P&M CARIB ENVIRONMENTAL

REPORTE FINAL
MUESTREO DE AGUA SUBTERÁNEA
(ABRIL 2020)

SISTEMA DE RELLENO SANITARIO
MUNICIPIO DE ARECIBO, PR

ABRIL DE 2020

MUESTREO DE AGUA SUBTERRÁNEA
(1er Evento Abril 2020)

Número de Proyecto: PMC-P37-20-007

Sistema de Relleno Sanitario (SRS) Arecibo
PR-682, Km. 10.6
Arecibo, Puerto Rico

Land-Tech

Preparado para:
Landfill Technologies LLC.
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Preparado por:

P&M CARIB ENVIRONMENTAL

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ACRÓNIMOS Y ABREVIACIONES

	Español	English
bgs	Bajo el nivel de la superficie	Below ground surface
CE	Conductividad específica	Specific Conductivity
COVs / VOCS	Compuestos Orgánicos Volátiles	Volatile Organic Compounds
FB	Blanco de campo	Field Blank
HAP / PAH	Hidrocarburos Aromáticos Policíclicos	Polycyclic Aromatic Hydrocarbons
HCl	Ácido clorhídrico	Hydrochloric acid
HNO_3	Ácido nítrico	Nitric acid
m	metros	Meters
msnm / amsl	Metros sobre el nivel del mar	Above mean sea level
NA	No aplicable	Not applicable
NACASDS / DRES-GQSD	Norma Ambiental sobre Calidad de Aguas Subterráneas y Descargas al Subsuelo de la República Dominicana	Dominican Republic Environmental Standard on Quality and Subsoil Discharges
ND	No detectado	Non-detected
NE	No encontrado	Not found
NRRS / RSSL	Niveles Regionales de Rastreo de Suelo	Regional Soil Screening Levels
OD	Oxígeno Disuelto	Dissolved Oxygen
ORP	Potencial de Oxidación - Reducción	Oxidation - Reduction Potential
OVA	Analizador de orgánicos volátiles	Organic Volatile Analyzer
P&M Carib	P&M Carib Environmental Group S.R. L.	
PID	Detector con lámpara de fotoionización	Photoionization lamp detector
ppm	Partes por millón	Parts per million
QA	Certeza de Calidad	Quality Assurance
QC	Control de Calidad	Quality Control
T	Temperatura	Temperature
TB	Blanco de viaje	Trip Blank
USEPA	Agencia de Protección Ambiental de los Estados Unidos	United States Environmental Protection Agency
PMC Carib	PMC Carib Environmental Consultant, LLC	
SRS	Sistema de Relleno Sanitario	
USEPA	Agencia de Protección Ambiental de Estados Unidos	
USGS	Servicio Geológico de Estados Unidos	
H_2S	Sulfuro de hidrógeno	
JCA	Junta de Calidad Ambiental	
LIE	Límite inferior de explosividad	
CH_4	Metano	
CO	Monóxido de carbono	
COVs	Compuestos orgánicos volátiles	
LTC	Landfill Technologies Corp.	
MCL	Límite Máximo de Contaminación Permisible	
O_2	Oxígeno	

1.0 INTRODUCCIÓN

PMC Carib Environmental Consultant, LLC (PMC Carib) fue contratado por Landfill Technologies, LLC localizados en Gurabo, Puerto Rico para realizar el muestreo de cumplimiento de agua subterránea en el Sistema de Relleno Sanitario localizado en el Municipio de Arecibo, también conocido como el Vertedero de Arecibo. La **Figura 1** presenta la ubicación del SRS en el cuadrángulo del Servicio Geológico de Estados Unidos (USGS, por sus siglas en inglés) correspondiente al área de Arecibo. PMC Carib ha preparado este primer reporte bianual de dos (1 de 2), que contiene los datos de campo, observaciones, resultados finales del laboratorio certificados por un químico licenciado en Puerto Rico, localización de las muestras obtenidas de los pozos de monitoria, conclusiones y recomendaciones. Los trabajos de campo y de muestreo de agua subterránea fueron realizados durante el 15 de abril del 2020.

1.1 Cumplimiento

Los trabajos de campo y de muestreo de agua subterránea, obedecen a los procedimientos establecidos en el Plan de Monitoreo de Agua Subterránea, sometido por Landfill Tecnologies, LLC y aprobado por la JCA en el año 2004. En el Plan aprobado por la JCA, se establecen los procedimientos del monitoreo, los pozos de monitoria a ser muestreados con sus duplicados, los análisis del laboratorio a ser realizados para determinar la presencia de 45 compuestos orgánicos volátiles (COVs) y la presencia de 15 metales que están asociados en la operación del SRS y los cuales se pueden encontrar en el Apéndice II bajo la *Lista de Compuestos Peligrosos Inorgánicos y Orgánicos del Reglamento para el Manejo de los Desperdicios Sólidos No Peligrosos.*

1.2 Propósito

El propósito de este programa trimestral de monitoreo y muestreo de agua subterránea en los cinco (5) pozos de monitoria de cumplimiento en los predios SRS, es confirmar la presencia, si alguna, de estos compuestos peligrosos mencionados en el párrafo anterior, utilizando los cinco (5) pozos de monitoria de donde se obtienen las muestras de agua subterránea para determinar la posible migración de estos compuestos desde el Sistema de Relleno Sanitario (SRS), hacia fuera de los predios o perímetro del SRS.

Las concentraciones de los compuestos peligrosos no deberán exceder los límites máximos de contaminación permisibles (*MCL, por sus siglas en inglés*) establecidos por la Agencia de Protección Ambiental de Estados Unidos, (*USEPA, por sus siglas en inglés*). En caso de que un MCL estuviese sobre

los limites requeridos, se requiere la notificación escrita de los resultados y la evaluación de un plan de acción correctiva, que este en cumplimiento con la Regla 559, del Reglamento para el Manejo de los Desperdicios Sólidos No Peligrosos.

2.0 ALCANCE DEL TRABAJO

El alcance del trabajo realizado por PMC Carib consistió en la ejecución de las siguientes tareas:

- Preparación y coordinación del evento de muestreo de agua subterránea con el personal encargado del SRS de Arecibo.
- Purgado de tres (3) veces el volumen de la columna de agua en cada pozo identificado desde el W-1 al W-5.
- Obtener datos de parámetros de campo durante el purgado de agua de los pozos de monitoria.
- Realizar el muestreo para los cinco (5) pozos de monitoria con sus respectivos duplicados.
- Obtener información adicional para reparar registros de los pozos, de ser necesario.
- Análisis químico de las muestras de agua de los pozos de monitoria del W-1 al W-5 con sus respectivos duplicados para análisis de VOC's siguiendo el método de USEPA 8260 y metales siguiendo el método de USEPA 6010.
- Redacción y entrega del informe de hallazgos y resultados a la JCA y Landfill Technologies, LLC.

2.1 Actividades Realizadas

Las actividades de campo incluyeron, el obtener los parámetros de campo y obtener las muestras de agua subterránea en los cinco (5) pozos de monitoria establecidos en el Plan aprobado por la JCA del 2004 con sus respectivos duplicados. Estos cinco (5) pozos de monitoria de agua subterránea, se encuentran localizados en los predios o alrededores de la operación del SRS de Arecibo. Los pozos de monitoria para el cumplimiento del Plan aprobado por JCA, se encuentran identificados como W-1, W-2, W-3, W-4 y W-5. A todos los pozos de monitoria, se les obtuvo muestras de agua subterránea con sus respectivos duplicados (*excepto al pozo de monitoria identificado como W-1, que se encuentra desaparecido o destruido y no se le obtuvo muestra de agua al momento del evento del muestreo*). El muestreo de agua subterránea se realiza con el fin de determinar mediante análisis químico en el laboratorio, el contenido de los compuestos orgánicos volátiles utilizando el Método de la Agencia de Protección Ambiental Federal (USEPA 8260) y para el análisis químico de metales utilizando el Método USEPA 6010 respectivamente. La **Figura 2** muestra la localización de los pozos de monitoria para el cumplimiento del Plan aprobado por la JCA del 2004agua subterránea.

2.2 Procedimiento del Muestreo

Antes de comenzar con el purgado de agua en cada pozo de monitoria, el nivel del agua subterránea o nivel freático o nivel estático, junto con la profundidad total de cada pozo, fue medido utilizando una sonda electrónica de interfase. Esta medida de la profundidad total junto con la medida del nivel freático en los pozos de monitora, fueron utilizadas para determinar la columna de agua en cada pozo y poder determinar el volumen de agua a ser purgado de cada uno de ellos, antes de obtener la muestra de agua para ser llevada al laboratorio. El purgado y muestreo de los pozos de monitoria, se realizó utilizando una bomba sumergible equipada de 1.5" con tubería de polietileno desechable de 3/8" para extraer el agua subterránea a través del revestimiento de la formación, aproximadamente a la misma razón de flujo que sale de la formación.

2.3 Parámetros de Campo

Durante el proceso del purgado en cada pozo de monitoria, se obtuvo lecturas de conductividad específica, pH, temperatura, turbidez, oxígeno disuelto, salinidad y sólidos disueltos totales del agua extraída del pozo. El purgado en cada pozo de monitoria consistió en purgar tres (3) veces el volumen encontrado en la columna de agua en cada pozo. Copia de los formularios del muestreo de agua se encuentra en el **Anejo A**.

2.4 Control de Calidad

Para propósitos del cumplimiento del Plan aprobado por la JCA en el 2004 y siguiendo el protocolo de control de calidad, se obtuvo blancos de campo y blancos de viaje diarios o por la duración del muestreo, identificados como FB (fecha del muestreo) y TB (fecha del muestreo) en la cadena de custodia. La muestra identificada como FB, es la muestra de agua en la cual se deja las botellas abiertas (con agua dentro), durante el proceso o duración del muestreo, para determinar si hay alguna concentración de VOC's en el ambiente que pueda estar en ese momento durante el proceso de este. La muestra identificada como TB, es la muestra que envía el laboratorio dentro de las neveras portátiles o "cooler" durante el transporte de las botellas hacia nuestras oficinas y duración del muestreo y las mismas no se abren, se mantienen dentro de las neveras portátiles o "coolers", para así determinar alguna concentración cruzada durante el proceso de transporte desde el laboratorio y desde e proyecto hacia el laboratorio (ida y vuelta). Ambas muestras (FB y TB) fueron identificadas en la cadena de custodia y son analizadas en el laboratorio únicamente para USEPA VOC's 8260.

2.5 Preservativos y Conservación de Muestras

Las muestras de agua y los blancos de campo fueron conservados en una nevera portátil con hielo luego de ser envasadas y propiamente identificadas. Las muestras de agua para análisis de compuestos

orgánicos volátiles fueron preservadas con ácido clorhídrico (HCl) y para las muestras de agua para el análisis de metales, fueron preservadas con ácido nítrico (HNO_3). Todas las muestras (incluyendo los blancos) se mantuvieron dentro de la nevera a una temperatura aproximada de 2°C ± 4°C hasta su llegada al laboratorio.

2.5.1 Muestras Duplicadas

Muestras de agua duplicadas en cada una de las muestras obtenidas de los pozos de monitoria. Las muestras duplicadas fueron identificadas utilizando la misma nomenclatura que se utilizó para identificar las muestras obtenidas en los pozos de monitoria, añadiéndole solamente una **"D"** al final de la identificación de la muestra obtenida. Las mismas fueron identificadas en la etiqueta y en la cadena de custodia. Por ejemplo, para la muestra del pozo **W-3** el duplicado se identificó como **W-3D**. En todas las muestras de aguas obtenidas de los pozos de monitoria en este SRS, todas llevaban un duplicado, las mismas fueron identificadas como **W-2D, W-3D, W-4D, W-5D.**

2.5 Laboratorio

Personal de la compañía **PMC Carib** estuvo a cargo de obtener las muestras de agua y custodiar las muestras y los "coolers" o neveras hasta su entrega a FedEx, quien a su vez transportaron las muestras al laboratorio de **Eurofin Test América**, localizado en el 6310 de Roth Way Street en Houston, TX. Copia de la cadena de custodia se incluye en el **Anejo B**.

3.0 RESULTADOS

3.1 Parámetros de Campo y Niveles de Agua Subterránea

Los niveles de agua subterránea fueron medidos con una sonda electrónica de interfase desde el tope de la camisilla de los pozos de monitoria hasta realizar contacto con el agua. Los niveles tuvieron una variación desde 3.80 pies en el pozo **W-2** hasta 18.43 pies en el pozo **W-3**. En adición se repasaron las profundidades totales de los pozos para determinar si tienen sedimentos en el fondo. El **(Anejo A)** se incluye la hoja de datos de campo del técnico ambiental de **PMC Carib** utilizada el día 15 de abril durante la duración del evento de muestreo de agua subterránea.

3.2 Resultados de Análisis Compuestos Orgánicos Volátiles USEPA 8260

Las muestras de agua subterráneas obtenidas en los cuatro (4) pozos de monitoria identificados como **W-2, W-3, W-4** y **W-5** y sus duplicados identificados como **W-2D, W-3D, W-4D** y **MW-5D** resultaron con concentraciones ligeramente detectables en algunos de los compuestos, pero ninguno de las concentraciones detectadas excede el límite máximo de contaminación permisible (MCL) establecido por la Agencia de Protección Ambiental de Estados Unidos para los compuestos de VOC's USEPA 8260.

Todas las muestras obtenidas resultaron con concentraciones por debajo del límite de detección del laboratorio o con concentraciones no detectables. La **Tabla 1** presenta los resultados analíticos de las muestras y sus duplicados para los compuestos orgánicos volátiles. El pozo *W-1 se encuentra desaparecido o destruido, no se le obtuvo muestra de agua al momento del evento del muestreo*

3.3 Resultados de Análisis Metales USEPA 6010

De las muestras obtenidas y analizadas para metales resultaron con concentraciones ligeramente detectables en algunos de los compuestos, pero ninguno de las concentraciones detectadas excede el límite máximo de contaminación permisible (MCL) establecido por la Agencia de Protección Ambiental de Estados Unidos para los parámetros de Metales de USEPA 6010.

La **Tabla 2** presenta los resultados analíticos de las muestras de agua y sus duplicados para los resultados de metales. El pozo *W-1 se encuentra desaparecido o destruido, no se le obtuvo muestra de agua al momento del evento del muestreo.*

El **Anejo C** presenta una copia del informe de resultados certificados por el laboratorio **Eurofin Test América.**

4.0 CONCLUSIONES

- Ninguna de las muestras de agua analizadas en los pozos W-2, W-3, W-4 y W-5 y sus duplicados para los compuestos de VOC's utilizando el método USEPA 8260 y el método de USEPA 8010, indicaron concentraciones sobre el criterio o niveles de limpieza de los MCL's;
- El pozo de monitoria para agua subterránea identificado como W-1, no se le obtuvo muestra de agua ni fue analizado en el laboratorio, el mismo se encuentra desaparecido o destruido al momento de efectuar el muestreo de agua el 15 de abril de 2020.

