Land-Tech

21 de mayo de 2015

Sra. Lorna Rodríguez
Gerente Interino
Área Control de Contaminación de Terrenos
Junta de Calidad Ambiental
Apartado 11488
San Juan, Puerto Rico 00910

21 MAY'15 AM10:49
RCUD JCA RADICACIONES

RE: REPORTE DE RESULTADOS DE MONITORIA AGUA SUBTERRÁNEA SISTEMA DE RELLENO SANITARIO DE ARECIBO ABRIL 2015

Estimada señora Rodríguez:

Adjunto para su evaluación está el Informe de Resultados de Monitoreo de Aguas Subterráneas del Sistema de Relleno Sanitario de Arecibo realizado en en el mes de abril de 2015.

Cualquier duda al respecto favor de comunicarse con quien suscribe al (787) 533-8673.

Cordialmente,

Yurima Pérez Rosell
Técnico Ambiental
Landfill Technologies, LLC.

Bo. Mamey, Carretera 189 km. 9.0, Gurabo, PR • P.O. Box 1322 Gurabo, PR 00778 • Tel. (787) 273-7639 • Fax (787) 687-0337

RESULTADOS DE MONITORIA DE
AGUA SUBTERRANEA
PARA EL PERIODO DE ABRIL DE 2015
SISTEMA DE RELLENO SANITARIO
ARECIBO, PUERTO RICO

RESULTADOS DE MONITORIA DE AGUA SUBTERRANEA
PARA EL PERIODO DE ABRIL DE 2015
SISTEMA DE RELLENO SANITARIO (SRS) MUNICIPAL
ARECIBO, PUERTO RICO

ABRIL 2015

Preparado para:

LANDFILL TECHNOLOGIES, CORP.
PO BOX 1322
GURABO, PR 00778

Land-Tech

Preparado por:

GROUNDWATER & ENVIRONMENTAL SERVICES OF PUERTO RICO, LLC
1550 AVENIDA PONCE DE LEÓN, PARADA 23, PISO 2, SANTURCE
SAN JUAN, PUERTO RICO 00909-1725

INFORME FINAL

RESULTADOS DE MONITORIA DE AGUA SUBTERRANEA PARA EL PERIODO DE ABRIL DE 2015 SISTEMA DE RELLENO SANITARIO (SRS) DE ARECIBO, PUERTO RICO

Proyecto GESPR Número: 7100830

ABRIL 2015

Efraín Camís Rosado, REM
Senior Project Manager

Isidro M Perera Armas
Site Operations Manager

Luis A. García Rivera, PE
QA/QC Reviewer

DECLARACIÓN DE CONFIDENCIALIDAD Y DIVULGACIÓN

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Groundwater & Environmental Services of Puerto Rico, LLC

20 de abril de 2015

Ing. Yurima Pérez
Oficial de Cumplimiento
Landfill Technologies Corp.
PO BOX 1322
Gurabo, PR 00778

RE: RESULTADOS DE MONITORIA DE AGUA SUBTERRANEA PARA EL PERIODO DE ABRIL DE 2015 – SISTEMA DE RELLENO SANITARIO (SRS) DE ARECIBO, PR

INTRODUCCIÓN

Adjunto los resultados para el periodo de abril del año 2015, según el "Plan Aprobado de Monitoria de Agua Subterránea" entre la Junta de Calidad Ambiental (JCA) y Landfill Technologies, Corp. (LTC) para el SRS en el 1999. El plan de monitoria es realizado para estar en cumplimiento con el Reglamento para el Manejo de los Desperdicios Sólidos No Peligrosos. Este reglamento requiere que se establezca un programa de monitoria el cual pueda detectar la presencia de 45 Compuestos Orgánicos Volátiles (COV's) y 15 metales. La concentración mayor sobre el límite máximo de contaminación permisible (MCL, por sus siglas en inglés) requiere la preparación de un plan de acción correspondiente. A estos fines estos reportes son analizados para determinar la presencia y recomendar acciones, si son necesarias, para mantener el sistema de monitoreo en óptimas condiciones.

La **Figura 1** presenta la ubicación del SRS en el cuadrángulo del Servicio Geológico Federal (USGS, por sus siglas en inglés) para el área de Arecibo. Incluido en dicha figura se encuentra una foto aérea de la propiedad donde ubica el SRS para referencia visual.

El monitoreo aprobado para el SRS requiere que se colecten muestras de cinco pozos de monitoreo de agua subterráneas. El sistema de monitoria se compone, como mínimo, de un pozo de agua subterránea gradiente arriba y cuatro pozos de monitoreo aguas abajo del SRS. El sistema se muestrea de acuerdo al Plan de Trabajo Aprobado por la JCA el cual describe en detalle la geología, hidrogeología, protocolos de las actividades de campo, laboratorio y reporte a la JCA.

El monitoreo de aguas se llevó a cabo el día 15 de abril de 2015 por personal de Groundwater & Environmnetal Services of Puerto Rico LLC (GESPR) con adiestramiento en HAZWOPER y con equipo de seguridad personal nivel D (capacete, chaleco reflector, gafas de seguridad, botas con punta de acero y guantes desechables de nitrilo). Previo al desarrollo y colección de muestras se completó una tabla de datos de cada pozo que incluyen: profundidad del agua y parámetros de muestreo de calidad de campo con equipo de muestreo calibrado para estos fines. El **Anejo 1** incluye la hoja de datos de campo para cada pozo.

ALCANCE DE LOS TRABAJOS

La localización de los pozos muestreados en el SRS se presenta en la **Figura 2**. Cada pozo fue debidamente identificado, desarrollado y muestreado según el plan aprobado. Las muestras fueron colectadas con duplicados para análisis de Orgánicos Volátiles utilizando el Método 8260 para VOC's y para metales por el Método 6010, ambos de la EPA. El **Anejo 2** incluye la cadena de custodia (COC, por sus siglas en inglés). El **Anejo 3** presenta los resultados de laboratorio debidamente certificados de Pace Analytical ubicado en Guaynabo, Puerto Rico.

La **Tabla 1** presenta los resultados obtenidos para los compuestos orgánicos volátiles. La **Tabla 2** presenta los resultados obtenidos para metales.

RESULTADOS

VOLÁTILES

Según se presenta en la **Tabla 1** para Compuestos Orgánicos Volátiles (COV's), los resultados de todos los parámetros fueron no detectados (ND) para las muestras de agua de los pozos W-1, W-2, W-3, W-4 y W-5. El sistema de monitoreo no ha presentado resultados significativos de volátiles durante los años 2014 y 2015.

METALES

Concentraciones de metales fueron detectadas en algunas de las muestras según presenta la **Tabla 2**. Sin embargo, ninguna de estas concentraciones sobrepasaron los niveles máximos de contaminación establecidos por EPA.

RECOMENDACIONES

Basado en las tareas realizadas y los resultados obtenidos recomendamos lo siguiente:

- Continuar con el programa de monitoria de agua subterránea;
- Preparar un reporte estadístico de valores históricos para metales y concentraciones naturales de metales para los suelos del SRS. De esta forma se podrá establecer si las concentraciones de metales que se mantienen presente son el producto de la interacción del suelo con el nivel freático o si las mismas representan la presencia de lixiviados. Dependiendo de los resultados, se recomendará la preparación de un plan de acción.

Atentamente,

Groundwater & Environmental Services of PR, LLC.

