	Pressure											
4		Canister Flow Reg				Date Time	Pressure	Date Time	Pressure											
5		Canister Flow Reg				Date Time	Pressure	Date Time	Pressure											

* Matrix Codes: AA = Ambient Air IA = Indoor Air S = Subslab / Soil Gas SVE = SVE L = Landfill D = Digester

** Container Codes: BV = 1 Liter Bottle Vac 6L = 6L Canister 1L = 1L Canister CYL = High Pressure Cylinder F = Filter S = Sorbent Tube TB = Tedlar Bag

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-Around Time:

☐ Standard ☐ Next Day

☒ 3 Day ☐ Same Day

☐ 2 Day ____ specify

Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x Sam Leick	Sam Leick	12-7-20/1426	x Clare Anderson	Clare Anderson	1439 12/7/20
Relinquished (Signature)	Print Name	Date/Time	Received (Signature)	Print Name	Date/Time
x			x		