5.0 RECOMENDACIONES

A base de las observaciones de campo y los resultados analíticos obtenidos, **PMC Carib Environmental Consultant, LLC** recomienda:

Se deberá de continuar con el programa de muestreo de aguas subterráneas como lo indica el Plan de muestreo;

Se deberá de coordinar con personal de Landfills Technologies, para reemplazar el pozo que se encuentra desaparecido (W-1).

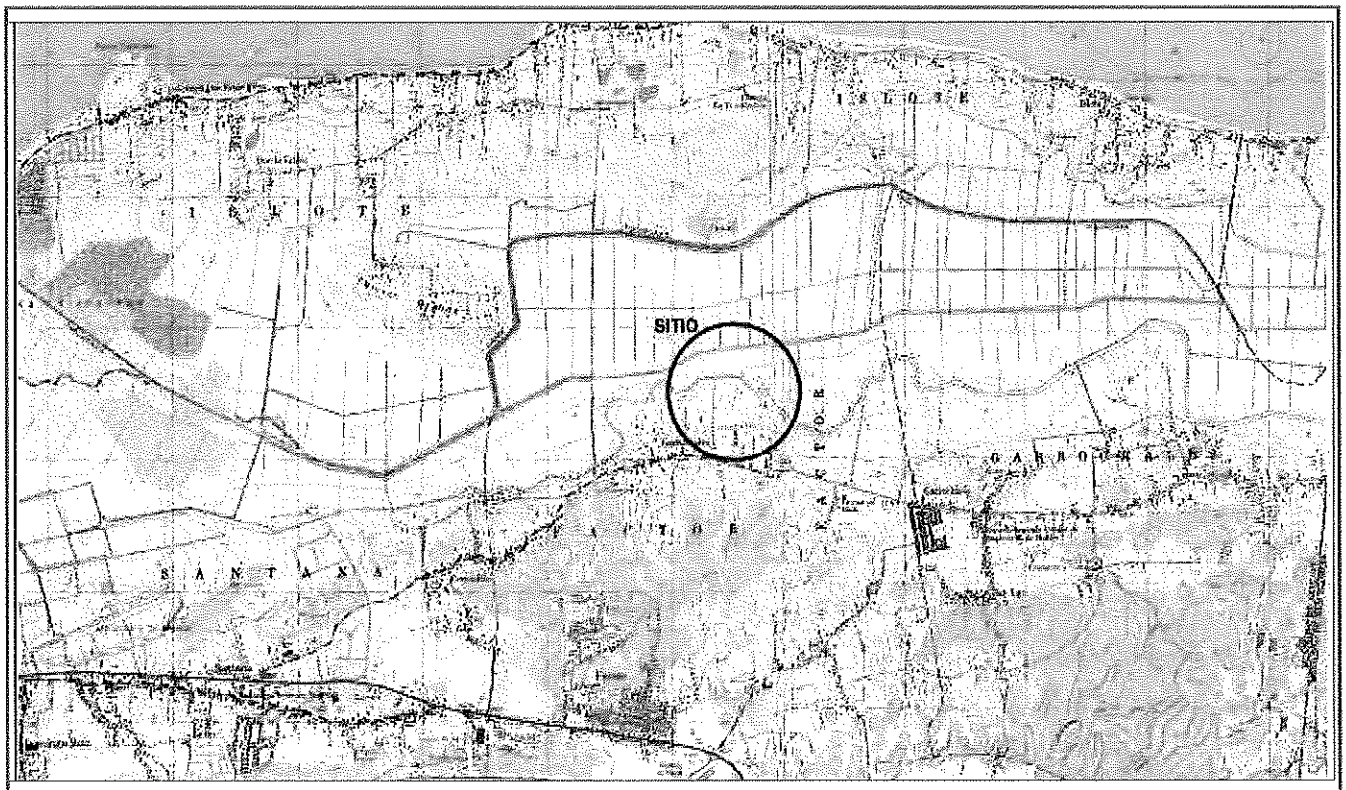
Continuar observando los resultados de los reportes del laboratorio, con el fin de monitorear los mismo y determinar si es necesario realizar acciones correctivas y continuar con los trabajos de mantenimiento periódico de todos los pozos.

6.0 LIMITACIONES

Este documento fue preparado por PMC Carib Environmental Consultant, LLC. para el uso exclusivo de Landfill Tecnologies, LLC y su cliente. El contenido de este informe no debe ser distribuido ni copiado por terceras personas o entidades sin la autorización escrita de PMC Carib Environmental Consultant, LLC y del Cliente. Los hallazgos documentados en este informe están basados en las condiciones existentes en el SRS de Arecibo durante las actividades de muestreo realizadas por el personal de PMC Carib Environmental Consultant, LLC y no representan necesariamente las condiciones en cualquier otro momento.

Las conclusiones aquí incluidas están basadas en las condiciones observadas por PMC Carib Environmental Consultant, LLC, la interpretación de los datos de campo, datos operaciones históricos provistos por el Cliente o representantes, y los resultados de las pruebas químicas realizadas a un número limitado de muestras de agua. Las mismas en ninguna circunstancia representan las condiciones en otras áreas no investigadas o analizadas. De igual manera es necesario reconocer la posibilidad de que existan otras formas de impactos no identificados por el programa de muestreo realizado. La metodología del muestreo, aunque sigue los procedimientos requeridos por la USEPA, no tiene la intensión de producir datos representativos de la caracterización completa del lugar.

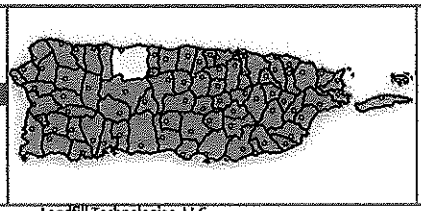
FIGURAS

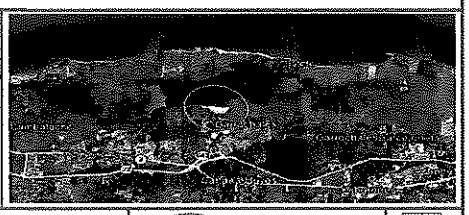


Fuente: Mapa Topográfico del USGS, Cuadrángulo de Arecibo, Fotorevisado 1982

Escala en Millas (Aproximadas)

0 0.5





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Fecha: Abril 2020	

Landfill Technologies, LLC
Mapa Topografico Cuadrangulo de Arecibo
PR-682, Km. 10.6, Arecibo, PR
Arecibo, Puerto Rico
FIGURA 1

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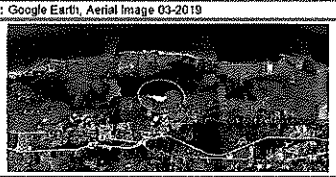
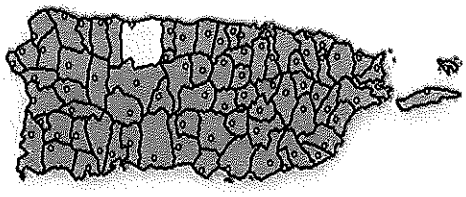
FUENTE: Google Earth, Aerial Image 03-2019





POZO	LATITUD	LONGITUD
W-1	18°28'01.66"	66°37'08.60"
W-2	18°28'1.32"	66°36'59.16"
W-3	18°27'54.42"	66°37'3.06"
W-4	18°27'50.7"	66°37'5.84"
W-5	18°28'2.64"	66°37'37.38"

Leyenda:

LOCALIZACIÓN DE POZOS DE MONITOREO DE AGUA SUBTERRANEA

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Fecha: Abril 2020

Landfill Technologies, LLC
PR-682, Km. 10.6, Arecibo, PR
PR-682, Km. 10.6, Arecibo, PR
FIGURA 2

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TABLAS

TABLA 1

RESUMEN DE RESULTADOS ANALÍTICOS COV's
MÉTODO (USEPA 8260)
SISTEMA RELLENO SANITARIO (SRS)
ARECIBO, PUERTO RICO
15 DE ABRIL DE 2020

NOMBRE DE LOS COMPUESTOS COV's ANALIZADOS	CAS NO.	MCL	RESULTADOS - SRS DE ARECIBO, PUERTO RICO										MUESTRAS QA/QC		RL (mg/L)
			POZO W-1		POZO W-2		POZO W-3		POZO W-4		POZO W-5				
			W-1	W-1D	W-2	W-2D	W-3	W-3D	W-4	W-4D	W-5	W-5D	TB-043520	FB-043520	
Acetona	67-64-1	4.000	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01000
Benceno	71-43-2	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Bromodiclorometano	75-27-4	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Bromoformo	75-25-2	0.700	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Bromometano	74-83-9	0.050	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
2-Butanona (MEK)	78-93-3	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Disulfuro de Carbono	75-15-0	4.000	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Tetracloruro de Carbono	56-23-5	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Clorobenceno	108-90-7	0.700	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Cloroformo	67-66-3	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Clorometano	74-87-3	0.200	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
1,2-Dibromo-3-Cloropropano	96-12-8	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Dibromoclorometano	124-48-1	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
1,2-Dibromuro de etileno (EDB)	106-93-4	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Diclorodifluorometano	75-71-8	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
1,1-Dicloroetano	75-34-3	0.007	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
1,2-Dicloroetano	107-06-2	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
1,1-Dicloroeteno	75-35-4	0.007	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
cis-1,3-Dicloropropeno	156-59-2	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
trans-1,2-Dicloroetano	156-60-5	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
1,2-Dicloropropeno	78-87-5	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
cis-1,3-Dicloropropeno	10061-01-5	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
trans-1,3-Dicloropropeno	10061-02-6	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Etilbenceno	100-41-4	0.700	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
2-Hexanona	591-78-6	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Isopropilbenceno (cumeno)	98-82-8	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Acetato de Metilo	79-20-9	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Cloruro de Metileno	75-09-2	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
4-Metil-2-Pentanona (MIBK)	108-10-1	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Metil-tert-butil éter	1634-04-4	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Estireno	100-42-5	0.100	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
1,1,2,2-Tetracloroetano	79-34-5	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Tetracloroetano	127-18-4	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Tolueno	108-88-3	1.000	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
1,1,1-Tricloroetano	71-55-6	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
1,1,2-Tricloroetano	79-00-5	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Tricloroeteno	79-01-6	0.002	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
Triclorofluorometano	75-69-4	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Cloruro de Vinilo	75-01-4	0.002	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
m&p-xileno		10.000	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00500
o-xileno	95-47-6		*NM*	*NM*											0.00500

LEYENDA:

COVs: Compuestos orgánicos volátiles según listado requerido para este muestreo
CAS NO.: Identificador numérico para parámetro analizado (Chemical Abstract Services, en inglés)
MCL: Límite Máximo de Contaminación Permisible según USEPA
Método 8260: Método de análisis para volátiles según USEPA SMW-846
mg/L: miligramos por litro
NM: No Muestreado (Pozo Desaparecido o Destruido)

ND: No detectado o Por Debajo del Límite de Detección del Laboratorio
QA/QC: Muestras de Control de Calidad y Certeza
RL: Límite de reporte según método analítico
Texto **enneg**recido indica concentraciones exceden el MCL para dicho parámetro
***: USEPA no tiene un MCL establecido para este parámetro

TABLA 2

RESUMEN DE RESULTADOS ANALÍTICOS
METALES MÉTODO USEPA 6010
Sistema de Relleno Sanitario
Arecibo, Puerto Rico
15 de abril de 2020

COMPUESTOS METALES ANALIZADOS			RESULTADOS - SRS DE ARECIBO, PUERTO RICO										RL (mg/L)
			POZO W-1		POZO W-2		POZO W-3		POZO W-4		POZO W-5		
NOMBRE	CAS NO.	MCL	W-1	W-1-D	W-2	W-2-D	W-3	W-3-D	W-4	W-4-D	W-5	W-5-D	
Antimonio	7440-36-0	0.060	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0500
Arsénico	7440-38-2	0.050	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Bario	7440-39-3	2.000	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0200
Berilio	7440-41-7	0.004	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0050
Cadmio	7440-43-9	0.005	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0050
Cromo	7440-47-3	0.100	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Cobalto	7440-48-4	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Cobre	7440-50-8	1.300	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Plomo	7439-92-1	0.015	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Níquel	7440-02-0	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Selenio	7782-49-2	0.050	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0400
Plata	7440-22-4	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Talio	7440-28-0	0.002	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0300
Vanadio	7440-62-2	***	*NM*	*NM*	ND	ND	ND	ND	ND	ND	ND	ND	0.0100
Zinc	7440-66-6	5.000	*NM*	*NM*	ND	ND	ND	ND	ND	ND	0.618	0.165	0.0300

LEYENDA:

CAS NO.: Identificador numérico para parámetro analizado (Chemical Abstract Services, en inglés)
MCL: Límite Máximo de Contaminación Permisible según USEPA
Método 6010: Método de análisis para metales según USEPA SMW-846
Método 7470: Método de análisis para mercurio
mg/L: miligramos por litro

ND: No detectado o Por Debajo del Límite de Detección del Laboratorio
RL: Límite de reporte según método analítico
Texto **ennegrecido** indica concentraciones exceden el MCL para dicho parámetro
*****:** USEPA no tiene un MCL establecido para este parámetro
NM: No Muestreado (Pozo Desaparecido o Destruido)

ANEJO A Documentos de Campo

P&M CARIB ENVIRONMENTAL

FORMULARIO / CONDUCE DE TRABAJO VERTEDEROS

INSTRUCCIONES: Anote el nombre del Proyecto y el número asignado de proyecto en cada página. Contestar todas las preguntas. Verificar lista de cotejo de equipo final. Repasar forma con Ingeniero del proyecto en la oficina cuando complete el proyecto. Use hora militar

I. INFORMACION DEL PROYECTO

1. Fecha del proyecto: Desde 04-15-20 Hasta 04-15-20
2. Nombre del Personal de Campo: Eduardo Pastrana
3. Num. de proyecto: **PMC-P37-20-00** 7
4. Supervisor del proyecto (PMC Carib Environmental): **Isidro M. Perera Armas**
5. Nombre del proyecto: **SRS** Arecibo **, PUERTO RICO**
6. Código de la Facilidad: **N/A**
7. Dirección: _____ Pueblo: _____ País: _____