Isidro M. Perera Armas
Site Operations Manager

TABLAS

TABLA 1
SRS ARECIBO
RESULTADOS ANALITICOS PARA - COV'S EN (MG/L)
METODO 8260
ABRIL DE 2015

PARAMETRO DE ANALISIS			MUESTRAS QA/QC			MUESTRAS DE AGUA DE POZOS										
						G.ARRIBA		POZOS DE CUMPLIMIENTO								
NOMBRE	CAS NO.	MCL	TB	FB	EB	W-1-1[1]	W-1-2[2]	W-2-1[3]	W-2-2[4]	W-3-1[5]	W-3-2[6]	W-4-1[7]	W-4-2[8]	W-5-1[9]	W-5-2[10]	RL (mg/L)
DICHLORODIFLUOROMETHANE	75-71-8	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CHLOROMETHANE	74-87-3	0.200	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
VINYL CHLORIDE	75-01-4	0.002	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
BROMOMETHANE	74-83-9	0.050	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CHLOROETHANE	75-00-3	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
TRICHLOROFLUOROMETHANE	75-69-4	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
METHYLENE CHLORIDE	75-09-2	0.005	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,1-DICHLOROETHENE	75-35-4	0.007	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
TRANS-1,2-DICHLOROETHENE	156-60-5	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,1-DICHLOROETHANE	75-34-3	0.007	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CIS 1,2-DICHLOROETHENE	156-59-2	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CHLOROFORM	67-66-3	0.005	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,1,1-TRICHLOROETHANE	71-55-6	0.0002	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CARBON TETRACHLORIDE	56-23-5	0.005	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
BEBZENE	71-43-2	0.005	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-DICHLOROETHANE	107-06-2	0.005	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
TRICHLOROETHENE	79-01-6	0.002	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-DICHLOROPROPANE	78-87-5	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
BROMODICHLOROMETHANE	75-27-4	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
TRANS-1,3-DICHLOROPROPENE	10061-02-6	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
TOLUENE	108-88-3	1.000	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CIS-1,3-DICHLOROPROPENE	10061-01-5	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,1,2-TRICHLOROETHANE	79-00-5	0.005	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
TETRACHLOROETHENE	127-18-4	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
DIBROMOCHLOROMETHANE	124-48-1	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-DIBROMOETHANE (EDB)	106-93-4	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CHLOROBENZENE	108-90-7	0.100	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
ETHYLBENZENE	100-41-4	0.700	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
M&P-XYLENE	179601-23-1	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
O-XYLENE	95-47-6	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
STYRENE	100-42-5	0.100	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
BROMOFORM	75-25-2	0.700	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
ISOPROPYLBENZZENE (CUMENE)	98-82-8	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,1,2,2-TETRACHLOROETHANE	79-34-5	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,3-DICHLOROBENZENE	541-73-1	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,4-DICHLOROBENZENE	106-46-7	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-DICHLOROBENZENE	95-50-1	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
2-BUTANONE (MEK)	78-93-3	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
2-HEXANONE	591-78-6	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
CARBON DISULFIDE	75-15-0	4.000	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
ACETONE	67-64-1	4.000	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
METHYL-TERT-BUTYL ETHER	1634-04-4	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	108-10-1	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
MEHTYL ACETATE	79-20-9	***	ND	ND	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010

Leyenda:

***: EPA no tiene un MCL establecido para este parámetro
MG/L: Miligrams per Liter (miligramos por litro)
Metodo 8260: Método de Análisis para Volátiles según EPA SW-846
RL: Reporting Limit (límite de Reporte según método) en mg/L
ND No detectado
QA/QC: Quality Assurance/Quality Control (Muestras de Control de Calidad y Certeza)
MCL: Maximum Contaminant Level (Nivel Máximo de Contaminación) según EPA en mg/L
COV's: Compuestos Orgánicos Volátiles según listado requerido para este muestreo.
CAS: Chemical Abstract Service (identificadores numéricos para parámetro a ser analizado).
N/A: No Aplica

TABLA 2
SRS ARECIBO
RESULTADOS ANALITICOS PARA METALES EN (MG/L)
METODO 6010 EPA
ABRIL DE 2015

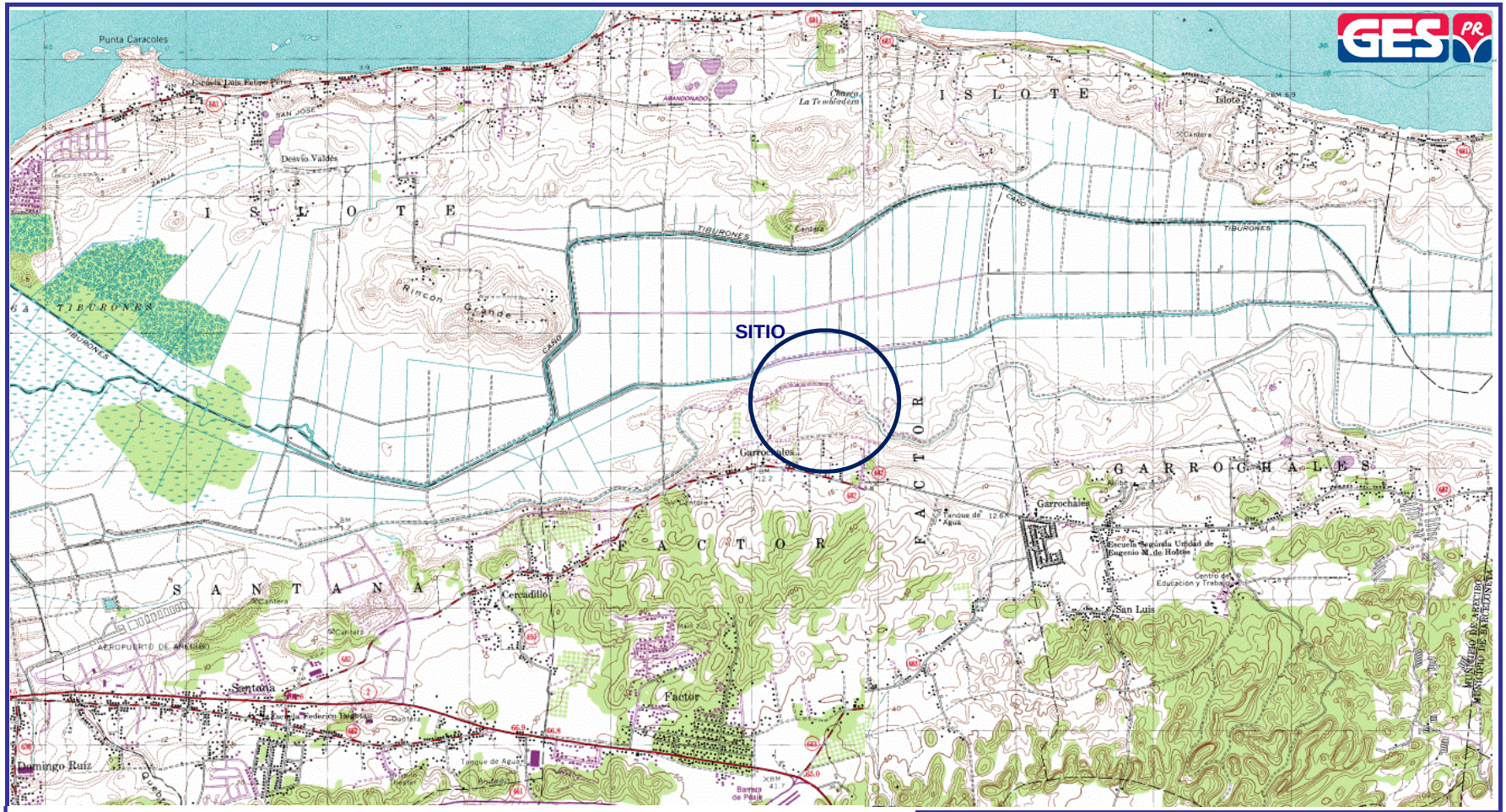
PARAMETRO DE ANALISIS			MUESTRAS QA/QC			MUESTRAS DE AGUA DE POZOS										
						G.ARRIBA		POZOS DE CUMPLIMIENTO								
NOMBRE	CAS NO.	MCL	TB	FB	EB	W-1-1	W-1-2	W-2-1	W-2-2	W-3-1	W-3-2	W-4-1	W-4-2	W-5-1	W-5-2	RL (mg/L)
ANTIMONY	7440-36-0	0.060	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.060
ARSENIC	7440-38-2	0.050	N/A	N/A	N/A	ND	ND	0.011	0.010	ND	ND	ND	ND	ND	ND	0.010
BARIUM	7440-39-3	2.000	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	0.38	0.38	ND	ND	0.200
BERYLLIUM	7440-41-7	0.004	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CADMIUM	7440-43-9	0.005	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
CHROMIUM	7440-47-3	0.100	N/A	N/A	N/A	ND	ND	ND	ND	0.012	0.014	ND	ND	0.014	0.012	0.010
COBALT	7440-48-4	***	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND	0.010
COPPER	7440-50-8	1.300	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	0.013	0.013	ND	ND	0.010
LEAD	7439-92-1	0.015	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005
NICKEL	7440-02-0	***	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	0.043	0.042	ND	ND	0.040
SELENIUM	7782-49-2	0.050	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.035
SILVER	7440-22-4	***	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
TALLIUM	7440-28-0	0.002	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
VANADIUM	7440-62-2	***	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.050
ZINC	7440-66-6	5.000	N/A	N/A	N/A	ND	ND	ND	ND	ND	ND	0.14	0.14	ND	ND	0.020