II. PROPOSITO DEL PROYECTO

X Muestreo de Agua Subterránea en MWs

_____ Muestreo de Cuerpo de Agua Superficial

_____ Monitoreo de Gases Superficiales/Ambiente

_____ Monitoreo de Gases Subterráneos/Pozos

_____ Muestreo Contenido de Drones

_____ Desarrollo de pozos de Monitoría

_____ Muestreo Gases / Summa Canisters

_____ Arreglo Manhole / Bollards / Pad de Concreto

_____ Instalación de Pozo de Monitoreo

_____ Instalación Pozo de Gases

Contactos CONWASTE

Toa Baja: Leonel Ruiz (787)375-6258 / lruiz@landfillpr.com.....**(Job#: PMC-P37-20-004)**
Jonathan de Jesus Rivera (939)630-9031 / jdejesusrivera@landfillpr.com
Guaynabo: Wendelyn Cortes (787)378-0734 / wcortes@landfillpr.com.....**(Job#: PMC-P37-20-005)**
Fajardo: Wendelyn Cortes (787)378-0734 / wcortes@landfillpr.com.....**(Job#: PMC-P37-20-006)**
Arecibo: Hermes Camis (787) 354-8114 / hcamis@landfillpr.com.....**(Job#: PMC-P37-20-007)**
Mayagüez: Idelfonso Rodriguez (787)627-9997 rodriguezruiz@landfillpr.com.....**(Job#: PMC-P37-20-008)**
San Juan: Juan Carrión (787)388-9523 / jcarrion@landfillpr.com.....**(Job#: PMC-P37-20-009)**

Wendelyn Cortes (787)378-0734 (Gerente de Operaciones) email: wcortes@landfillpr.com (Arecibo/Fajardo)
Ing. Vilka Rivera – (787) 632-7546 (Gerente de Operaciones) email: vrivera@landfillpr.com (SJU, Toa Baja, Mayagüez, Arecibo)
Mrs. Sonia Feliciano – (787) 459-9471 (Oficial de Cumplimiento) email: sfeliciano@landfillpr.com (**ConWaste**-Gurabo)

Contactos PMC Carib Environmental Consultant, LLC

Isidro M. Perera: (787) 243-5293 email: iperera@pmcarib.com
Luz E. Martínez: (787) 247-5397 email: lmartinez@pmcarib.com
Carmen Del Valle: (787) 220-9665 email: cdelvalle@pmcarib.com
Eduardo Pastrana: (787) 552-7036 email: epastrana.pmcarib@gmail.com

Contactos de Emergencias

******Ver Hoja de Reunión de Seguridad******

*1515-FB-041520

P&M CARIB

Datos de Parametros de Campo en Pozos de Monitoria

PROYECTO: SRS de Arecibo

FECHA / HORA: 04-15-20

Descripción del Pozo de Monitoria	Tipo del Pozo de Monitoria / Identificación			
	Cumplimiento W-1	Cumplimiento W-2	Cumplimiento W-3	Cumplimiento W-4
Temperatura ____, Tiempo ____ (Nublado, Soleado, Lluvia)	Soleado	Soleado	Soleado	Soleado
Datos del Nivel Freático				
Profundidad del Nivel Freático antes del Desarrollo		3.80	18.43	10.40
Profundidad del Nivel Freático despues del Desarrollo		8.62	18.51	10.53
Datos de la Construcción de los Pozos de Monitoria				
Profundidad total del Pozo (pies)		30.06 ft	46.96 ft	54.00 ft
Altura de la Camisilla del Pozo desde el suelo (Pies)		2.5	2.5 ft	2.5 ft
Diametro del Pozo (Pulgadas)		4"	4"	4"
Columna de Agua en Pozo (Profundidad total ( ) Nivel freático)		26.76	28.53	43.60
Volumen Actual de Agua en Pozo (galones)		17.06 gal	18.54 gal	23.34 gal
Volumen de Agua Removido en el Pozo (Galones)		5 gal	5 gal	5 gal
Datos de Pozos Durante Desarrollo				
TECNICA UTILIZADA	Bomba Sumergible / Bailer / Peristaltica	Bomba Sumergible / Bailer / Peristaltica	Bomba Sumergible / Bailer / Peristaltica	Bomba Sumergible / Bailer / Peristaltica
Hora Comienzo del Desarrollo		1348	1251	1137
Hora Terminado el Desarrollo		1419	1325	1230

DESARROLLO (3 VOLUMENES)	W-1			W-2			W-3			W-4		
Datos de Parametros de Campo	Volumen (1)	Volumen (2)	Volumen (3)	Volumen (1)	Volumen (2)	Volumen (3)	Volumen (1)	Volumen (2)	Volumen (3)	Volumen (1)	Volumen (2)	Volumen (3)
Galones				17 gal	17 gal	16 gal	18	18	18	28	28	28
Nivel de Agua (pies)				10.54	10.92	11.96	18.63	18.65	18.65	11.83	11.85	11.85
Hora (am / pm)				1400	1407	1419	1304	1312	1320	1152	1211	1226
Temperatura (°C o F)				26.6	27.1	27.0	27.2	26.9	26.9	27.6	27.3	27.4
Conductividad Especifica(mS/cm)				610	600	580	900	880	880	2210	2190	2180
pH				9.85	9.52	8.45	7.27	7.15	7.09	8.88	8.77	8.71
Turbidez (ntu)				51.3 NTU	37.7 NTU	25.2 NTU	19.8 NTU	18.5 NTU	16.7 NTU	119 NTU	46.5 NTU	43.9 NTU
DO (%)				0.28	0.31	0.35	0.33	0.35	0.36	0.25	0.26	0.26
Salinidad				0.35	0.33	0.32	0.40	0.37	0.34	1.27	1.19	1.15
TDS (Mg/L)				0.588	0.574	0.570	0.563	0.548	0.552	1.659	1.486	1.359
Color				clear	clear	clear	clear	clear	clear	turbid	turbid	turbid
Olor				NO	NO	NO	NO	NO	NO	SI	SI	SI
Hora del Muestreo:				W-2 (1417)	W-2 (1419)		W-3 (1323)	W-3 (1325)		W-4 (1228)	W-4 (1230)	
Comentarios:				buena condicion			buena condicion			buena condicion		

Equipo Utilizado:

Tecnico Ambiental en Proyecto: Eduardo Castrano

Hora de Terminado el Evento: 1530

Firma: [signature]

WELL CASING VOLUMES

GAL/FT 1-1/4" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65 1-1/2" = 0.09 2-1/2" = 0.26 3-1/2" = 0.50 6" = 1.47

P&M CARIB ENVIRONMENTAL

Datos de Parametros de Campo en Pozos de Monitoria

OYECTO: SRS de Arecibo | FECHA / HORA: 04-15-20

Descripción del Pozo de Monitoria	Tipo del Pozo de Monitoria / Identificación			
	Cumplimiento	Cumplimiento	Cumplimiento	Cumplimiento
	W-5	W-__	W-__	W-__
peratura_____, Tiempo____(Nublado, Soleado, Lluvia)	Soleado			
Datos del Nivel Freático				
undidad del Nivel Freático antes del Desarrollo	4.09			
undidad del Nivel Freático despues del Desarrollo	11.51			
Datos de la Construcción de los Pozos de Monitoria				
undidad total del Pozo (pies)	42.04			
ra de la Camisilla del Pozo desde el suelo (Pies)	2.5 ft			
netro del Pozo (Pulgadas)	4"			
mna de Agua en Pozo (Profundidad total (-) Nivel freático)	37.95			
men Actual de Agua en Pozo (galones)	24.66			
men de Agua Removido en el Pozo (Galones)	72 gal			
Datos de Pozos Durante Desarrollo				
TECNICA UTILIZADA	Bomba Sumergible / Bailer / Peristaltica	Bomba Sumergible / Bailer / Peristaltica	Bomba Sumergible / Bailer / Peristaltica	Bomba Sumergible / Bailer / Perista
Comienzo del Desarrollo	1424			
Terminado el Desarrollo	1507			

DESARROLLO (3 VOLUMENES)	W-5			W-__			W-__			W-__		
s de Parametros de Campo	Volumen (1)	Volumen (2)	Volumen (3)	Volumen (1)	Volumen (2)	Volumen (3)	Volumen (1)	Volumen (2)	Volumen (3)	Volumen (1)	Volumen (2)	Volume
nes	24	24	24									
l de Agua (pies)	12.09	17.48	19.64									
(am / pm)	1432	1444	1455									
peratura (°C) o F)	26.5	26.1	26.0									
luctividad Especifica(mS/cm)	930	910	920									
	852	8.09	7.84									
idez (ntu)	7.65 ntu	6.32 ntu	8.90 ntu									
%)	0.47	0.43	0.43									
idad	0.38	0.33	0.30									
(Mg/L)	0.450	0.416	0.403									
	clear	clear	clear									
	No	NO	NO									
Hora del Muestreo:	W-5 (1505)	W-5D (1507)										
entarios:	buena condición											
po Utilizado:												

ico Ambiental en Proyecto: Eduardo Pastrana | Hora de Terminado el Evento: 1530 | Firma: [signature]

L CASING VOLUMES

/FT 1-¼" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65 1-½" = 0.09 2-1/2" = 0.26 3-1/2" = 0.50 6" = 1.47

Anejo B Cadena de Custodia del Laboratorio Eurofin Test América, Houston,Texas

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone: 713-690-4444 Fax: 713-690-5646

eurofins | Environment Testing TestAmerica

Chain of Custody Record

Client Information	Sampler: Eduardo Pestrana	Lab PM: Swafford, Mark H	Carrier Tracking No(s):
Client Contact: Isidro Perera Armas	Phone: (787) 552-7036	E-Mail: mark.swafford@testamericainc.com	COC No: 600-76005-20499.2
Company: PMC Carib Environmental Consultant LLC			Page: Page 1 of 1
Address: 1651 Ponce De Leon Avenue Equity Plaza Suite 301	Due Date Requested: 04 15 20		Job #
City: San Juan	TAT Requested (days): Std		
State, Zip: PR, 00909			
Phone: 787-243-5293(Tel)	PO #: Pre-Payment by CC Required		
Email: pmc@pmcarib.com	WO #: 3700-010		
Project Name: Puerto Rico Landfill Project	Project #: 60012066		
Site: SRS Arecibo	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C - Target Analyte List	8260C - (MOD) App I Landfill 8260	Total Number of containers	Special Instructions/Note:
			Preservation Codes:		X	X	D	A	X	
W-2	041520	1417	G	Water	N	N	X	X		
W-2D	041520	1419	G	Water	N	N	X	X		
W-3	041520	1323	G	Water	N	N	X	X		
W-3D	041520	1325	G	Water	N	N	X	X		
W-4	041520	1228	G	Water	N	N	X	X		
W-4D	041520	1230	G	Water	N	N	X	X		
W-5	041520	1505	G	Water	N	N	X	X		
W-5D	041520	1507	G	Water	N	N	X	X		
TB-041520	041520	X	G	Water	N	N		X		
FB-041520	041520	1515	G	Water	N	N		X		
				Water						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Eduardo Pestrana	041520 / 1640	PMC Carib Env	Fed Ex		
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks

Scanned with CamScanner

Anejo C Informe Final del Laboratorio Eurofin Test América Certificados por Químico Licenciado bajo el Colegio de Químicos de Puerto Rico

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-203921-1
Client Project/Site: SRS Arecibo

For:
PMC Carib Environmental Consultant LLC
1651 Ponce De Leon Avenue
Equity Plaza
Suite 301
San Juan, Puerto Rico 00909

Attn: Isidro M Perera Armas

Mark Swafford

Authorized for release by:
4/30/2020 9:09:59 AM

Mark Swafford, Project Manager II
(850)471-6207
mark.swafford@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 600-203921-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-203921-1

Comments
No additional comments.

Receipt
The samples were received on 4/16/2020 10:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° C.

GC/MS VOA
Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: W-4 (600-203921-5) and W-4 D (600-203921-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL HOU
6010C	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
5030C	Purge and Trap	SW846	TAL HOU

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-203921-1	W-2	Water	04/15/20 14:17	04/16/20 10:05	
600-203921-2	W-2 D	Water	04/15/20 14:19	04/16/20 10:05	
600-203921-3	W-3	Water	04/15/20 13:23	04/16/20 10:05	
600-203921-4	W-3 D	Water	04/15/20 13:25	04/16/20 10:05	
600-203921-5	W-4	Water	04/15/20 12:28	04/16/20 10:05	
600-203921-6	W-4 D	Water	04/15/20 12:30	04/16/20 10:05	
600-203921-7	W-5	Water	04/15/20 15:05	04/16/20 10:05	
600-203921-8	W-5 D	Water	04/15/20 15:07	04/16/20 10:05	
600-203921-9	TB-041520	Water	04/15/20 00:00	04/16/20 10:05	
600-203921-10	FB-041520	Water	04/15/20 15:15	04/16/20 10:05	

Detection Summary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Client Sample ID: W-2 — Lab Sample ID: 600-203921-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00370	J	0.0100	0.00285	mg/L	1		6010C	Total/NA
Barium	0.0229		0.0200	0.000530	mg/L	1		6010C	Total/NA
Cadmium	0.000700	J	0.00500	0.000280	mg/L	1		6010C	Total/NA
Calcium	46.0		1.00	0.0240	mg/L	1		6010C	Total/NA
Magnesium	15.1		1.00	0.0555	mg/L	1		6010C	Total/NA
Manganese	0.00270	J	0.0100	0.000360	mg/L	1		6010C	Total/NA
Potassium	3.35		1.00	0.0374	mg/L	1		6010C	Total/NA
Selenium	0.00510	J	0.0400	0.00287	mg/L	1		6010C	Total/NA
Sodium	84.4		1.00	0.0214	mg/L	1		6010C	Total/NA
Thallium	0.00800	J	0.0300	0.00417	mg/L	1		6010C	Total/NA
Zinc	0.00750	J	0.0300	0.00400	mg/L	1		6010C	Total/NA

Client Sample ID: W-2 D — Lab Sample ID: 600-203921-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0181	J	0.0200	0.000530	mg/L	1		6010C	Total/NA
Cadmium	0.000800	J	0.00500	0.000280	mg/L	1		6010C	Total/NA
Calcium	46.3		1.00	0.0240	mg/L	1		6010C	Total/NA
Iron	0.0297	J	0.400	0.0270	mg/L	1		6010C	Total/NA
Magnesium	14.9		1.00	0.0555	mg/L	1		6010C	Total/NA
Manganese	0.00250	J	0.0100	0.000360	mg/L	1		6010C	Total/NA
Potassium	3.49		1.00	0.0374	mg/L	1		6010C	Total/NA
Sodium	83.9		1.00	0.0214	mg/L	1		6010C	Total/NA
Zinc	0.00760	J	0.0300	0.00400	mg/L	1		6010C	Total/NA