LEYENDA

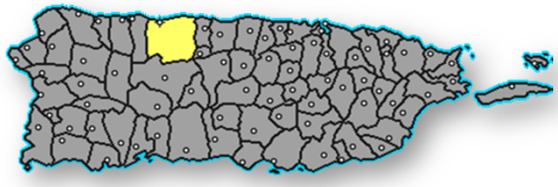
Metodo 8260: Método de Análisis para Volátiles según EPA SW-846
RL: Reporting Limit (límite de Reporte según método) en mg/L
MG/L: Miligrams per Liter (miligramos por litro)
*****:** EPA no tienen un MCL establecido par este parámetro
MCL: Maximum Contaminant Level (Nivel Máximo de Contaminación) según EPA en mg/L

QA/QC: Quality Assurance/Quality Control (Muestras de Control de Calidad y Certeza)
ND: ND Detectado **N/A:** No Aplica
Arrojó un resultado por encima del MCL establecido por EPA
COV's: Compuestos Orgánicos Volátiles según listado requerido para este muestreo.
CAS NO: Chemical Abstract Service (identificadores numéricos para parámetro a ser analizado).

FIGURAS



FUENTE: USGS TOPOGRAPHIC MAP
ARECIBO QUADRANGLE, PHOTOREVISED 1982



ESCALA 0 — MILLA 1

PREPARADO POR: D.GINES	**LOCALIZACIÓN DEL SISTEMA DE RELLENO SANITARIO DE ARECIBO**		
REVISADO POR: E.CAMIS	**LANDFILL TECHNOLOGIES CORPORATION, LTC**		
APROBADO POR: I.PERERA	LANDFILL TECHNOLOGIES CORPORATION, LTC		
NORTE	ESCALA GRAFICA	FECHA:	FIGURA: **1**

FUENTE: GOOGLE EARTH, AERIAL IMAGE 12-24-2013

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:

POZOS DE MONITORIA DE AGUA

DIB. POR: D.GINES E.CAMIS

REV. POR: Y.SOTO

APROBADO POR: I.PERERA

NORTE

LOCALIZACION DE PUNTOS DE MONITORIA DE AGUA SUBTERRANEA

LANDFILL TECHNOLOGIES CORPORATION, LTC

Groundwater & Environmental Services Puerto Rico, LLC
1550 Ave. Ponce De León, Parada 23, Piso 2 Santurce PR 00909

ESCALA GRAFICA	FECHA: 4/20/2015	FIGURA: **2**

ANEJO 1

Hoja de Datos de Campo

JB 04/15/15

WELL DEVELOPMENT DATA

SAMPLING EVENT LOCATION:	SRS ARECIBO	EVENT START TIME:	
DESCRIPTION OF WELL CONDITION	WELL I.D. AND TYPE		
	COMPLIANCE	COMPLIANCE	
	W-2	W-1	
WEATHER	Sunny	Sunny	
GROUNDWATER PRESENCE DATA			
DEPTH OF WATER BEFORE DEVELOPME	~~2.28ft~~ 6.96	~~7.93ft~~ 8.33	
DEPTH OF WATER AFTER DEVELOPMEN	~~11.28ft~~ 13.22	~~14.21~~ 20.05	
WELL CONSTRUCTION DATA			
DEPTH OF WELL	30.0FT	41.60FT	
HEIGHT OF CASING	2.50FT	3.00FT	
WELL DIAMETER	4 INCH	4 INCH	
LENGTH OF WATER COLUMN	23.04	33.27	
VOLUME OF WATER IN COLUMN	14.97	21	
VOLUMES TO BE REMOVED FROM WELL	15gal.	21gal.	
WELL DEVELOPMENT DATA			
SURGE TECHNIQUE	PUMP/BAILER	PUMP/BAILER	PUMP/BAILER
SURGE START TIME	0951	1026	
SURGE END TIME	1000	1038	

DEVELOPMENT (3 VOLUMES)	W-2			W-1					
FIELD PARAMETER DATA	VOL (1)	VOL (2)	VOL (3)	VOL (1)	VOL (2)	VOL (3)	VOL (1)	VOL (2)	VOL (3)
GALLONS	5	5	5	7	7	7			
WATER LEVEL (FT)	12.90	13.25	13.70	18.36	19.20	23.87			
TIME (AM OR PM)	0953	0955	0957	1029	1032	1035			
TEMP (°C)	18.97	18.98	19.10	20.13	20.16	20.22			
SPECIFIC CONDUCTANCE(mS/cm)	570	569	566	1004	1004	1005			
PH	8.14	7.86	7.65	7.36	7.27	7.27			
TURBIDITY (ntu)	17.2	10.01	8.08	1.24	1.10	1.21			
DO (%)	1.81	1.81	2.23	2.19	2.81	2.95			
SALINITY	0.11	0.11	0.11	0.23	0.16	0.12			
COLOR	clear	clear	clear	clear	clear	clear			
ODOR	none	none	none	none	~~clear~~	none			
SAMPLE TIME	W-2-1(1003) / W-2-2(1006)			none					
COMMENTS	W-2-1			W-1-1(1042) / W-1-2(1045)					
EQUIPMENT	JB	YSI PLUS							
LOGGED IN THE FIELD BY:		END OF EVENT AT (TIME):				SIGNATURE			
TDS	380	354	310	374	336	221			

JB

JB 04/15/15

WELL DEVELOPMENT DATA			
SAMPLING EVENT LOCATION:	SRS ARECIBO	EVENT START TIME:	
DESCRIPTION OF WELL CONDITION	WELL I.D. AND TYPE		
	UPGRADIENT	COMPLIANCE	COMPLIANCE
	W-5	W-4	W-3
WEATHER	Sunny	Sunny	Sunny
GROUNDWATER PRESENCE DATA			
DEPTH OF WATER BEFORE DEVELOPME	4.11	11.02	18.48
DEPTH OF WATER AFTER DEVELOPMEN	15.02	10.96	18.50
WELL CONSTRUCTION DATA			
DEPTH OF WELL	42.00FT	54FT	47.0FT
HEIGHT OF CASING	2.50FT	2.50FT	2.5FT
WELL DIAMETER	4 INCH	4 INCH	4 INCH
LENGTH OF WATER COLUMN	37.89	42.98	28.52
VOLUME OF WATER IN COLUMN	24	27.93	18.53
VOLUMES TO BE REMOVED FROM WELI	24gal.	27 ~~18~~gal.	18gal
WELL DEVELOPMENT DATA			
SURGE TECHNIQUE	PUMP/BAILER	PUMP/BAILER	PUMP/BAILER
SURGE START TIME	1100	0841	0920
SURGE END TIME	1116	0908	0932

DEVELOPMENT (3 VOLUMES)	W-5			W-4			W-3		
FIELD PARAMETER DATA	VOL (1)	VOL (2)	VOL (3)	VOL (1)	VOL (2)	VOL (3)	VOL (1)	VOL (2)	VOL (3)
GALLONS	8	8	8	9	9	9	6	6	6
WATER LEVEL (FT)	11.10	18.16	20.16	12.31	12.05	11.94	19.24	19.27	19.30
TIME (AM OR PM)	1104	1108	1112	0849	0857	0905	0923	0926	0929
TEMP (°C)	18.46	18.46	18.49	20.09	20.16	20.12	20.21	20.08	19.90
SPECIFIC CONDUCTANCE(mS/cm)	744	745	745	3792	3867	3366	1298	1302	1295
PH	7.69	7.81	7.86	6.35	6.80	6.99	8.27	8.00	7.85
TURBIDITY (ntu)	2.34	2.10	2.48	8.58	3.99	4.85	1.64	1.03	1.63
DO (%)	8.19	7.74	7.62	4.14	4.48	4.75	3.50	3.54	3.18
SALINITY	0.11	0.11	0.11	0.18	0.22	0.18	0.23	0.29	0.16
COLOR	clear	clear	clear	clear	clear	clear	clear	clear	clear
ODOR	none	none	none	none	none	none	none	none	none
SAMPLE TIME	W-5-1 (1120) / W-5-2 (1123)			W-4-1 (0912) / W-4-2 (0915)			W-3-1 (0935) / W-3-2 (0937)		
COMMENTS									
EQUIPMENT	YSI MULTI PLUS								
LOGGED IN THE FIELD BY:		END OF EVENT AT (TIME):				SIGNATURE			
TDS	330	226	333	146	190	196	321	302	444

ANEJO 2

Cadenas de Custodia

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WO# : 2018538

2018538

...uest Document
...t be completed accurately.