Client Sample ID: W-3 — Lab Sample ID: 600-203921-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0474		0.0200	0.000530	mg/L	1		6010C	Total/NA
Cadmium	0.000400	J	0.00500	0.000280	mg/L	1		6010C	Total/NA
Calcium	79.7		1.00	0.0240	mg/L	1		6010C	Total/NA
Chromium	0.00190	J	0.0100	0.00159	mg/L	1		6010C	Total/NA
Iron	0.202	J	0.400	0.0270	mg/L	1		6010C	Total/NA
Magnesium	14.3		1.00	0.0555	mg/L	1		6010C	Total/NA
Manganese	0.00460	J	0.0100	0.000360	mg/L	1		6010C	Total/NA
Nickel	0.00110	J	0.0100	0.000800	mg/L	1		6010C	Total/NA
Potassium	4.93		1.00	0.0374	mg/L	1		6010C	Total/NA
Sodium	96.4		1.00	0.0214	mg/L	1		6010C	Total/NA
Vanadium	0.00160	J	0.0100	0.000470	mg/L	1		6010C	Total/NA
Zinc	0.0174	J	0.0300	0.00400	mg/L	1		6010C	Total/NA

Client Sample ID: W-3 D — Lab Sample ID: 600-203921-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0439		0.0200	0.000530	mg/L	1		6010C	Total/NA
Calcium	77.1		1.00	0.0240	mg/L	1		6010C	Total/NA
Chromium	0.00180	J	0.0100	0.00159	mg/L	1		6010C	Total/NA
Iron	0.0439	J	0.400	0.0270	mg/L	1		6010C	Total/NA
Magnesium	13.9		1.00	0.0555	mg/L	1		6010C	Total/NA
Manganese	0.00130	J	0.0100	0.000360	mg/L	1		6010C	Total/NA
Nickel	0.00100	J	0.0100	0.000800	mg/L	1		6010C	Total/NA
Potassium	4.74		1.00	0.0374	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Houston

Detection Summary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Client Sample ID: W-3 D (Continued) — Lab Sample ID: 600-203921-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	95.2		1.00	0.0214	mg/L	1		6010C	Total/NA
Vanadium	0.00140	J	0.0100	0.000470	mg/L	1		6010C	Total/NA
Zinc	0.00990	J	0.0300	0.00400	mg/L	1		6010C	Total/NA

Client Sample ID: W-4 — Lab Sample ID: 600-203921-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.312	J	0.500	0.0926	mg/L	1		6010C	Total/NA
Arsenic	0.0214		0.0100	0.00285	mg/L	1		6010C	Total/NA
Barium	0.455		0.0200	0.000530	mg/L	1		6010C	Total/NA
Cadmium	0.000400	J	0.00500	0.000280	mg/L	1		6010C	Total/NA
Calcium	158		1.00	0.0240	mg/L	1		6010C	Total/NA
Chromium	0.0211		0.0100	0.00159	mg/L	1		6010C	Total/NA
Cobalt	0.0422		0.0100	0.000310	mg/L	1		6010C	Total/NA
Copper	0.00820	J	0.0100	0.00813	mg/L	1		6010C	Total/NA
Iron	4.73		0.400	0.0270	mg/L	1		6010C	Total/NA
Lead	0.00300	J	0.0100	0.00219	mg/L	1		6010C	Total/NA
Magnesium	37.1		1.00	0.0555	mg/L	1		6010C	Total/NA
Manganese	0.188		0.0100	0.000360	mg/L	1		6010C	Total/NA
Nickel	0.175		0.0100	0.000800	mg/L	1		6010C	Total/NA
Potassium	365		10.0	0.374	mg/L	10		6010C	Total/NA
Sodium	1310		10.0	0.214	mg/L	10		6010C	Total/NA
Vanadium	0.0142		0.0100	0.000470	mg/L	1		6010C	Total/NA
Zinc	0.383		0.0300	0.00400	mg/L	1		6010C	Total/NA

Client Sample ID: W-4 D — Lab Sample ID: 600-203921-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.120	J	0.500	0.0926	mg/L	1		6010C	Total/NA
Arsenic	0.0182		0.0100	0.00285	mg/L	1		6010C	Total/NA
Barium	0.424		0.0200	0.000530	mg/L	1		6010C	Total/NA
Cadmium	0.000500	J	0.00500	0.000280	mg/L	1		6010C	Total/NA
Calcium	154		1.00	0.0240	mg/L	1		6010C	Total/NA
Chromium	0.0188		0.0100	0.00159	mg/L	1		6010C	Total/NA
Cobalt	0.0417		0.0100	0.000310	mg/L	1		6010C	Total/NA
Iron	1.59		0.400	0.0270	mg/L	1		6010C	Total/NA
Magnesium	36.9		1.00	0.0555	mg/L	1		6010C	Total/NA
Manganese	0.166		0.0100	0.000360	mg/L	1		6010C	Total/NA
Nickel	0.172		0.0100	0.000800	mg/L	1		6010C	Total/NA
Potassium	412		10.0	0.374	mg/L	10		6010C	Total/NA
Sodium	1490		10.0	0.214	mg/L	10		6010C	Total/NA
Vanadium	0.0111		0.0100	0.000470	mg/L	1		6010C	Total/NA
Zinc	0.253		0.0300	0.00400	mg/L	1		6010C	Total/NA

Client Sample ID: W-5 — Lab Sample ID: 600-203921-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	1.39		0.500	0.0926	mg/L	1		6010C	Total/NA
Arsenic	0.00340	J	0.0100	0.00285	mg/L	1		6010C	Total/NA
Barium	0.0158	J	0.0200	0.000530	mg/L	1		6010C	Total/NA
Cadmium	0.000300	J	0.00500	0.000280	mg/L	1		6010C	Total/NA
Calcium	92.4		1.00	0.0240	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Houston

Detection Summary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Client Sample ID: W-5 (Continued) — Lab Sample ID: 600-203921-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0266		0.0100	0.00159	mg/L	1		6010C	Total/NA
Cobalt	0.000500	J	0.0100	0.000310	mg/L	1		6010C	Total/NA
Copper	0.0252		0.0100	0.00813	mg/L	1		6010C	Total/NA
Iron	3.43		0.400	0.0270	mg/L	1		6010C	Total/NA
Lead	0.00410	J	0.0100	0.00219	mg/L	1		6010C	Total/NA
Magnesium	21.0		1.00	0.0555	mg/L	1		6010C	Total/NA
Manganese	0.0408		0.0100	0.000360	mg/L	1		6010C	Total/NA
Nickel	0.00170	J	0.0100	0.000800	mg/L	1		6010C	Total/NA
Potassium	4.17		1.00	0.0374	mg/L	1		6010C	Total/NA
Sodium	71.0		1.00	0.0214	mg/L	1		6010C	Total/NA
Vanadium	0.0119		0.0100	0.000470	mg/L	1		6010C	Total/NA
Zinc	0.0503		0.0300	0.00400	mg/L	1		6010C	Total/NA

Client Sample ID: W-5 D — Lab Sample ID: 600-203921-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	1.67		0.500	0.0926	mg/L	1		6010C	Total/NA
Arsenic	0.00480	J	0.0100	0.00285	mg/L	1		6010C	Total/NA
Barium	0.0134	J	0.0200	0.000530	mg/L	1		6010C	Total/NA
Cadmium	0.000300	J	0.00500	0.000280	mg/L	1		6010C	Total/NA
Calcium	92.0		1.00	0.0240	mg/L	1		6010C	Total/NA
Chromium	0.0326		0.0100	0.00159	mg/L	1		6010C	Total/NA
Cobalt	0.000400	J	0.0100	0.000310	mg/L	1		6010C	Total/NA
Copper	0.0277		0.0100	0.00813	mg/L	1		6010C	Total/NA
Iron	3.87		0.400	0.0270	mg/L	1		6010C	Total/NA
Lead	0.00360	J	0.0100	0.00219	mg/L	1		6010C	Total/NA
Magnesium	20.9		1.00	0.0555	mg/L	1		6010C	Total/NA
Manganese	0.0412		0.0100	0.000360	mg/L	1		6010C	Total/NA
Nickel	0.00220	J	0.0100	0.000800	mg/L	1		6010C	Total/NA
Potassium	4.10		1.00	0.0374	mg/L	1		6010C	Total/NA
Sodium	70.7		1.00	0.0214	mg/L	1		6010C	Total/NA
Vanadium	0.0120		0.0100	0.000470	mg/L	1		6010C	Total/NA
Zinc	0.0317		0.0300	0.00400	mg/L	1		6010C	Total/NA

Client Sample ID: TB-041520 — Lab Sample ID: 600-203921-9

No Detections.

Client Sample ID: FB-041520 — Lab Sample ID: 600-203921-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.00126	J	0.0100	0.000820	mg/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: W-1

Date Collected: 04/14/20 10:02
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/24/20 15:16	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/24/20 15:16	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/24/20 15:16	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/24/20 15:16	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/24/20 15:16	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/24/20 15:16	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/24/20 15:16	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/24/20 15:16	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/24/20 15:16	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/24/20 15:16	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/24/20 15:16	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/24/20 15:16	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/24/20 15:16	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/24/20 15:16	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/24/20 15:16	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/24/20 15:16	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/24/20 15:16	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 15:16	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/24/20 15:16	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/24/20 15:16	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/24/20 15:16	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/24/20 15:16	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/24/20 15:16	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/24/20 15:16	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/24/20 15:16	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/24/20 15:16	1
Chloroform	0.000820	U	0.0100	0.000820	mg/L			04/24/20 15:16	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/24/20 15:16	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 15:16	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/24/20 15:16	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/24/20 15:16	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/24/20 15:16	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/24/20 15:16	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/24/20 15:16	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 15:16	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/24/20 15:16	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/24/20 15:16	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/24/20 15:16	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/24/20 15:16	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 15:16	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/24/20 15:16	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/24/20 15:16	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/24/20 15:16	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/24/20 15:16	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/24/20 15:16	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/24/20 15:16	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 15:16	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/24/20 15:16	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/24/20 15:16	1

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Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: W-1

Date Collected: 04/14/20 10:02
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/24/20 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*67 - 139*		*04/24/20 15:16*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*04/24/20 15:16*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*04/24/20 15:16*	*1*

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.271**	**J**	0.500	0.0926	mg/L		04/24/20 06:31	04/27/20 13:10	1
Antimony	0.00393	U	0.0500	0.00393	mg/L		04/24/20 06:31	04/27/20 13:10	1
Arsenic	**0.00380**	**J**	0.0100	0.00285	mg/L		04/24/20 06:31	04/27/20 13:10	1
Barium	**0.182**		0.0200	0.000530	mg/L		04/24/20 06:31	04/27/20 13:10	1
Beryllium	**0.000500**	**J**	0.00500	0.000420	mg/L		04/24/20 06:31	04/27/20 13:10	1
Cadmium	**0.000300**	**J**	0.00500	0.000280	mg/L		04/24/20 06:31	04/27/20 13:10	1
Calcium	**61.0**		1.00	0.0240	mg/L		04/24/20 06:31	04/27/20 13:10	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/24/20 06:31	04/27/20 13:10	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/24/20 06:31	04/27/20 13:10	1
Copper	0.00813	U	0.0100	0.00813	mg/L		04/24/20 06:31	04/27/20 13:10	1
Iron	**0.497**		0.400	0.0270	mg/L		04/24/20 06:31	04/27/20 13:10	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/24/20 06:31	04/27/20 13:10	1
Magnesium	**18.5**		1.00	0.0555	mg/L		04/24/20 06:31	04/27/20 13:10	1
Manganese	**0.0202**		0.0100	0.000360	mg/L		04/24/20 06:31	04/27/20 13:10	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/24/20 06:31	04/27/20 13:10	1
Potassium	**1.63**		1.00	0.0374	mg/L		04/24/20 06:31	04/28/20 11:10	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/24/20 06:31	04/27/20 13:10	1
Silver	0.00129	U	0.0100	0.00129	mg/L		04/24/20 06:31	04/27/20 13:10	1
Sodium	**28.2**		1.00	0.0214	mg/L		04/24/20 06:31	04/27/20 13:10	1
Thallium	**0.00590**	**J**	0.0300	0.00417	mg/L		04/24/20 06:31	04/27/20 13:10	1
Vanadium	**0.000600**	**J**	0.0100	0.000470	mg/L		04/24/20 06:31	04/27/20 13:10	1
Zinc	**0.0269**	**J**	0.0300	0.00400	mg/L		04/24/20 06:31	04/27/20 13:10	1

ESTADO LIBRE ASOCIADO DE PUERTO RICO
MARIA DE LOS A. NEGRON
LICENCIA NUMERO 5118
QUIMICO LICENCIADO

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: W-1D

Date Collected: 04/14/20 10:04
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/24/20 15:44	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/24/20 15:44	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/24/20 15:44	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/24/20 15:44	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/24/20 15:44	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/24/20 15:44	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/24/20 15:44	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/24/20 15:44	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/24/20 15:44	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/24/20 15:44	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/24/20 15:44	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/24/20 15:44	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/24/20 15:44	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/24/20 15:44	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/24/20 15:44	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/24/20 15:44	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/24/20 15:44	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 15:44	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/24/20 15:44	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/24/20 15:44	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/24/20 15:44	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/24/20 15:44	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/24/20 15:44	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/24/20 15:44	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/24/20 15:44	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/24/20 15:44	1
Chloroform	0.000820	U	0.0100	0.000820	mg/L			04/24/20 15:44	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/24/20 15:44	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 15:44	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/24/20 15:44	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/24/20 15:44	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/24/20 15:44	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/24/20 15:44	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/24/20 15:44	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 15:44	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/24/20 15:44	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/24/20 15:44	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/24/20 15:44	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/24/20 15:44	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 15:44	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/24/20 15:44	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/24/20 15:44	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/24/20 15:44	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/24/20 15:44	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/24/20 15:44	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/24/20 15:44	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 15:44	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/24/20 15:44	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/24/20 15:44	1

ESTADO LIBRE ASOCIADO DE PUERTO RICO
MARIA DE LOS A. NEGRON
LICENCIA NUMERO 3,088
QUIMICO LICENCIADO

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: W-1D

Date Collected: 04/14/20 10:04
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/24/20 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*67 - 139*		*04/24/20 15:44*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*04/24/20 15:44*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*04/24/20 15:44*	*1*