Page: 1 of 1

1399702

Section A
Required Client Information:

Company: GESPR
Address: 1550 Ponce de Leon Piso 2, Santurce, P.R.
Email To: ecamis@gesonline.com
Phone: 787 721 4118 Fax: n/a
Requested Due Date/TAT: Std

Section B
Required Project Information:

Report To: Efrain Camis / GESPR
Copy To: Efrain Camis / GESPR
Purchase Order No.:
Project Name: SRS Arecibo
Project Number: 7100 830

Attention: Efrain Camis
Company Name: GESPR
Address:
Pace Quote Reference:
Pace Project Manager: Juan Rodarte
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER EQB

Site Location: Arecibo
STATE: PR

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes
MATRIX / CODE
Drinking Water DW
Water WT
Waste Water WW
Product P
Soil/Solid SL
Oil OL
Wipe WP
Air AR
Tissue TS
Other OT

Requested Analysis Filtered (Y/N): N, N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	WC 8260	Metals (with Hg)												Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-041515	WT	G			041515	—	NA	2				Y						X													N	
2	W-4-1	WT	G			041515	0912	NA	3			Y	Y						Y	Y												N	
3	W-4-2	WT	G			041515	0915	NA	3			Y	Y						Y	Y												N	
4	W-3-1	WT	G			041515	0935	NA	3			Y	Y						Y	Y												N	
5	W-3-2	WT	G			041515	0937	NA	3			Y	Y						Y	Y												N	
6	W-2-1	WT	G			041515	1003	NA	3			Y	Y						Y	Y												N	
7	W-2-2	WT	G			041515	1006	NA	3			Y	Y						Y	Y												N	
8	W-1-1	WT	G			041515	1042	NA	3			Y	Y						Y	Y												N	
9	W-1-2	WT	G			041515	1045	NA	3			Y	Y						Y	Y												N	
10	W-5-1	WT	G			041515	1120	NA	3			Y	Y						Y	Y												N	
11	W-5-2	WT	G			041515	1123	NA	3			Y	Y						Y	Y												N	
12	FB-041515	WT	G			041515	1136	NA	2				Y						X													N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
EDD: SRS Arecibo-laboratorio	José Bonilla / GESPR	041515	1:44	PACE	4/15/15	1344	3	Y	N	Y
21861.EQ EDD.zip	PACE	4/15/15	1638							
Email: ges@eqisonline.com	FedEx	4-16-15	850		4/16/15	850	5.0 / 5.7	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: José Bonilla
SIGNATURE of SAMPLER: José Bonilla
DATE Signed (MM/DD/YY): 041515

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

ANEJO 3

Resultados de Laboratorio

Pace Analytical Services, Inc.
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

April 22, 2015

Isidro Perera
GES PR
1418 Ave. Ponce De Leon Ave
Suite 201
San Juan, PR 009074000

RE: Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Dear Isidro Perera:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Juan Redondo
juan.redondo@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

New Orleans Certification IDs
California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylviania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

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SAMPLE SUMMARY

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2018538001	TB- 041515	Water	04/15/15 00:00	04/15/15 13:44
2018538002	W-4-1	Water	04/15/15 09:12	04/15/15 13:44
2018538003	W-4-2	Water	04/15/15 09:15	04/15/15 13:44
2018538004	W-3-1	Water	04/15/15 09:35	04/15/15 13:44
2018538005	W-3-2	Water	04/15/15 09:37	04/15/15 13:44
2018538006	W-2-1	Water	04/15/15 10:03	04/15/15 13:44
2018538007	W-2-2	Water	04/15/15 10:06	04/15/15 13:44
2018538008	W-1-1	Water	04/15/15 10:42	04/15/15 13:44
2018538009	W-1-2	Water	04/15/15 10:45	04/15/15 13:44
2018538010	W-5-1	Water	04/15/15 11:20	04/15/15 13:44
2018538011	W-5-2	Water	04/15/15 11:23	04/15/15 13:44
2018538012	FB-041515	Water	04/15/15 11:36	04/15/15 13:44

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SAMPLE ANALYTE COUNT

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2018538001	TB- 041515	EPA 8260	MHM	48	PASI-N
2018538002	W-4-1	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538003	W-4-2	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538004	W-3-1	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538005	W-3-2	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538006	W-2-1	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538007	W-2-2	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538008	W-1-1	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538009	W-1-2	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538010	W-5-1	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538011	W-5-2	EPA 6010	MHB1	15	PASI-N
		EPA 8260	MHM	48	PASI-N
2018538012	FB-041515	EPA 8260	MHM	48	PASI-N

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PROJECT NARRATIVE

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Method: **EPA 6010**
Description: 6010 Metals, Total
Client: GES PR
Date: April 22, 2015

General Information:
10 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Method: **EPA 8260**
Description: 8260 MSV
Client: GES PR
Date: April 22, 2015

General Information:
12 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: MSV/2878

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- W-3-1 (Lab ID: 2018538004)
  - Dibromofluoromethane (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
María de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: TB- 041515 **Lab ID: 2018538001** Collected: 04/15/15 00:00 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 17:06	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 17:06	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 17:06	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 17:06	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 17:06	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 17:06	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 17:06	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 17:06	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:06	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 17:06	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 17:06	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 17:06	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 17:06	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 17:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 17:06	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:06	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:06	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:06	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 17:06	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 17:06	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 17:06	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:06	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:06	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:06	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 17:06	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 17:06	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 17:06	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 17:06	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 17:06	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 17:06	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 17:06	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 17:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 17:06	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 17:06	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 17:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 17:06	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 17:06	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 17:06	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 17:06	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 17:06	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 17:06	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 17:06	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 17:06	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 17:06	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 17:06	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%.	70-123	1		04/16/15 17:06	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
María de los A. Negrón #518
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: TB- 041515 **Lab ID: 2018538001** Collected: 04/15/15 00:00 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Surrogates								
4-Bromofluorobenzene (S)	105	%.	62-134	1		04/16/15 17:06	460-00-4	
Dibromofluoromethane (S)	101	%.	64-130	1		04/16/15 17:06	1868-53-7	

Sample: W-4-1 **Lab ID: 2018538002** Collected: 04/15/15 09:12 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 18:34	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:34	7440-38-2	
Barium	**0.38**	mg/L	0.20	1	04/17/15 05:00	04/17/15 18:34	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:34	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:34	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:34	7440-47-3	
Cobalt	**0.010**	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:34	7440-48-4	
Copper	**0.013**	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:34	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:34	7439-92-1	
Nickel	**0.043**	mg/L	0.040	1	04/17/15 05:00	04/17/15 18:34	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:34	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:34	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:34	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 18:34	7440-62-2	
Zinc	**0.14**	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:34	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 17:26	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 17:26	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 17:26	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 17:26	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 17:26	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 17:26	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 17:26	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 17:26	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:26	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 17:26	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 17:26	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 17:26	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 17:26	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 17:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 17:26	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:26	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:26	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:26	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 17:26	75-71-8	

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QUIMICO
María de los A. Negrón #5118

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-4-1 **Lab ID: 2018538002** Collected: 04/15/15 09:12 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 17:26	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 17:26	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:26	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:26	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:26	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 17:26	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 17:26	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 17:26	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 17:26	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 17:26	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 17:26	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 17:26	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 17:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 17:26	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 17:26	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 17:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 17:26	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 17:26	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 17:26	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 17:26	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 17:26	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 17:26	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 17:26	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 17:26	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 17:26	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 17:26	95-47-6	
Surrogates								
Toluene-d8 (S)	112	%.	70-123	1		04/16/15 17:26	2037-26-5	
4-Bromofluorobenzene (S)	120	%.	62-134	1		04/16/15 17:26	460-00-4	
Dibromofluoromethane (S)	119	%.	64-130	1		04/16/15 17:26	1868-53-7	