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.141**	**J**	0.500	0.0926	mg/L		04/24/20 06:31	04/27/20 13:18	1
Antimony	0.00393	U	0.0500	0.00393	mg/L		04/24/20 06:31	04/27/20 13:18	1
Arsenic	**0.00490**	**J**	0.0100	0.00285	mg/L		04/24/20 06:31	04/27/20 13:18	1
Barium	**0.158**		0.0200	0.000530	mg/L		04/24/20 06:31	04/27/20 13:18	1
Beryllium	0.000420	U	0.00500	0.000420	mg/L		04/24/20 06:31	04/27/20 13:18	1
Cadmium	**0.000300**	**J**	0.00500	0.000280	mg/L		04/24/20 06:31	04/27/20 13:18	1
Calcium	**62.8**		1.00	0.0240	mg/L		04/24/20 06:31	04/27/20 13:18	1
Chromium	**0.00210**	**J**	0.0100	0.00159	mg/L		04/24/20 06:31	04/27/20 13:18	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/24/20 06:31	04/27/20 13:18	1
Copper	0.00813	U	0.0100	0.00813	mg/L		04/24/20 06:31	04/27/20 13:18	1
Iron	**0.338**	**J**	0.400	0.0270	mg/L		04/24/20 06:31	04/27/20 13:18	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/24/20 06:31	04/27/20 13:18	1
Magnesium	**18.8**		1.00	0.0555	mg/L		04/24/20 06:31	04/27/20 13:18	1
Manganese	**0.0121**		0.0100	0.000360	mg/L		04/24/20 06:31	04/27/20 13:18	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/24/20 06:31	04/27/20 13:18	1
Potassium	**1.59**		1.00	0.0374	mg/L		04/24/20 06:31	04/28/20 11:25	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/24/20 06:31	04/27/20 13:18	1
Silver	0.00129	U	0.0100	0.00129	mg/L		04/24/20 06:31	04/27/20 13:18	1
Sodium	**28.8**		1.00	0.0214	mg/L		04/24/20 06:31	04/27/20 13:18	1
Thallium	0.00417	U	0.0300	0.00417	mg/L		04/24/20 06:31	04/27/20 13:18	1
Vanadium	**0.000500**	**J**	0.0100	0.000470	mg/L		04/24/20 06:31	04/27/20 13:18	1
Zinc	**0.0193**	**J**	0.0300	0.00400	mg/L		04/24/20 06:31	04/27/20 13:18	1

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: AW-2

Date Collected: 04/14/20 09:17
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/24/20 16:23	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/24/20 16:23	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/24/20 16:23	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/24/20 16:23	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/24/20 16:23	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/24/20 16:23	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/24/20 16:23	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/24/20 16:23	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/24/20 16:23	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/24/20 16:23	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/24/20 16:23	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/24/20 16:23	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/24/20 16:23	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/24/20 16:23	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/24/20 16:23	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/24/20 16:23	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/24/20 16:23	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 16:23	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/24/20 16:23	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/24/20 16:23	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/24/20 16:23	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/24/20 16:23	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/24/20 16:23	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/24/20 16:23	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/24/20 16:23	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/24/20 16:23	1
Chloroform	0.000820	U	0.0100	0.000820	mg/L			04/24/20 16:23	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/24/20 16:23	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 16:23	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/24/20 16:23	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/24/20 16:23	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/24/20 16:23	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/24/20 16:23	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/24/20 16:23	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 16:23	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/24/20 16:23	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/24/20 16:23	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/24/20 16:23	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/24/20 16:23	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 16:23	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/24/20 16:23	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/24/20 16:23	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/24/20 16:23	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/24/20 16:23	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/24/20 16:23	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/24/20 16:23	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 16:23	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/24/20 16:23	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/24/20 16:23	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: AW-2

Date Collected: 04/14/20 09:17
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/24/20 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*67 - 139*		*04/24/20 16:23*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*04/24/20 16:23*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/24/20 16:23*	*1*

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**29.3**		0.500	0.0926	mg/L		04/24/20 06:31	04/27/20 13:26	1
Antimony	0.00393	U	0.0500	0.00393	mg/L		04/24/20 06:31	04/27/20 13:26	1
Arsenic	**0.0162**		0.0100	0.00285	mg/L		04/24/20 06:31	04/27/20 13:26	1
Barium	**1.74**		0.0200	0.000530	mg/L		04/24/20 06:31	04/27/20 13:26	1
Beryllium	**0.000900**	J	0.00500	0.000420	mg/L		04/24/20 06:31	04/27/20 13:26	1
Cadmium	**0.000600**	J	0.00500	0.000280	mg/L		04/24/20 06:31	04/27/20 13:26	1
Calcium	**36.7**		1.00	0.0240	mg/L		04/24/20 06:31	04/27/20 13:26	1
Chromium	**0.0517**		0.0100	0.00159	mg/L		04/24/20 06:31	04/27/20 13:26	1
Cobalt	**0.0139**		0.0100	0.000310	mg/L		04/24/20 06:31	04/27/20 13:26	1
Copper	**0.0655**		0.0100	0.00813	mg/L		04/24/20 06:31	04/27/20 13:26	1
Iron	**53.4**		0.400	0.0270	mg/L		04/24/20 06:31	04/27/20 13:26	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/24/20 06:31	04/27/20 13:26	1
Magnesium	**19.4**		1.00	0.0555	mg/L		04/24/20 06:31	04/27/20 13:26	1
Manganese	**1.03**		0.0100	0.000360	mg/L		04/24/20 06:31	04/27/20 13:26	1
Nickel	**0.0106**		0.0100	0.000800	mg/L		04/24/20 06:31	04/27/20 13:26	1
Potassium	**6.44**		1.00	0.0374	mg/L		04/24/20 06:31	04/28/20 11:28	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/24/20 06:31	04/27/20 13:26	1
Silver	0.00129	U	0.0100	0.00129	mg/L		04/24/20 06:31	04/27/20 13:26	1
Sodium	**42.1**		1.00	0.0214	mg/L		04/24/20 06:31	04/27/20 13:26	1
Thallium	0.00417	U	0.0300	0.00417	mg/L		04/24/20 06:31	04/27/20 13:26	1
Vanadium	**0.0695**		0.0100	0.000470	mg/L		04/24/20 06:31	04/27/20 13:26	1
Zinc	**0.132**		0.0300	0.00400	mg/L		04/24/20 06:31	04/27/20 13:26	1

ESTADO LIBRE ASOCIADO DE PUERTO RICO
MARIA DE LOS A. NEGRON
LICENCIA NUMERO 5118
QUIMICO LICENCIADO

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: AW-2D

Date Collected: 04/14/20 09:20
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/24/20 16:50	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/24/20 16:50	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/24/20 16:50	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/24/20 16:50	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/24/20 16:50	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/24/20 16:50	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/24/20 16:50	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/24/20 16:50	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/24/20 16:50	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/24/20 16:50	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/24/20 16:50	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/24/20 16:50	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/24/20 16:50	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/24/20 16:50	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/24/20 16:50	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/24/20 16:50	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/24/20 16:50	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 16:50	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/24/20 16:50	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/24/20 16:50	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/24/20 16:50	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/24/20 16:50	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/24/20 16:50	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/24/20 16:50	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/24/20 16:50	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/24/20 16:50	1
Chloroform	0.000820	U	0.0100	0.000820	mg/L			04/24/20 16:50	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/24/20 16:50	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 16:50	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/24/20 16:50	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/24/20 16:50	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/24/20 16:50	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/24/20 16:50	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/24/20 16:50	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 16:50	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/24/20 16:50	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/24/20 16:50	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/24/20 16:50	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/24/20 16:50	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 16:50	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/24/20 16:50	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/24/20 16:50	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/24/20 16:50	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/24/20 16:50	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/24/20 16:50	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/24/20 16:50	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 16:50	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/24/20 16:50	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/24/20 16:50	1

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: AW-2D

Date Collected: 04/14/20 09:20
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/24/20 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*67 - 139*		*04/24/20 16:50*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*04/24/20 16:50*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*04/24/20 16:50*	*1*

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8.83**		0.500	0.0926	mg/L		04/24/20 06:31	04/27/20 13:27	1
Antimony	0.00393	U	0.0500	0.00393	mg/L		04/24/20 06:31	04/27/20 13:27	1
Arsenic	**0.00400**	J	0.0100	0.00285	mg/L		04/24/20 06:31	04/27/20 13:27	1
Barium	**0.483**		0.0200	0.000530	mg/L		04/24/20 06:31	04/27/20 13:27	1
Beryllium	**0.000500**	J	0.00500	0.000420	mg/L		04/24/20 06:31	04/27/20 13:27	1
Cadmium	**0.000500**	J	0.00500	0.000280	mg/L		04/24/20 06:31	04/27/20 13:27	1
Calcium	**30.3**		1.00	0.0240	mg/L		04/24/20 06:31	04/27/20 13:27	1
Chromium	**0.0160**		0.0100	0.00159	mg/L		04/24/20 06:31	04/27/20 13:27	1
Cobalt	**0.00340**	J	0.0100	0.000310	mg/L		04/24/20 06:31	04/27/20 13:27	1
Copper	**0.0154**		0.0100	0.00813	mg/L		04/24/20 06:31	04/27/20 13:27	1
Iron	**15.2**		0.400	0.0270	mg/L		04/24/20 06:31	04/27/20 13:27	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/24/20 06:31	04/27/20 13:27	1
Magnesium	**12.9**		1.00	0.0555	mg/L		04/24/20 06:31	04/27/20 13:27	1
Manganese	**0.314**		0.0100	0.000360	mg/L		04/24/20 06:31	04/27/20 13:27	1
Nickel	**0.00270**	J	0.0100	0.000800	mg/L		04/24/20 06:31	04/27/20 13:27	1
Potassium	**3.41**		1.00	0.0374	mg/L		04/24/20 06:31	04/28/20 11:29	1
Selenium	**0.00430**	J	0.0400	0.00287	mg/L		04/24/20 06:31	04/27/20 13:27	1
Silver	0.00129	U	0.0100	0.00129	mg/L		04/24/20 06:31	04/27/20 13:27	1
Sodium	**41.5**		1.00	0.0214	mg/L		04/24/20 06:31	04/27/20 13:27	1
Thallium	0.00417	U	0.0300	0.00417	mg/L		04/24/20 06:31	04/27/20 13:27	1
Vanadium	**0.0215**		0.0100	0.000470	mg/L		04/24/20 06:31	04/27/20 13:27	1
Zinc	**0.0390**		0.0300	0.00400	mg/L		04/24/20 06:31	04/27/20 13:27	1

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MARIA DE LOS A. NEGRON
LICENCIA NUMERO 5118
QUIMICO LICENCIADO

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: W-3

Date Collected: 04/14/20 08:30
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/24/20 17:18	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/24/20 17:18	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/24/20 17:18	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/24/20 17:18	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/24/20 17:18	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/24/20 17:18	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/24/20 17:18	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/24/20 17:18	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/24/20 17:18	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/24/20 17:18	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/24/20 17:18	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/24/20 17:18	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/24/20 17:18	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/24/20 17:18	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/24/20 17:18	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/24/20 17:18	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/24/20 17:18	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 17:18	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/24/20 17:18	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/24/20 17:18	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/24/20 17:18	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/24/20 17:18	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/24/20 17:18	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/24/20 17:18	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/24/20 17:18	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/24/20 17:18	1
Chloroform	0.000820	U	0.0100	0.000820	mg/L			04/24/20 17:18	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/24/20 17:18	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 17:18	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/24/20 17:18	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/24/20 17:18	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/24/20 17:18	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/24/20 17:18	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/24/20 17:18	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 17:18	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/24/20 17:18	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/24/20 17:18	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/24/20 17:18	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/24/20 17:18	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 17:18	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/24/20 17:18	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/24/20 17:18	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/24/20 17:18	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/24/20 17:18	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/24/20 17:18	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/24/20 17:18	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 17:18	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/24/20 17:18	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/24/20 17:18	1

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: W-3

Date Collected: 04/14/20 08:30
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/24/20 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*67 - 139*		*04/24/20 17:18*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*04/24/20 17:18*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*04/24/20 17:18*	*1*

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.863**		0.500	0.0926	mg/L		04/24/20 06:31	04/27/20 13:29	1
Antimony	0.00393	U	0.0500	0.00393	mg/L		04/24/20 06:31	04/27/20 13:29	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/24/20 06:31	04/27/20 13:29	1
Barium	**0.0184**	J	0.0200	0.000530	mg/L		04/24/20 06:31	04/27/20 13:29	1
Beryllium	0.000420	U	0.00500	0.000420	mg/L		04/24/20 06:31	04/27/20 13:29	1
Cadmium	**0.000500**	J	0.00500	0.000280	mg/L		04/24/20 06:31	04/27/20 13:29	1
Calcium	**20.4**		1.00	0.0240	mg/L		04/24/20 06:31	04/27/20 13:29	1
Chromium	**0.00430**	J	0.0100	0.00159	mg/L		04/24/20 06:31	04/27/20 13:29	1
Cobalt	**0.000800**	J	0.0100	0.000310	mg/L		04/24/20 06:31	04/27/20 13:29	1
Copper	**0.0504**		0.0100	0.00813	mg/L		04/24/20 06:31	04/27/20 13:29	1
Iron	**1.60**		0.400	0.0270	mg/L		04/24/20 06:31	04/27/20 13:29	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/24/20 06:31	04/27/20 13:29	1
Magnesium	**13.2**		1.00	0.0555	mg/L		04/24/20 06:31	04/27/20 13:29	1
Manganese	**0.0440**		0.0100	0.000360	mg/L		04/24/20 06:31	04/27/20 13:29	1
Nickel	**0.00180**	J	0.0100	0.000800	mg/L		04/24/20 06:31	04/27/20 13:29	1
Potassium	**2.70**		1.00	0.0374	mg/L		04/24/20 06:31	04/28/20 11:31	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/24/20 06:31	04/27/20 13:29	1
Silver	0.00129	U	0.0100	0.00129	mg/L		04/24/20 06:31	04/27/20 13:29	1
Sodium	**49.2**		1.00	0.0214	mg/L		04/24/20 06:31	04/27/20 13:29	1
Thallium	0.00417	U	0.0300	0.00417	mg/L		04/24/20 06:31	04/27/20 13:29	1
Vanadium	**0.00780**	J	0.0100	0.000470	mg/L		04/24/20 06:31	04/27/20 13:29	1
Zinc	**0.0167**	J	0.0300	0.00400	mg/L		04/24/20 06:31	04/27/20 13:29	1