Sample: W-4-2 **Lab ID: 2018538003** Collected: 04/15/15 09:15 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 18:38	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:38	7440-38-2	
Barium	**0.38**	mg/L	0.20	1	04/17/15 05:00	04/17/15 18:38	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:38	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:38	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:38	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:38	7440-48-4	
Copper	**0.013**	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:38	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:38	7439-92-1	
Nickel	**0.042**	mg/L	0.040	1	04/17/15 05:00	04/17/15 18:38	7440-02-0	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
Maria de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-4-2 **Lab ID: 2018538003** Collected: 04/15/15 09:15 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:38	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:38	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:38	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 18:38	7440-62-2	
Zinc	**0.14**	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:38	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 17:46	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 17:46	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 17:46	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 17:46	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 17:46	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 17:46	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 17:46	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1*		04/16/15 17:46	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:46	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 17:46	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 17:46	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 17:46	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 17:46	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 17:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 17:46	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:46	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:46	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 17:46	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 17:46	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 17:46	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 17:46	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:46	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:46	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 17:46	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 17:46	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 17:46	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 17:46	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 17:46	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 17:46	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 17:46	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 17:46	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 17:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 17:46	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 17:46	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 17:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 17:46	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 17:46	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 17:46	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 17:46	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 17:46	79-00-5	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
María de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-4-2 **Lab ID: 2018538003** Collected: 04/15/15 09:15 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 17:46	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 17:46	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 17:46	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 17:46	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 17:46	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%.	70-123	1		04/16/15 17:46	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	62-134	1		04/16/15 17:46	460-00-4	
Dibromofluoromethane (S)	104	%.	64-130	1		04/16/15 17:46	1868-53-7	

Sample: W-3-1 **Lab ID: 2018538004** Collected: 04/15/15 09:35 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 18:42	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:42	7440-38-2	
Barium	ND	mg/L	0.20	1	04/17/15 05:00	04/17/15 18:42	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:42	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:42	7440-43-9	
Chromium	**0.012**	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:42	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:42	7440-48-4	
Copper	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:42	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:42	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/17/15 05:00	04/17/15 18:42	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:42	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:42	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:42	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 18:42	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:42	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 18:05	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 18:05	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 18:05	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 18:05	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 18:05	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 18:05	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 18:05	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 18:05	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:05	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 18:05	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 18:05	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 18:05	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 18:05	96-12-8	

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María de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-3-1 Lab ID: 2018538004 Collected: 04/15/15 09:35 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 18:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 18:05	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:05	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:05	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:05	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 18:05	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 18:05	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 18:05	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:05	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:05	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:05	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 18:05	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 18:05	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 18:05	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 18:05	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 18:05	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 18:05	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 18:05	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 18:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 18:05	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 18:05	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 18:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 18:05	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 18:05	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 18:05	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 18:05	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 18:05	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 18:05	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 18:05	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 18:05	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 18:05	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 18:05	95-47-6	
Surrogates								
Toluene-d8 (S)	123	%.	70-123	1		04/16/15 18:05	2037-26-5	
4-Bromofluorobenzene (S)	131	%.	62-134	1		04/16/15 18:05	460-00-4	
Dibromofluoromethane (S)	131	%.	64-130	1		04/16/15 18:05	1868-53-7	S3

Sample: W-3-2 Lab ID: 2018538005 Collected: 04/15/15 09:37 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 18:53	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:53	7440-38-2	
Barium	ND	mg/L	0.20	1	04/17/15 05:00	04/17/15 18:53	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:53	7440-41-7	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
QUIMICO LICENCIADO
María de los A. Negrón #5118

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-3-2 **Lab ID: 2018538005** Collected: 04/15/15 09:37 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:53	7440-43-9	
Chromium	**0.014**	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:53	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:53	7440-48-4	
Copper	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:53	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:53	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/17/15 05:00	04/17/15 18:53	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:53	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:53	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:53	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 18:53	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:53	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 18:25	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 18:25	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 18:25	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 18:25	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 18:25	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 18:25	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 18:25	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 18:25	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:25	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 18:25	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 18:25	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 18:25	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 18:25	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 18:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 18:25	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:25	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:25	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:25	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 18:25	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 18:25	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 18:25	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:25	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:25	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:25	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 18:25	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 18:25	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 18:25	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 18:25	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 18:25	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 18:25	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 18:25	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 18:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 18:25	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 18:25	1634-04-4	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
María de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-3-2 **Lab ID: 2018538005** Collected: 04/15/15 09:37 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Styrene	ND	mg/L	0.0050	1		04/16/15 18:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 18:25	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 18:25	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 18:25	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 18:25	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 18:25	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 18:25	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 18:25	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 18:25	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 18:25	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 18:25	95-47-6	
Surrogates								
Toluene-d8 (S)	89	%.	70-123	1		04/16/15 18:25	2037-26-5	
4-Bromofluorobenzene (S)	92	%.	62-134	1		04/16/15 18:25	460-00-4	
Dibromofluoromethane (S)	90	%.	64-130	1		04/16/15 18:25	1868-53-7	

Sample: W-2-1 **Lab ID: 2018538006** Collected: 04/15/15 10:03 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 18:57	7440-36-0	
Arsenic	**0.011**	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:57	7440-38-2	
Barium	ND	mg/L	0.20	1	04/17/15 05:00	04/17/15 18:57	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:57	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:57	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:57	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:57	7440-48-4	
Copper	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:57	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 18:57	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/17/15 05:00	04/17/15 18:57	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:57	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:57	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 18:57	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 18:57	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 18:57	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 18:45	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 18:45	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 18:45	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 18:45	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 18:45	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 18:45	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 18:45	75-15-0	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
QUIMICO LICENCIADO
María de Los A. Negrón #5118

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-2-1 **Lab ID: 2018538006** Collected: 04/15/15 10:03 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 18:45	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:45	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 18:45	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 18:45	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 18:45	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 18:45	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 18:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 18:45	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:45	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:45	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 18:45	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 18:45	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 18:45	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 18:45	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:45	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:45	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 18:45	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 18:45	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 18:45	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 18:45	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 18:45	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 18:45	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 18:45	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 18:45	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 18:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 18:45	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 18:45	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 18:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 18:45	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 18:45	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 18:45	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 18:45	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 18:45	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 18:45	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 18:45	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 18:45	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 18:45	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 18:45	95-47-6	
Surrogates								
Toluene-d8 (S)	109	%.	70-123	1		04/16/15 18:45	2037-26-5	
4-Bromofluorobenzene (S)	113	%.	62-134	1		04/16/15 18:45	460-00-4	
Dibromofluoromethane (S)	111	%.	64-130	1		04/16/15 18:45	1868-53-7	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
QUIMICO LICENCIADO
María de los A. Negrón #5118

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-2-2 **Lab ID: 2018538007** Collected: 04/15/15 10:06 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 19:01	7440-36-0	
Arsenic	**0.010**	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:01	7440-38-2	
Barium	ND	mg/L	0.20	1	04/17/15 05:00	04/17/15 19:01	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:01	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:01	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:01	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:01	7440-48-4	
Copper	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:01	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:01	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/17/15 05:00	04/17/15 19:01	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:01	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:01	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:01	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 19:01	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:01	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 19:05	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 19:05	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 19:05	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 19:05	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 19:05	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 19:05	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 19:05	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 19:05	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:05	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 19:05	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 19:05	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 19:05	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 19:05	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 19:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 19:05	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:05	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:05	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:05	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 19:05	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 19:05	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 19:05	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:05	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:05	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:05	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 19:05	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 19:05	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 19:05	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 19:05	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 19:05	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 19:05	98-82-8	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
Maria de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-2-2 **Lab ID: 2018538007** Collected: 04/15/15 10:06 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Methyl acetate	ND	mg/L	0.010	1		04/16/15 19:05	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 19:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 19:05	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 19:05	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 19:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 19:05	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 19:05	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 19:05	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 19:05	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 19:05	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 19:05	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 19:05	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 19:05	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 19:05	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 19:05	95-47-6	
Surrogates								
Toluene-d8 (S)	109	%.	70-123	1		04/16/15 19:05	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	62-134	1		04/16/15 19:05	460-00-4	
Dibromofluoromethane (S)	115	%.	64-130	1		04/16/15 19:05	1868-53-7	

Sample: W-1-1 **Lab ID: 2018538008** Collected: 04/15/15 10:42 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 19:04	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:04	7440-38-2	
Barium	ND	mg/L	0.20	1	04/17/15 05:00	04/17/15 19:04	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:04	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:04	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:04	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:04	7440-48-4	
Copper	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:04	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:04	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/17/15 05:00	04/17/15 19:04	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:04	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:04	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:04	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 19:04	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:04	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 19:24	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 19:24	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 19:24	75-27-4	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
María de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-1-1 **Lab ID: 2018538008** Collected: 04/15/15 10:42 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Bromoform	ND	mg/L	0.0050	1		04/16/15 19:24	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 19:24	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 19:24	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 19:24	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 19:24	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:24	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 19:24	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 19:24	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 19:24	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 19:24	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 19:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 19:24	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:24	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:24	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:24	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 19:24	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 19:24	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 19:24	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:24	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:24	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:24	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 19:24	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 19:24	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 19:24	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 19:24	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 19:24	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 19:24	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 19:24	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 19:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 19:24	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 19:24	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 19:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 19:24	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 19:24	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 19:24	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 19:24	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 19:24	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 19:24	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 19:24	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 19:24	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 19:24	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 19:24	95-47-6	
Surrogates								
Toluene-d8 (S)	117	%.	70-123	1		04/16/15 19:24	2037-26-5	
4-Bromofluorobenzene (S)	123	%.	62-134	1		04/16/15 19:24	460-00-4	
Dibromofluoromethane (S)	121	%.	64-130	1		04/16/15 19:24	1868-53-7	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
Maria de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-1-2 **Lab ID: 2018538009** Collected: 04/15/15 10:45 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 19:08	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:08	7440-38-2	
Barium	ND	mg/L	0.20	1	04/17/15 05:00	04/17/15 19:08	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:08	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:08	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:08	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:08	7440-48-4	
Copper	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:08	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:08	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/17/15 05:00	04/17/15 19:08	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:08	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:08	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:08	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 19:08	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:08	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 19:44	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 19:44	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 19:44	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 19:44	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 19:44	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 19:44	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 19:44	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 19:44	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:44	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 19:44	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 19:44	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 19:44	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 19:44	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 19:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 19:44	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:44	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:44	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 19:44	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 19:44	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 19:44	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 19:44	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:44	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:44	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 19:44	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 19:44	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 19:44	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 19:44	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 19:44	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 19:44	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 19:44	98-82-8	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
QUIMICO LICENCIADO
María de los A. Negrón #5118

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-1-2 **Lab ID: 2018538009** Collected: 04/15/15 10:45 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Methyl acetate	ND	mg/L	0.010	1		04/16/15 19:44	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 19:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 19:44	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 19:44	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 19:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 19:44	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 19:44	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 19:44	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 19:44	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 19:44	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 19:44	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 19:44	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 19:44	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 19:44	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 19:44	95-47-6	
Surrogates								
Toluene-d8 (S)	92	%.	70-123	1		04/16/15 19:44	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	62-134	1		04/16/15 19:44	460-00-4	
Dibromofluoromethane (S)	95	%.	64-130	1		04/16/15 19:44	1868-53-7	

Sample: W-5-1 **Lab ID: 2018538010** Collected: 04/15/15 11:20 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 19:12	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:12	7440-38-2	
Barium	ND	mg/L	0.20	1	04/17/15 05:00	04/17/15 19:12	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:12	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:12	7440-43-9	
Chromium	**0.014**	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:12	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:12	7440-48-4	
Copper	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:12	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:12	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/17/15 05:00	04/17/15 19:12	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:12	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:12	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:12	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 19:12	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:12	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 20:04	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 20:04	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 20:04	75-27-4	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
QUIMICO LICENCIADO
María de los A. Negrón #5118

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-5-1 **Lab ID: 2018538010** Collected: 04/15/15 11:20 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Bromoform	ND	mg/L	0.0050	1		04/16/15 20:04	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 20:04	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 20:04	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 20:04	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 20:04	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:04	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 20:04	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 20:04	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 20:04	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 20:04	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 20:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 20:04	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:04	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:04	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:04	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 20:04	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 20:04	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 20:04	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:04	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:04	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:04	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 20:04	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 20:04	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 20:04	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 20:04	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 20:04	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 20:04	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 20:04	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 20:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 20:04	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 20:04	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 20:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 20:04	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 20:04	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 20:04	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 20:04	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 20:04	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 20:04	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 20:04	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 20:04	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 20:04	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 20:04	95-47-6	
Surrogates								
Toluene-d8 (S)	119	%.	70-123	1		04/16/15 20:04	2037-26-5	
4-Bromofluorobenzene (S)	125	%.	62-134	1		04/16/15 20:04	460-00-4	
Dibromofluoromethane (S)	125	%.	64-130	1		04/16/15 20:04	1868-53-7	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
María de los A. Negrón #5118
QUIMICO LICENCIADO

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-5-2 **Lab ID: 2018538011** Collected: 04/15/15 11:23 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/17/15 05:00	04/17/15 19:16	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:16	7440-38-2	
Barium	ND	mg/L	0.20	1	04/17/15 05:00	04/17/15 19:16	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:16	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:16	7440-43-9	
Chromium	**0.012**	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:16	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:16	7440-48-4	
Copper	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:16	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/17/15 05:00	04/17/15 19:16	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/17/15 05:00	04/17/15 19:16	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:16	7782-49-2	
Silver	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:16	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/17/15 05:00	04/17/15 19:16	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/17/15 05:00	04/17/15 19:16	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/17/15 05:00	04/17/15 19:16	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 20:23	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 20:23	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 20:23	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 20:23	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 20:23	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 20:23	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 20:23	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 20:23	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:23	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 20:23	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 20:23	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 20:23	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 20:23	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 20:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 20:23	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:23	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:23	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:23	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 20:23	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 20:23	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 20:23	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:23	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:23	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:23	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 20:23	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 20:23	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 20:23	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 20:23	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 20:23	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 20:23	98-82-8	

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ESTADO LIBRE ASOCIADO DE PUERTO RICO
QUIMICO LICENCIADO
María de los A. Negrón #5118

ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: W-5-2 Lab ID: 2018538011 Collected: 04/15/15 11:23 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Methyl acetate	ND	mg/L	0.010	1		04/16/15 20:23	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 20:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 20:23	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 20:23	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 20:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 20:23	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 20:23	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 20:23	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 20:23	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 20:23	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 20:23	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 20:23	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 20:23	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 20:23	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 20:23	95-47-6	
Surrogates								
Toluene-d8 (S)	114	%.	70-123	1		04/16/15 20:23	2037-26-5	
4-Bromofluorobenzene (S)	113	%.	62-134	1		04/16/15 20:23	460-00-4	
Dibromofluoromethane (S)	120	%.	64-130	1		04/16/15 20:23	1868-53-7	

Sample: FB-041515 Lab ID: 2018538012 Collected: 04/15/15 11:36 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/16/15 20:43	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/16/15 20:43	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/16/15 20:43	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/16/15 20:43	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/16/15 20:43	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/16/15 20:43	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/16/15 20:43	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/16/15 20:43	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:43	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/16/15 20:43	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/16/15 20:43	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/16/15 20:43	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/16/15 20:43	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/16/15 20:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/16/15 20:43	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:43	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:43	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/16/15 20:43	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/16/15 20:43	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 20:43	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/16/15 20:43	107-06-2	

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ANALYTICAL RESULTS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Sample: FB-041515 **Lab ID: 2018538012** Collected: 04/15/15 11:36 Received: 04/15/15 13:44 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:43	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:43	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/16/15 20:43	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/16/15 20:43	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 20:43	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/16/15 20:43	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/16/15 20:43	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/16/15 20:43	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/16/15 20:43	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/16/15 20:43	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/16/15 20:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/16/15 20:43	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/16/15 20:43	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/16/15 20:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/16/15 20:43	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/16/15 20:43	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/16/15 20:43	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 20:43	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/16/15 20:43	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/16/15 20:43	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/16/15 20:43	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/16/15 20:43	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/16/15 20:43	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/16/15 20:43	95-47-6	
Surrogates								
Toluene-d8 (S)	114	%.	70-123	1		04/16/15 20:43	2037-26-5	
4-Bromofluorobenzene (S)	118	%.	62-134	1		04/16/15 20:43	460-00-4	
Dibromofluoromethane (S)	121	%.	64-130	1		04/16/15 20:43	1868-53-7	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