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MARIA DE LOS A. NEGRON
LICENCIA NUMERO 5118
QUIMICO LICENCIADO

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: W-3D

Date Collected: 04/14/20 08:32
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/27/20 13:06	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/27/20 13:06	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/27/20 13:06	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/27/20 13:06	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/27/20 13:06	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/27/20 13:06	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/27/20 13:06	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/27/20 13:06	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/27/20 13:06	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/27/20 13:06	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/27/20 13:06	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/27/20 13:06	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/27/20 13:06	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/27/20 13:06	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/27/20 13:06	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/27/20 13:06	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/27/20 13:06	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/27/20 13:06	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/27/20 13:06	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/27/20 13:06	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/27/20 13:06	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/27/20 13:06	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/27/20 13:06	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/27/20 13:06	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/27/20 13:06	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/27/20 13:06	1
Chloroform	0.000820	U	0.0100	0.000820	mg/L			04/27/20 13:06	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/27/20 13:06	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/27/20 13:06	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/27/20 13:06	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/27/20 13:06	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/27/20 13:06	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/27/20 13:06	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/27/20 13:06	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/27/20 13:06	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/27/20 13:06	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/27/20 13:06	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/27/20 13:06	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/27/20 13:06	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/27/20 13:06	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/27/20 13:06	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/27/20 13:06	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/27/20 13:06	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/27/20 13:06	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/27/20 13:06	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/27/20 13:06	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/27/20 13:06	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/27/20 13:06	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/27/20 13:06	1

ESTADO LIBRE ASOCIADO DE PUERTO RICO
MARIA DE LOS A. NEGRON
LICENCIA NUMERO 5178
QUIMICO LICENCIADO

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: W-3D

Date Collected: 04/14/20 08:32
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/27/20 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*67 - 139*		*04/27/20 13:06*	*1*
Dibromofluoromethane	*83*		*62 - 130*		*04/27/20 13:06*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*04/27/20 13:06*	*1*

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.578**		0.500	0.0926	mg/L		04/24/20 06:31	04/27/20 13:31	1
Antimony	0.00393	U	0.0500	0.00393	mg/L		04/24/20 06:31	04/27/20 13:31	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/24/20 06:31	04/27/20 13:31	1
Barium	**0.0188**	**J**	0.0200	0.000530	mg/L		04/24/20 06:31	04/27/20 13:31	1
Beryllium	0.000420	U	0.00500	0.000420	mg/L		04/24/20 06:31	04/27/20 13:31	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/24/20 06:31	04/27/20 13:31	1
Calcium	**19.7**		1.00	0.0240	mg/L		04/24/20 06:31	04/27/20 13:31	1
Chromium	**0.00280**	**J**	0.0100	0.00159	mg/L		04/24/20 06:31	04/27/20 13:31	1
Cobalt	**0.000500**	**J**	0.0100	0.000310	mg/L		04/24/20 06:31	04/27/20 13:31	1
Copper	**0.0375**		0.0100	0.00813	mg/L		04/24/20 06:31	04/27/20 13:31	1
Iron	**1.10**		0.400	0.0270	mg/L		04/24/20 06:31	04/27/20 13:31	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/24/20 06:31	04/27/20 13:31	1
Magnesium	**13.5**		1.00	0.0555	mg/L		04/24/20 06:31	04/27/20 13:31	1
Manganese	**0.0382**		0.0100	0.000360	mg/L		04/24/20 06:31	04/27/20 13:31	1
Nickel	**0.00140**	**J**	0.0100	0.000800	mg/L		04/24/20 06:31	04/27/20 13:31	1
Potassium	**2.56**		1.00	0.0374	mg/L		04/24/20 06:31	04/28/20 11:33	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/24/20 06:31	04/27/20 13:31	1
Silver	0.00129	U	0.0100	0.00129	mg/L		04/24/20 06:31	04/27/20 13:31	1
Sodium	**47.1**		1.00	0.0214	mg/L		04/24/20 06:31	04/27/20 13:31	1
Thallium	0.00417	U	0.0300	0.00417	mg/L		04/24/20 06:31	04/27/20 13:31	1
Vanadium	**0.00620**	**J**	0.0100	0.000470	mg/L		04/24/20 06:31	04/27/20 13:31	1
Zinc	**0.0196**	**J**	0.0300	0.00400	mg/L		04/24/20 06:31	04/27/20 13:31	1

ESTADO LIBRE ASOCIADO DE PUERTO RICO
MARIA DE LOS A. NEGRON
LICENCIA NUMERO 5118
QUIMICO LICENCIADO

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: TB-041420

Date Collected: 04/14/20 00:00
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/24/20 12:34	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/24/20 12:34	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/24/20 12:34	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/24/20 12:34	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/24/20 12:34	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/24/20 12:34	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/24/20 12:34	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/24/20 12:34	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/24/20 12:34	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/24/20 12:34	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/24/20 12:34	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/24/20 12:34	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/24/20 12:34	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/24/20 12:34	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/24/20 12:34	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/24/20 12:34	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/24/20 12:34	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 12:34	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/24/20 12:34	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/24/20 12:34	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/24/20 12:34	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/24/20 12:34	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/24/20 12:34	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/24/20 12:34	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/24/20 12:34	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/24/20 12:34	1
Chloroform	0.000820	U	0.0100	0.000820	mg/L			04/24/20 12:34	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/24/20 12:34	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 12:34	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/24/20 12:34	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/24/20 12:34	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/24/20 12:34	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/24/20 12:34	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/24/20 12:34	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 12:34	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/24/20 12:34	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/24/20 12:34	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/24/20 12:34	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/24/20 12:34	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 12:34	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/24/20 12:34	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/24/20 12:34	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/24/20 12:34	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/24/20 12:34	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/24/20 12:34	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/24/20 12:34	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 12:34	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/24/20 12:34	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/24/20 12:34	1

ESTADO LIBRE ASOCIADO DE PUERTO RICO
MARIA DE LOS A. NEGRON
LICENCIA NUMERO
QUIMICO LICENCIADO

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: TB-041420

Date Collected: 04/14/20 00:00
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/24/20 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*67 - 139*		*04/24/20 12:34*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*04/24/20 12:34*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*04/24/20 12:34*	*1*

ESTADO LIBRE ASOCIADO DE PUERTO RICO
MARIA DE LOS A. NEGRON
LICENCIA NUMERO 5118
QUIMICO LICENCIADO

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: FB-041420

Date Collected: 04/14/20 10:35
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/24/20 13:01	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/24/20 13:01	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/24/20 13:01	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/24/20 13:01	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/24/20 13:01	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/24/20 13:01	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/24/20 13:01	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/24/20 13:01	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/24/20 13:01	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/24/20 13:01	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/24/20 13:01	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/24/20 13:01	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/24/20 13:01	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/24/20 13:01	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/24/20 13:01	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/24/20 13:01	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/24/20 13:01	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 13:01	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/24/20 13:01	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/24/20 13:01	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/24/20 13:01	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/24/20 13:01	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/24/20 13:01	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/24/20 13:01	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/24/20 13:01	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/24/20 13:01	1
Chloroform	**0.00151**	**J**	0.0100	0.000820	mg/L			04/24/20 13:01	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/24/20 13:01	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 13:01	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/24/20 13:01	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/24/20 13:01	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/24/20 13:01	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/24/20 13:01	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/24/20 13:01	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 13:01	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/24/20 13:01	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/24/20 13:01	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/24/20 13:01	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/24/20 13:01	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/24/20 13:01	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/24/20 13:01	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/24/20 13:01	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/24/20 13:01	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/24/20 13:01	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/24/20 13:01	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/24/20 13:01	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/24/20 13:01	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/24/20 13:01	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/24/20 13:01	1

ESTADO LIBRE ASOCIADO DE PUERTO RICO · MARÍA DE LOS A. NEGRÓN · LICENCIA NÚMERO 5148 · QUÍMICO LICENCIADO

Eurofins TestAmerica, Houston

Client Sample Results

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Guaynabo

Job ID: 600-203738-1

Client Sample ID: FB-041420

Date Collected: 04/14/20 10:35
Date Received: 04/15/20 10:19

Lab Sample ID: 600-203738-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/24/20 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*67 - 139*		*04/24/20 13:01*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*04/24/20 13:01*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*04/24/20 13:01*	*1*

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
MARIA DE LOS A. NEGRON
LICENCIA NUMERO 5118
QUIMICO LICENCIADO

Definitions/Glossary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 600-293317/7
Matrix: Water
Analysis Batch: 293317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.000940	U	0.00500	0.000940	mg/L			04/27/20 12:13	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/27/20 12:13	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/27/20 12:13	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/27/20 12:13	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/27/20 12:13	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/27/20 12:13	1
1,2,3-Trichloropropane	0.00116	U	0.00500	0.00116	mg/L			04/27/20 12:13	1
1,2-Dibromo-3-Chloropropane	0.00148	U	0.00500	0.00148	mg/L			04/27/20 12:13	1
1,2-Dichlorobenzene	0.000530	U	0.00500	0.000530	mg/L			04/27/20 12:13	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/27/20 12:13	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/27/20 12:13	1
1,4-Dichlorobenzene	0.000910	U	0.00500	0.000910	mg/L			04/27/20 12:13	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/27/20 12:13	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/27/20 12:13	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/27/20 12:13	1
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/27/20 12:13	1
Acrylonitrile	0.00509	U	0.0500	0.00509	mg/L			04/27/20 12:13	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/27/20 12:13	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/27/20 12:13	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/27/20 12:13	1
Carbon disulfide	0.00170	U	0.0100	0.00170	mg/L			04/27/20 12:13	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/27/20 12:13	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/27/20 12:13	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/27/20 12:13	1
Chlorodibromomethane	0.000920	U	0.00500	0.000920	mg/L			04/27/20 12:13	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/27/20 12:13	1
Chloroform	0.000820	U	0.0100	0.000820	mg/L			04/27/20 12:13	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/27/20 12:13	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/27/20 12:13	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/27/20 12:13	1
Dibromomethane	0.000850	U	0.00500	0.000850	mg/L			04/27/20 12:13	1
Dichlorobromomethane	0.000760	U	0.00500	0.000760	mg/L			04/27/20 12:13	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/27/20 12:13	1
Ethylene Dibromide	0.000850	U	0.00500	0.000850	mg/L			04/27/20 12:13	1
Iodomethane	0.00123	U	0.0100	0.00123	mg/L			04/27/20 12:13	1
Isopropylbenzene	0.000620	U	0.00500	0.000620	mg/L			04/27/20 12:13	1
Methyl acetate	0.000570	U	0.00500	0.000570	mg/L			04/27/20 12:13	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/27/20 12:13	1
Methyl-tert-butyl Ether (MTBE)	0.000440	U	0.00500	0.000440	mg/L			04/27/20 12:13	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/27/20 12:13	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/27/20 12:13	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/27/20 12:13	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/27/20 12:13	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/27/20 12:13	1
trans-1,4-Dichloro-2-butene	0.00190	U	0.0100	0.00190	mg/L			04/27/20 12:13	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/27/20 12:13	1
Trichlorofluoromethane	0.00123	U	0.0100	0.00123	mg/L			04/27/20 12:13	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/27/20 12:13	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 600-293317/7
Matrix: Water
Analysis Batch: 293317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/27/20 12:13	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/27/20 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*67 - 139*		*04/27/20 12:13*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*04/27/20 12:13*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/27/20 12:13*	*1*

Lab Sample ID: LCS 600-293317/4
Matrix: Water
Analysis Batch: 293317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.05659		mg/L		113	70 - 130
1,1,1-Trichloroethane	0.0500	0.04981		mg/L		100	67 - 139
1,1,2,2-Tetrachloroethane	0.0500	0.05175		mg/L		104	62 - 130
1,1,2-Trichloroethane	0.0500	0.05402		mg/L		108	70 - 130
1,1-Dichloroethane	0.0500	0.04769		mg/L		95	70 - 137
1,1-Dichloroethene	0.0500	0.05294		mg/L		106	67 - 134
1,2,3-Trichloropropane	0.0500	0.05236		mg/L		105	42 - 141
1,2-Dibromo-3-Chloropropane	0.0500	0.05661		mg/L		113	39 - 150
1,2-Dichlorobenzene	0.0500	0.05316		mg/L		106	69 - 130
1,2-Dichloroethane	0.0500	0.04914		mg/L		98	62 - 144
1,2-Dichloropropane	0.0500	0.05092		mg/L		102	70 - 133
1,4-Dichlorobenzene	0.0500	0.05298		mg/L		106	70 - 130
2-Butanone (MEK)	0.100	0.09905		mg/L		99	34 - 140
2-Hexanone	0.100	0.1024		mg/L		102	46 - 139
4-Methyl-2-pentanone (MIBK)	0.100	0.1013		mg/L		101	39 - 150
Acetone	0.100	0.09936		mg/L		99	21 - 148
Acrylonitrile	0.500	0.4857		mg/L		97	35 - 145
Benzene	0.0500	0.04888		mg/L		98	70 - 131
Bromoform	0.0500	0.05377		mg/L		108	67 - 134
Bromomethane	0.0500	0.04828		mg/L		97	45 - 150
Carbon disulfide	0.0500	0.04201		mg/L		84	60 - 146
Carbon tetrachloride	0.0500	0.05371		mg/L		107	68 - 140
Chlorobenzene	0.0500	0.05615		mg/L		112	70 - 130
Chlorobromomethane	0.0500	0.05032		mg/L		101	70 - 130
Chlorodibromomethane	0.0500	0.05673		mg/L		113	70 - 130
Chloroethane	0.0500	0.04577		mg/L		92	65 - 138
Chloroform	0.0500	0.04815		mg/L		96	70 - 131
Chloromethane	0.0500	0.03683		mg/L		74	15 - 150
cis-1,2-Dichloroethene	0.0500	0.04976		mg/L		100	70 - 130
cis-1,3-Dichloropropene	0.0500	0.05328		mg/L		107	66 - 130
Dibromomethane	0.0500	0.05164		mg/L		103	70 - 130
Dichlorobromomethane	0.0500	0.04997		mg/L		100	70 - 130
Ethylbenzene	0.0500	0.05628		mg/L		113	70 - 130
Ethylene Dibromide	0.0500	0.05813		mg/L		116	70 - 130
Iodomethane	0.0500	0.04343		mg/L		87	40 - 150