QC Batch: MPRP/2591 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 2018538002, 2018538003, 2018538004, 2018538005, 2018538006, 2018538007, 2018538008, 2018538009, 2018538010, 2018538011

METHOD BLANK: 112280 Matrix: Water
Associated Lab Samples: 2018538002, 2018538003, 2018538004, 2018538005, 2018538006, 2018538007, 2018538008, 2018538009, 2018538010, 2018538011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/L	ND	0.060	04/17/15 17:33	
Arsenic	mg/L	ND	0.010	04/17/15 17:33	
Barium	mg/L	ND	0.20	04/17/15 17:33	
Beryllium	mg/L	ND	0.0050	04/17/15 17:33	
Cadmium	mg/L	ND	0.0050	04/17/15 17:33	
Chromium	mg/L	ND	0.010	04/17/15 17:33	
Cobalt	mg/L	ND	0.010	04/17/15 17:33	
Copper	mg/L	ND	0.010	04/17/15 17:33	
Lead	mg/L	ND	0.0050	04/17/15 17:33	
Nickel	mg/L	ND	0.040	04/17/15 17:33	
Selenium	mg/L	ND	0.020	04/17/15 17:33	
Silver	mg/L	ND	0.010	04/17/15 17:33	
Thallium	mg/L	ND	0.010	04/17/15 17:33	
Vanadium	mg/L	ND	0.050	04/17/15 17:33	
Zinc	mg/L	ND	0.020	04/17/15 17:33	B

LABORATORY CONTROL SAMPLE: 112281

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	1	1.1	106	82-120	
Arsenic	mg/L	1	1.0	104	84-117	
Barium	mg/L	1	1.0	103	85-118	
Beryllium	mg/L	1	1.0	105	85-117	
Cadmium	mg/L	1	1.0	105	85-115	
Chromium	mg/L	1	1.0	104	83-117	
Cobalt	mg/L	1	1.1	105	85-117	
Copper	mg/L	1	1.0	104	85-116	
Lead	mg/L	1	1.1	106	84-118	
Nickel	mg/L	1	1.1	106	85-118	
Selenium	mg/L	1	1.0	105	85-116	
Silver	mg/L	.5	0.52	105	80-120	
Thallium	mg/L	1	1.0	104	85-118	
Vanadium	mg/L	1	1.0	104	85-116	
Zinc	mg/L	1	1.0	104	81-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 112282 112283

Parameter	Units	2018528001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	1	1	1.0	1.0	100	102	80-120	2	20	
Arsenic	mg/L	11.7 ug/L	1	1	1.0	1.1	101	104	80-120	3	20	
Barium	mg/L	88.5J ug/L	1	1	1.1	1.1	99	103	80-120	4	20	
Beryllium	mg/L	ND	1	1	1.0	1.1	101	106	80-120	4	20	
Cadmium	mg/L	7.2 ug/L	1	1	0.98	1.0	97	100	80-120	3	20	
Chromium	mg/L	18.2 ug/L	1	1	1.0	1.0	99	103	80-120	4	20	
Cobalt	mg/L	ND	1	1	0.96	1.0	96	100	80-120	3	20	
Copper	mg/L	2.5J ug/L	1	1	1.0	1.0	100	104	80-120	4	20	
Lead	mg/L	2.9J ug/L	1	1	0.96	0.99	96	98	80-120	3	20	
Nickel	mg/L	10.0J ug/L	1	1	0.97	1.0	96	100	80-120	3	20	
Selenium	mg/L	8.7J ug/L	1	1	1.0	1.0	99	103	80-120	4	20	
Silver	mg/L	ND	.5	.5	0.49	0.50	98	101	80-120	3	20	
Thallium	mg/L	ND	1	1	0.92	0.95	92	95	80-120	3	20	
Vanadium	mg/L	13.1J ug/L	1	1	1.0	1.1	101	105	80-120	4	20	
Zinc	mg/L	21.3 ug/L	1	1	0.98	1.0	96	99	80-120	3	20	

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QUALITY CONTROL DATA

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

QC Batch: MSV/2878 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 2018538001, 2018538002, 2018538003, 2018538004, 2018538005, 2018538006, 2018538007, 2018538008, 2018538009, 2018538010, 2018538011, 2018538012

METHOD BLANK: 112178 Matrix: Water
Associated Lab Samples: 2018538001, 2018538002, 2018538003, 2018538004, 2018538005, 2018538006, 2018538007, 2018538008, 2018538009, 2018538010, 2018538011, 2018538012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	mg/L	ND	0.0050	04/16/15 09:54	
1,1,2,2-Tetrachloroethane	mg/L	ND	0.0050	04/16/15 09:54	
1,1,2-Trichloroethane	mg/L	ND	0.0050	04/16/15 09:54	
1,1-Dichloroethane	mg/L	ND	0.0050	04/16/15 09:54	
1,1-Dichloroethene	mg/L	ND	0.0050	04/16/15 09:54	
1,2-Dibromo-3-chloropropane	mg/L	ND	0.0050	04/16/15 09:54	
1,2-Dibromoethane (EDB)	mg/L	ND	0.0050	04/16/15 09:54	
1,2-Dichlorobenzene	mg/L	ND	0.0050	04/16/15 09:54	
1,2-Dichloroethane	mg/L	ND	0.0050	04/16/15 09:54	
1,2-Dichloropropane	mg/L	ND	0.0050	04/16/15 09:54	
1,3-Dichlorobenzene	mg/L	ND	0.0050	04/16/15 09:54	
1,4-Dichlorobenzene	mg/L	ND	0.0050	04/16/15 09:54	
2-Butanone (MEK)	mg/L	ND	0.010	04/16/15 09:54	
2-Hexanone	mg/L	ND	0.010	04/16/15 09:54	
4-Methyl-2-pentanone (MIBK)	mg/L	ND	0.010	04/16/15 09:54	
Acetone	mg/L	ND	0.010	04/16/15 09:54	
Benzene	mg/L	ND	0.0050	04/16/15 09:54	
Bromodichloromethane	mg/L	ND	0.0050	04/16/15 09:54	
Bromoform	mg/L	ND	0.0050	04/16/15 09:54	
Bromomethane	mg/L	ND	0.0050	04/16/15 09:54	
Carbon disulfide	mg/L	ND	0.0050	04/16/15 09:54	
Carbon tetrachloride	mg/L	ND	0.0050	04/16/15 09:54	
Chlorobenzene	mg/L	ND	0.0050	04/16/15 09:54	
Chloroethane	mg/L	ND	0.0050	04/16/15 09:54	
Chloroform	mg/L	ND	0.0050	04/16/15 09:54	
Chloromethane	mg/L	ND	0.0050	04/16/15 09:54	
cis-1,2-Dichloroethene	mg/L	ND	0.0050	04/16/15 09:54	
cis-1,3-Dichloropropene	mg/L	ND	0.0050	04/16/15 09:54	
Dibromochloromethane	mg/L	ND	0.0050	04/16/15 09:54	
Dichlorodifluoromethane	mg/L	ND	0.0050	04/16/15 09:54	
Ethylbenzene	mg/L	ND	0.0050	04/16/15 09:54	
Isopropylbenzene (Cumene)	mg/L	ND	0.0050	04/16/15 09:54	
m&p-Xylene	mg/L	ND	0.010	04/16/15 09:54	
Methyl acetate	mg/L	ND	0.010	04/16/15 09:54	
Methyl-tert-butyl ether	mg/L	ND	0.0050	04/16/15 09:54	
Methylene Chloride	mg/L	ND	0.0050	04/16/15 09:54	
o-Xylene	mg/L	ND	0.0050	04/16/15 09:54	
Styrene	mg/L	ND	0.0050	04/16/15 09:54	
Tetrachloroethene	mg/L	ND	0.0050	04/16/15 09:54	
Toluene	mg/L	ND	0.0050	04/16/15 09:54	

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REPORT OF LABORATORY ANALYSIS