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 600-293317/4
Matrix: Water
Analysis Batch: 293317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	0.0500	0.05953		mg/L		119	70 - 130
Methyl acetate	0.100	0.09571		mg/L		96	10 - 130
Methylene Chloride	0.0500	0.04825		mg/L		97	67 - 130
Methyl-tert-butyl Ether (MTBE)	0.0500	0.04774		mg/L		95	63 - 134
m-Xylene & p-Xylene	0.0500	0.05479		mg/L		110	70 - 130
o-Xylene	0.0500	0.05284		mg/L		106	69 - 130
Styrene	0.0500	0.05266		mg/L		105	70 - 130
Tetrachloroethene	0.0500	0.05471		mg/L		109	57 - 130
Toluene	0.0500	0.05236		mg/L		105	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04794		mg/L		96	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05471		mg/L		109	70 - 138
trans-1,4-Dichloro-2-butene	0.0500	0.05657		mg/L		113	31 - 149
Trichloroethene	0.0500	0.05268		mg/L		105	70 - 130
Trichlorofluoromethane	0.0500	0.05008		mg/L		100	66 - 137
Vinyl acetate	0.100	0.08744		mg/L		87	22 - 150
Vinyl chloride	0.0500	0.03359		mg/L		67	55 - 150
Xylenes, Total	0.100	0.1076		mg/L		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*67 - 139*
Dibromofluoromethane	*94*		*62 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 600-293317/5
Matrix: Water
Analysis Batch: 293317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0500	0.05243		mg/L		105	70 - 130	8	20
1,1,1-Trichloroethane	0.0500	0.04634		mg/L		93	67 - 139	7	20
1,1,2,2-Tetrachloroethane	0.0500	0.05544		mg/L		111	62 - 130	7	20
1,1,2-Trichloroethane	0.0500	0.05320		mg/L		106	70 - 130	2	20
1,1-Dichloroethane	0.0500	0.04527		mg/L		91	70 - 137	5	20
1,1-Dichloroethene	0.0500	0.04764		mg/L		95	67 - 134	11	20
1,2,3-Trichloropropane	0.0500	0.05386		mg/L		108	42 - 141	3	20
1,2-Dibromo-3-Chloropropane	0.0500	0.05737		mg/L		115	39 - 150	1	20
1,2-Dichlorobenzene	0.0500	0.05365		mg/L		107	69 - 130	1	20
1,2-Dichloroethane	0.0500	0.04920		mg/L		98	62 - 144	0	20
1,2-Dichloropropane	0.0500	0.05026		mg/L		101	70 - 133	1	20
1,4-Dichlorobenzene	0.0500	0.05287		mg/L		106	70 - 130	0	20
2-Butanone (MEK)	0.100	0.1030		mg/L		103	34 - 140	4	20
2-Hexanone	0.100	0.09853		mg/L		99	46 - 139	4	20
4-Methyl-2-pentanone (MIBK)	0.100	0.1028		mg/L		103	39 - 150	1	20
Acetone	0.100	0.1094		mg/L		109	21 - 148	10	20
Acrylonitrile	0.500	0.5080		mg/L		102	35 - 145	4	20
Benzene	0.0500	0.04693		mg/L		94	70 - 131	4	20
Bromoform	0.0500	0.05535		mg/L		111	67 - 134	3	20
Bromomethane	0.0500	0.04818		mg/L		96	45 - 150	0	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 600-293317/5
Matrix: Water
Analysis Batch: 293317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide	0.0500	0.03775		mg/L		76	60 - 146	11	20
Carbon tetrachloride	0.0500	0.04861		mg/L		97	68 - 140	10	20
Chlorobenzene	0.0500	0.05292		mg/L		106	70 - 130	6	20
Chlorobromomethane	0.0500	0.05207		mg/L		104	70 - 130	3	20
Chlorodibromomethane	0.0500	0.05262		mg/L		105	70 - 130	8	20
Chloroethane	0.0500	0.04331		mg/L		87	65 - 138	6	20
Chloroform	0.0500	0.04842		mg/L		97	70 - 131	1	20
Chloromethane	0.0500	0.04012		mg/L		80	15 - 150	9	20
cis-1,2-Dichloroethene	0.0500	0.04810		mg/L		96	70 - 130	3	20
cis-1,3-Dichloropropene	0.0500	0.05146		mg/L		103	66 - 130	3	20
Dibromomethane	0.0500	0.05138		mg/L		103	70 - 130	1	20
Dichlorobromomethane	0.0500	0.04951		mg/L		99	70 - 130	1	20
Ethylbenzene	0.0500	0.05173		mg/L		103	70 - 130	8	20
Ethylene Dibromide	0.0500	0.05523		mg/L		110	70 - 130	5	20
Iodomethane	0.0500	0.04145		mg/L		83	40 - 150	5	20
Isopropylbenzene	0.0500	0.05529		mg/L		111	70 - 130	7	20
Methyl acetate	0.100	0.1085		mg/L		109	10 - 130	13	20
Methylene Chloride	0.0500	0.04603		mg/L		92	67 - 130	5	20
Methyl-tert-butyl Ether (MTBE)	0.0500	0.04682		mg/L		94	63 - 134	2	20
m-Xylene & p-Xylene	0.0500	0.05092		mg/L		102	70 - 130	7	20
o-Xylene	0.0500	0.05117		mg/L		102	69 - 130	3	20
Styrene	0.0500	0.05049		mg/L		101	70 - 130	4	20
Tetrachloroethene	0.0500	0.05127		mg/L		103	57 - 130	6	20
Toluene	0.0500	0.05032		mg/L		101	70 - 130	4	20
trans-1,2-Dichloroethene	0.0500	0.04447		mg/L		89	70 - 130	7	20
trans-1,3-Dichloropropene	0.0500	0.05208		mg/L		104	70 - 138	5	20
trans-1,4-Dichloro-2-butene	0.0500	0.06080		mg/L		122	31 - 149	7	20
Trichloroethene	0.0500	0.04878		mg/L		98	70 - 130	8	20
Trichlorofluoromethane	0.0500	0.04605		mg/L		92	66 - 137	8	20
Vinyl acetate	0.100	0.08469		mg/L		85	22 - 150	3	20
Vinyl chloride	0.0500	0.03566		mg/L		71	55 - 150	6	20
Xylenes, Total	0.100	0.1021		mg/L		102	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*67 - 139*
Dibromofluoromethane	*93*		*62 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-293296/1-A
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/27/20 06:25	04/28/20 10:04	1
Antimony	0.00393	U	0.0500	0.00393	mg/L		04/27/20 06:25	04/28/20 10:04	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/27/20 06:25	04/28/20 10:04	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/27/20 06:25	04/28/20 10:04	1

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-293296/1-A
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.000420	U	0.00500	0.000420	mg/L		04/27/20 06:25	04/28/20 10:04	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/27/20 06:25	04/28/20 10:04	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/27/20 06:25	04/28/20 10:04	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/27/20 06:25	04/28/20 10:04	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/27/20 06:25	04/28/20 10:04	1
Copper	0.00813	U	0.0100	0.00813	mg/L		04/27/20 06:25	04/28/20 10:04	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/27/20 06:25	04/28/20 10:04	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/27/20 06:25	04/28/20 10:04	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/27/20 06:25	04/28/20 10:04	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/27/20 06:25	04/28/20 10:04	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/27/20 06:25	04/28/20 10:04	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/27/20 06:25	04/28/20 10:04	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/27/20 06:25	04/28/20 10:04	1
Silver	0.00129	U	0.0100	0.00129	mg/L		04/27/20 06:25	04/28/20 10:04	1
Sodium	0.0214	U	1.00	0.0214	mg/L		04/27/20 06:25	04/28/20 10:04	1
Thallium	0.00417	U	0.0300	0.00417	mg/L		04/27/20 06:25	04/28/20 10:04	1
Vanadium	0.000470	U	0.0100	0.000470	mg/L		04/27/20 06:25	04/28/20 10:04	1
Zinc	0.00400	U	0.0300	0.00400	mg/L		04/27/20 06:25	04/28/20 10:04	1

Lab Sample ID: LCS 600-293296/2-A
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.839		mg/L		98	80 - 120
Antimony	1.50	1.656		mg/L		110	80 - 120
Arsenic	1.00	1.022		mg/L		102	80 - 120
Barium	1.00	1.007		mg/L		101	80 - 120
Beryllium	1.00	1.006		mg/L		101	80 - 120
Cadmium	1.00	1.036		mg/L		104	80 - 120
Calcium	10.0	9.986		mg/L		100	80 - 120
Chromium	1.00	1.021		mg/L		102	80 - 120
Cobalt	1.00	0.9961		mg/L		100	80 - 120
Copper	1.00	1.016		mg/L		102	80 - 120
Iron	10.0	10.07		mg/L		101	80 - 120
Lead	1.00	0.9956		mg/L		100	80 - 120
Magnesium	10.0	10.26		mg/L		103	80 - 120
Manganese	1.00	1.018		mg/L		102	80 - 120
Nickel	1.00	0.9975		mg/L		100	80 - 120
Potassium	10.0	10.45		mg/L		105	80 - 120
Selenium	1.00	1.023		mg/L		102	80 - 120
Silver	0.250	0.2596		mg/L		104	80 - 120
Sodium	10.0	10.20		mg/L		102	80 - 120
Thallium	1.00	1.033		mg/L		103	80 - 120
Vanadium	1.00	0.9955		mg/L		100	80 - 120
Zinc	0.500	0.5044		mg/L		101	80 - 120

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-203854-I-1-G MS
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 293296

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0926	U	10.0	10.29		mg/L		103	75 - 125
Antimony	0.00393	U	1.50	1.768		mg/L		118	75 - 125
Arsenic	0.00740	J	1.00	1.118		mg/L		111	75 - 125
Barium	0.288		1.00	1.284		mg/L		100	75 - 125
Beryllium	0.000420	U	1.00	1.011		mg/L		101	75 - 125
Cadmium	0.000400	J	1.00	1.110		mg/L		111	75 - 125
Calcium	32.5		10.0	43.00		mg/L		105	75 - 125
Chromium	0.00159	U	1.00	1.008		mg/L		101	75 - 125
Cobalt	0.207		1.00	1.314		mg/L		111	75 - 125
Copper	0.00813	U	1.00	1.005		mg/L		101	75 - 125
Iron	0.605		10.0	10.94		mg/L		103	75 - 125
Lead	0.00219	U	1.00	1.078		mg/L		108	75 - 125
Magnesium	9.78		10.0	19.94		mg/L		102	75 - 125
Manganese	2.20		1.00	3.154		mg/L		95	75 - 125
Nickel	0.0132		1.00	1.104		mg/L		109	75 - 125
Potassium	2.95		10.0	13.42		mg/L		105	75 - 125
Selenium	0.00400	J	1.00	1.100		mg/L		110	75 - 125
Silver	0.00129	U	0.250	0.2558		mg/L		102	75 - 125
Sodium	66.9		10.0	76.74	4	mg/L		98	75 - 125
Thallium	0.00660	J	1.00	1.094		mg/L		109	75 - 125
Vanadium	0.000470	U	1.00	0.9949		mg/L		99	75 - 125
Zinc	0.0473		0.500	0.5743		mg/L		105	75 - 125

Lab Sample ID: 600-203854-I-1-H MSD
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 293296

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0926	U	10.0	10.26		mg/L		103	75 - 125	0	20
Antimony	0.00393	U	1.50	1.679		mg/L		112	75 - 125	5	20
Arsenic	0.00740	J	1.00	1.058		mg/L		105	75 - 125	6	20
Barium	0.288		1.00	1.290		mg/L		100	75 - 125	0	20
Beryllium	0.000420	U	1.00	1.012		mg/L		101	75 - 125	0	20
Cadmium	0.000400	J	1.00	1.052		mg/L		105	75 - 125	5	20
Calcium	32.5		10.0	43.17		mg/L		106	75 - 125	0	20
Chromium	0.00159	U	1.00	1.012		mg/L		101	75 - 125	0	20
Cobalt	0.207		1.00	1.245		mg/L		104	75 - 125	5	20
Copper	0.00813	U	1.00	1.008		mg/L		101	75 - 125	0	20
Iron	0.605		10.0	10.85		mg/L		102	75 - 125	1	20
Lead	0.00219	U	1.00	1.018		mg/L		102	75 - 125	6	20
Magnesium	9.78		10.0	20.11		mg/L		103	75 - 125	1	20
Manganese	2.20		1.00	3.204		mg/L		100	75 - 125	2	20
Nickel	0.0132		1.00	1.041		mg/L		103	75 - 125	6	20
Potassium	2.95		10.0	13.48		mg/L		105	75 - 125	0	20
Selenium	0.00400	J	1.00	1.049		mg/L		105	75 - 125	5	20
Silver	0.00129	U	0.250	0.2578		mg/L		103	75 - 125	1	20
Sodium	66.9		10.0	77.93	4	mg/L		110	75 - 125	2	20
Thallium	0.00660	J	1.00	1.045		mg/L		104	75 - 125	5	20
Vanadium	0.000470	U	1.00	1.002		mg/L		100	75 - 125	1	20

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-203854-I-1-H MSD
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 293296

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	0.0473		0.500	0.5327		mg/L		97	75 - 125	8	20

Lab Sample ID: 600-203854-I-10-D MS
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 293296

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0926	U	10.0	10.08		mg/L		101	75 - 125
Antimony	0.00393	U	1.50	1.687		mg/L		112	75 - 125
Arsenic	0.00285	U	1.00	1.069		mg/L		107	75 - 125
Barium	0.119		1.00	1.136		mg/L		102	75 - 125
Beryllium	0.000420	U	1.00	0.9907		mg/L		99	75 - 125
Cadmium	0.000500	J	1.00	1.064		mg/L		106	75 - 125
Calcium	50.8		10.0	63.44	4	mg/L		126	75 - 125
Chromium	0.00159	U	1.00	0.9782		mg/L		98	75 - 125
Cobalt	0.000310	U	1.00	1.031		mg/L		103	75 - 125
Copper	0.00813	U	1.00	1.011		mg/L		101	75 - 125
Iron	0.0312	J	10.0	10.19		mg/L		102	75 - 125
Lead	0.00219	U	1.00	0.9907		mg/L		99	75 - 125
Magnesium	5.58		10.0	15.53		mg/L		100	75 - 125
Manganese	0.0548		1.00	1.036		mg/L		98	75 - 125
Nickel	0.000800	U	1.00	1.016		mg/L		102	75 - 125
Potassium	1.49		10.0	12.00		mg/L		105	75 - 125
Selenium	0.00530	J	1.00	1.058		mg/L		105	75 - 125
Silver	0.00129	U	0.250	0.2596		mg/L		104	75 - 125
Sodium	157		10.0	172.5	4	mg/L		152	75 - 125
Thallium	0.00417	U	1.00	1.015		mg/L		102	75 - 125
Vanadium	0.00600	J	1.00	0.9917		mg/L		99	75 - 125
Zinc	0.0285	J	0.500	0.5513		mg/L		105	75 - 125

Lab Sample ID: 600-203854-I-10-E MSD
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 293296

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0926	U	10.0	10.17		mg/L		102	75 - 125	1	20
Antimony	0.00393	U	1.50	1.692		mg/L		113	75 - 125	0	20
Arsenic	0.00285	U	1.00	1.070		mg/L		107	75 - 125	0	20
Barium	0.119		1.00	1.140		mg/L		102	75 - 125	0	20
Beryllium	0.000420	U	1.00	0.9949		mg/L		99	75 - 125	0	20
Cadmium	0.000500	J	1.00	1.062		mg/L		106	75 - 125	0	20
Calcium	50.8		10.0	63.81	4	mg/L		130	75 - 125	1	20
Chromium	0.00159	U	1.00	0.9700		mg/L		97	75 - 125	1	20
Cobalt	0.000310	U	1.00	1.028		mg/L		103	75 - 125	0	20
Copper	0.00813	U	1.00	1.002		mg/L		100	75 - 125	1	20
Iron	0.0312	J	10.0	10.29		mg/L		103	75 - 125	1	20
Lead	0.00219	U	1.00	0.9880		mg/L		99	75 - 125	0	20
Magnesium	5.58		10.0	15.63		mg/L		101	75 - 125	1	20
Manganese	0.0548		1.00	1.031		mg/L		98	75 - 125	0	20

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-203854-I-10-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293426 — **Prep Batch: 293296**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	0.000800	U	1.00	1.013		mg/L		101	75 - 125	0	20
Potassium	1.49		10.0	12.05		mg/L		106	75 - 125	0	20
Selenium	0.00530	J	1.00	1.055		mg/L		105	75 - 125	0	20
Silver	0.00129	U	0.250	0.2591		mg/L		104	75 - 125	0	20
Sodium	157		10.0	173.4	4	mg/L		161	75 - 125	1	20
Thallium	0.00417	U	1.00	1.009		mg/L		101	75 - 125	1	20
Vanadium	0.00600	J	1.00	0.9921		mg/L		99	75 - 125	0	20
Zinc	0.0285	J	0.500	0.5616		mg/L		107	75 - 125	2	20

Lab Sample ID: 600-203854-I-1-F DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293426 — **Prep Batch: 293296**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	0.0926	U	0.0926	U	mg/L		NC	20
Antimony	0.00393	U	0.00393	U	mg/L		NC	20
Arsenic	0.00740	J	0.01060	F5	mg/L		36	20
Barium	0.288		0.2885		mg/L		0.2	20
Beryllium	0.000420	U	0.000420	U	mg/L		NC	20
Cadmium	0.000400	J	0.000280	U	mg/L		NC	20
Calcium	32.5		32.24		mg/L		0.9	20
Chromium	0.00159	U	0.00159	U	mg/L		NC	20
Cobalt	0.207		0.2109		mg/L		2	20
Copper	0.00813	U	0.00813	U	mg/L		NC	20
Iron	0.605		0.5808		mg/L		4	20
Lead	0.00219	U	0.00219	U	mg/L		NC	20
Magnesium	9.78		9.932		mg/L		2	20
Manganese	2.20		2.247		mg/L		2	20
Nickel	0.0132		0.01340		mg/L		2	20
Potassium	2.95		2.994		mg/L		2	20
Selenium	0.00400	J	0.003600	J	mg/L		11	20
Silver	0.00129	U	0.00129	U	mg/L		NC	20
Sodium	66.9		68.13		mg/L		2	20
Thallium	0.00660	J	0.00417	U	mg/L		NC	20
Vanadium	0.000470	U	0.000470	U	mg/L		NC	20
Zinc	0.0473		0.01930	J F5	mg/L		84	20

Lab Sample ID: 600-203854-I-10-C DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293426 — **Prep Batch: 293296**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	0.0926	U	0.0926	U	mg/L		NC	20
Antimony	0.00393	U	0.00393	U	mg/L		NC	20
Arsenic	0.00285	U	0.00285	U	mg/L		NC	20
Barium	0.119		0.1264		mg/L		6	20
Beryllium	0.000420	U	0.000420	U	mg/L		NC	20
Cadmium	0.000500	J	0.0003000	J F5	mg/L		50	20
Calcium	50.8		54.18		mg/L		6	20

Method: 6010C - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-203854-I-10-C DU
Matrix: Water
Analysis Batch: 293426

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 293296

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chromium	0.00159	U		0.00159	U	mg/L				NC	20
Cobalt	0.000310	U		0.000310	U	mg/L				NC	20
Copper	0.00813	U		0.00813	U	mg/L				NC	20
Iron	0.0312	J		0.04770	J F5	mg/L				42	20
Lead	0.00219	U		0.00219	U	mg/L				NC	20
Magnesium	5.58			5.860		mg/L				5	20
Manganese	0.0548			0.05460		mg/L				0.4	20
Nickel	0.000800	U		0.000800	U	mg/L				NC	20
Potassium	1.49			1.588		mg/L				6	20
Selenium	0.00530	J		0.004300	J F5	mg/L				21	20
Silver	0.00129	U		0.00129	U	mg/L				NC	20
Sodium	157			166.1		mg/L				5	20
Thallium	0.00417	U		0.00417	U	mg/L				NC	20
Vanadium	0.00600	J		0.006200	J	mg/L				3	20
Zinc	0.0285	J		0.02880	J	mg/L				1	20

QC Association Summary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

GC/MS VOA

Analysis Batch: 293317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-203921-1	W-2	Total/NA	Water	8260C	
600-203921-2	W-2 D	Total/NA	Water	8260C	
600-203921-3	W-3	Total/NA	Water	8260C	
600-203921-4	W-3 D	Total/NA	Water	8260C	
600-203921-5	W-4	Total/NA	Water	8260C	
600-203921-6	W-4 D	Total/NA	Water	8260C	
600-203921-7	W-5	Total/NA	Water	8260C	
600-203921-8	W-5 D	Total/NA	Water	8260C	
600-203921-9	TB-041520	Total/NA	Water	8260C	
600-203921-10	FB-041520	Total/NA	Water	8260C	
MB 600-293317/7	Method Blank	Total/NA	Water	8260C	
LCS 600-293317/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 600-293317/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 293296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-203921-1	W-2	Total/NA	Water	3010A	
600-203921-2	W-2 D	Total/NA	Water	3010A	
600-203921-3	W-3	Total/NA	Water	3010A	
600-203921-4	W-3 D	Total/NA	Water	3010A	
600-203921-5	W-4	Total/NA	Water	3010A	
600-203921-6	W-4 D	Total/NA	Water	3010A	
600-203921-7	W-5	Total/NA	Water	3010A	
600-203921-8	W-5 D	Total/NA	Water	3010A	
MB 600-293296/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-293296/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-203854-I-1-G MS	Matrix Spike	Total/NA	Water	3010A	
600-203854-I-1-H MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
600-203854-I-10-D MS	Matrix Spike	Total/NA	Water	3010A	
600-203854-I-10-E MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
600-203854-I-1-F DU	Duplicate	Total/NA	Water	3010A	
600-203854-I-10-C DU	Duplicate	Total/NA	Water	3010A	

Analysis Batch: 293426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-203921-1	W-2	Total/NA	Water	6010C	293296
600-203921-2	W-2 D	Total/NA	Water	6010C	293296
600-203921-3	W-3	Total/NA	Water	6010C	293296
600-203921-4	W-3 D	Total/NA	Water	6010C	293296
600-203921-5	W-4	Total/NA	Water	6010C	293296
600-203921-6	W-4 D	Total/NA	Water	6010C	293296
600-203921-7	W-5	Total/NA	Water	6010C	293296
600-203921-8	W-5 D	Total/NA	Water	6010C	293296
MB 600-293296/1-A	Method Blank	Total/NA	Water	6010C	293296
LCS 600-293296/2-A	Lab Control Sample	Total/NA	Water	6010C	293296
600-203854-I-1-G MS	Matrix Spike	Total/NA	Water	6010C	293296
600-203854-I-1-H MSD	Matrix Spike Duplicate	Total/NA	Water	6010C	293296
600-203854-I-10-D MS	Matrix Spike	Total/NA	Water	6010C	293296
600-203854-I-10-E MSD	Matrix Spike Duplicate	Total/NA	Water	6010C	293296

QC Association Summary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Metals (Continued)

Analysis Batch: 293426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-203854-I-1-F DU	Duplicate	Total/NA	Water	6010C	293296
600-203854-I-10-C DU	Duplicate	Total/NA	Water	6010C	293296

Analysis Batch: 293528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-203921-5	W-4	Total/NA	Water	6010C	293296
600-203921-6	W-4 D	Total/NA	Water	6010C	293296

Lab Chronicle

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Client Sample ID: W-2
Date Collected: 04/15/20 14:17
Date Received: 04/16/20 10:05

Lab Sample ID: 600-203921-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	293317	04/27/20 15:46	DT1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		1			293426	04/28/20 13:41	KP1	TAL HOU

Client Sample ID: W-2 D
Date Collected: 04/15/20 14:19
Date Received: 04/16/20 10:05

Lab Sample ID: 600-203921-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	293317	04/27/20 16:13	DT1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		1			293426	04/28/20 13:43	KP1	TAL HOU

Client Sample ID: W-3
Date Collected: 04/15/20 13:23
Date Received: 04/16/20 10:05

Lab Sample ID: 600-203921-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	293317	04/27/20 16:39	DT1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		1			293426	04/28/20 13:45	KP1	TAL HOU

Client Sample ID: W-3 D
Date Collected: 04/15/20 13:25
Date Received: 04/16/20 10:05

Lab Sample ID: 600-203921-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	293317	04/27/20 17:06	DT1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		1			293426	04/28/20 13:47	KP1	TAL HOU

Client Sample ID: W-4
Date Collected: 04/15/20 12:28
Date Received: 04/16/20 10:05

Lab Sample ID: 600-203921-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	5 mL	5 mL	293317	04/27/20 17:33	DT1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		1			293426	04/28/20 13:49	KP1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		10			293528	04/29/20 10:45	KP1	TAL HOU

Lab Chronicle

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Client Sample ID: W-4 D
Lab Sample ID: 600-203921-6
Date Collected: 04/15/20 12:30
Matrix: Water
Date Received: 04/16/20 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	5 mL	5 mL	293317	04/27/20 17:59	DT1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		1			293426	04/28/20 13:51	KP1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		10			293528	04/29/20 10:47	KP1	TAL HOU

Client Sample ID: W-5
Lab Sample ID: 600-203921-7
Date Collected: 04/15/20 15:05
Matrix: Water
Date Received: 04/16/20 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	293317	04/27/20 18:26	DT1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		1			293426	04/28/20 13:59	KP1	TAL HOU

Client Sample ID: W-5 D
Lab Sample ID: 600-203921-8
Date Collected: 04/15/20 15:07
Matrix: Water
Date Received: 04/16/20 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	293317	04/27/20 18:53	DT1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	293296	04/27/20 06:25	KP1	TAL HOU
Total/NA	Analysis	6010C		1			293426	04/28/20 14:01	KP1	TAL HOU

Client Sample ID: TB-041520
Lab Sample ID: 600-203921-9
Date Collected: 04/15/20 00:00
Matrix: Water
Date Received: 04/16/20 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	293317	04/27/20 12:40	DT1	TAL HOU

Client Sample ID: FB-041520
Lab Sample ID: 600-203921-10
Date Collected: 04/15/20 15:15
Matrix: Water
Date Received: 04/16/20 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	293317	04/27/20 19:19	DT1	TAL HOU

Laboratory References:
TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: PMC Carib Environmental Consultant LLC
Project/Site: SRS Arecibo

Job ID: 600-203921-1

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0759	08-04-20
Louisiana	NELAP	01967	06-30-20
Oklahoma	State	2019-073	08-31-20
Texas	NELAP	T104704223-19-25	10-31-20
USDA	US Federal Programs	P330-18-00130	04-30-21
Utah	NELAP	TX000832019-5	07-31-20

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone: 713-690-4444 Fax: 713-690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Eduardo Pastrana	Lab PM: Swafford, Mark H	Carrier Tracking No(s):	COC No: 600-76005-20499.2
Client Contact: Isidro Perera Armas	Phone: (787) 552-7036	E-Mail: mark.swafford@testamericainc.com		Page: Page ~~2 of 5~~ 1-1
Company: PMC Carib Environmental Consultant LLC				Job #:
Address: 1651 Ponce De Leon Avenue Equity Plaza Suite 301	Due Date Requested: 04 15 20			
City: San Juan	TAT Requested (days): Std			
State, Zip: PR, 00909				
Phone: 787-243-5293(Tel)	PO #: Pre-Payment by CC Required			
Email: pmc@pmcarib.com	WO #: 3700-010			
Project Name: Puerto Rico Landfill Project	Project #: 60012066			
Site: SRS Arecibo	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecanydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil/waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C - Target Analyte List	8260C - (MOD) App I Landfill 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A		
W-2	041520	1417	G	Water	N	N	X	X		
W-2D	041520	1419	G	Water	N	N	X	X		
W-3	041520	1323	G	Water	N	N	X	X		
W-3D	041520	1325	G	Water	N	N	X	X		
W-4	041520	1228	G	Water	N	N	X	X		
W-4D	041520	1230	G	Water	N	N	X	X		
W-5	041520	1505	G	Water	N	N	X	X		
W-5D	041520	1507	G	Water	N	N	X	X		
TB-041520	041520		G	Water	N	N		X		
FB-041520	041520	1515	G	Water	N	N		X		
				Water						

600-203921 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Eduardo Pastrana	Date/Time: 041520 / 1640	Company: PMC Carib Env	Received by: Fed Ex	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: MRS	Date/Time: 4/16/20 1005	Company: ETA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Loc: 600
203921

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

'20 APR 16 10:05

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: PMC

UNPACKED BY: YP CARRIER/DRIVER: Fedex

Custody Seal Present: ☑YES ☐NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
4303	Y / N	Y / N	1.6	678	-0.1	1.5
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

4/16/20

Samples received on ice? ☑YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☑YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot # HC991818 VOA headspace acceptable (5-6mm): ☑YES ☐NO ☐NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☑YES	☐ NO

COMMENTS:

4/16/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: PMC Carib Environmental Consultant LLC

Job Number: 600-203921-1

Login Number: 203921
List Number: 1
Creator: Rubio, Yuri

List Source: Eurofins TestAmerica, Houston

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.