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(504)469-0333

QUALITY CONTROL DATA

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

METHOD BLANK: 112178 Matrix: Water

Associated Lab Samples: 2018538001, 2018538002, 2018538003, 2018538004, 2018538005, 2018538006, 2018538007, 2018538008, 2018538009, 2018538010, 2018538011, 2018538012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	mg/L	ND	0.0050	04/16/15 09:54	
trans-1,3-Dichloropropene	mg/L	ND	0.0050	04/16/15 09:54	
Trichloroethene	mg/L	ND	0.0050	04/16/15 09:54	
Trichlorofluoromethane	mg/L	ND	0.0050	04/16/15 09:54	
Vinyl chloride	mg/L	ND	0.0020	04/16/15 09:54	
4-Bromofluorobenzene (S)	%.	104	62-134	04/16/15 09:54	
Dibromofluoromethane (S)	%.	107	64-130	04/16/15 09:54	
Toluene-d8 (S)	%.	96	70-123	04/16/15 09:54	

LABORATORY CONTROL SAMPLE: 112179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/L	.05	0.047	94	65-132	
1,1,2,2-Tetrachloroethane	mg/L	.05	0.054	108	46-153	
1,1,2-Trichloroethane	mg/L	.05	0.050	99	64-140	
1,1-Dichloroethane	mg/L	.05	0.050	99	63-135	
1,1-Dichloroethene	mg/L	.05	0.053	106	50-151	
1,2-Dibromo-3-chloropropane	mg/L	.05	0.051	103	40-155	
1,2-Dibromoethane (EDB)	mg/L	.05	0.052	105	62-146	
1,2-Dichlorobenzene	mg/L	.05	0.049	98	70-129	
1,2-Dichloroethane	mg/L	.05	0.046	93	58-150	
1,2-Dichloropropane	mg/L	.05	0.048	96	66-131	
1,3-Dichlorobenzene	mg/L	.05	0.048	95	69-127	
1,4-Dichlorobenzene	mg/L	.05	0.049	99	71-128	
2-Butanone (MEK)	mg/L	.05	0.074	147	18-173	
2-Hexanone	mg/L	.05	0.055	110	29-158	
4-Methyl-2-pentanone (MIBK)	mg/L	.05	0.055	110	46-159	
Acetone	mg/L	.05	0.048	95	10-198	
Benzene	mg/L	.05	0.054	108	68-129	
Bromodichloromethane	mg/L	.05	0.047	93	68-132	
Bromoform	mg/L	.05	0.051	101	56-153	
Bromomethane	mg/L	.05	0.055	111	47-149	
Carbon disulfide	mg/L	.05	0.051	102	25-166	
Carbon tetrachloride	mg/L	.05	0.044	88	56-146	
Chlorobenzene	mg/L	.05	0.050	99	74-131	
Chloroethane	mg/L	.05	0.055	111	28-190	
Chloroform	mg/L	.05	0.047	95	71-132	
Chloromethane	mg/L	.05	0.044	89	27-154	
cis-1,2-Dichloroethene	mg/L	.05	0.049	98	65-132	
cis-1,3-Dichloropropene	mg/L	.05	0.048	97	66-135	
Dibromochloromethane	mg/L	.05	0.047	94	64-138	
Dichlorodifluoromethane	mg/L	.05	0.051	103	18-173	
Ethylbenzene	mg/L	.05	0.047	95	73-129	

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(504)469-0333

QUALITY CONTROL DATA

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

LABORATORY CONTROL SAMPLE: 112179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Isopropylbenzene (Cumene)	mg/L	.05	0.050	101	61-139	
m&p-Xylene	mg/L	.1	0.097	97	71-132	
Methyl acetate	mg/L	.05	0.056	113	20-142	
Methyl-tert-butyl ether	mg/L	.05	0.052	104	51-155	
Methylene Chloride	mg/L	.05	0.048	96	41-171	
o-Xylene	mg/L	.05	0.049	98	69-129	
Styrene	mg/L	.05	0.049	98	74-132	
Tetrachloroethene	mg/L	.05	0.050	100	57-151	
Toluene	mg/L	.05	0.049	98	70-130	
trans-1,2-Dichloroethene	mg/L	.05	0.050	101	56-137	
trans-1,3-Dichloropropene	mg/L	.05	0.050	100	62-146	
Trichloroethene	mg/L	.05	0.044	88	71-131	
Trichlorofluoromethane	mg/L	.05	0.061	121	37-188	
Vinyl chloride	mg/L	.05	0.048	95	42-148	
4-Bromofluorobenzene (S)	%.			109	62-134	
Dibromofluoromethane (S)	%.			107	64-130	
Toluene-d8 (S)	%.			104	70-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 112180 112181

Parameter	Units	2018510002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	mg/L	ND	.05	.05	0.046	0.046	93	92	61-138	0	20	
1,1,2,2-Tetrachloroethane	mg/L	ND	.05	.05	0.047	0.048	94	96	41-160	2	20	
1,1,2-Trichloroethane	mg/L	ND	.05	.05	0.045	0.044	91	88	63-145	3	20	
1,1-Dichloroethane	mg/L	ND	.05	.05	0.049	0.048	97	97	61-141	0	20	
1,1-Dichloroethene	mg/L	ND	.05	.05	0.053	0.053	107	106	40-163	0	20	
1,2-Dibromo-3-chloropropane	mg/L	ND	.05	.05	0.044	0.047	88	93	38-162	6	20	
1,2-Dibromoethane (EDB)	mg/L	ND	.05	.05	0.046	0.047	92	94	61-149	2	20	
1,2-Dichlorobenzene	mg/L	ND	.05	.05	0.047	0.048	94	96	70-131	3	20	
1,2-Dichloroethane	mg/L	ND	.05	.05	0.043	0.044	85	87	57-155	3	20	
1,2-Dichloropropane	mg/L	ND	.05	.05	0.046	0.046	93	93	64-137	0	20	
1,3-Dichlorobenzene	mg/L	ND	.05	.05	0.046	0.047	92	93	68-130	1	20	
1,4-Dichlorobenzene	mg/L	ND	.05	.05	0.046	0.048	93	95	70-130	3	20	
2-Butanone (MEK)	mg/L	ND	.05	.05	0.064	0.060	127	120	14-184	6	20	
2-Hexanone	mg/L	ND	.05	.05	0.047	0.047	94	94	27-165	0	20	
4-Methyl-2-pentanone (MIBK)	mg/L	ND	.05	.05	0.048	0.047	97	94	43-165	3	20	
Acetone	mg/L	ND	.05	.05	0.040	0.041	80	82	10-202	2	20	
Benzene	mg/L	ND	.05	.05	0.051	0.052	102	104	60-138	2	20	
Bromodichloromethane	mg/L	ND	.05	.05	0.043	0.044	86	87	66-137	1	20	
Bromoform	mg/L	ND	.05	.05	0.046	0.045	92	90	53-156	3	20	
Bromomethane	mg/L	ND	.05	.05	0.055	0.054	111	107	43-151	3	20	
Carbon disulfide	mg/L	ND	.05	.05	0.053	0.050	105	100	17-176	5	20	
Carbon tetrachloride	mg/L	ND	.05	.05	0.043	0.043	86	86	51-151	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 112180 112181

Parameter	Units	2018510002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chlorobenzene	mg/L	ND	.05	.05	0.049	0.050	98	100	71-135	2	20	
Chloroethane	mg/L	ND	.05	.05	0.059	0.057	117	114	21-191	3	20	
Chloroform	mg/L	ND	.05	.05	0.046	0.046	92	93	67-138	1	20	
Chloromethane	mg/L	ND	.05	.05	0.046	0.044	92	88	24-158	5	20	
cis-1,2-Dichloroethene	mg/L	ND	.05	.05	0.048	0.047	96	95	61-138	1	20	
cis-1,3-Dichloropropene	mg/L	ND	.05	.05	0.046	0.047	92	94	62-137	2	20	
Dibromochloromethane	mg/L	ND	.05	.05	0.043	0.044	87	87	62-142	0	20	
Dichlorodifluoromethane	mg/L	ND	.05	.05	0.045	0.044	91	88	16-176	4	20	
Ethylbenzene	mg/L	ND	.05	.05	0.048	0.049	94	97	66-136	2	20	
Isopropylbenzene (Cumene)	mg/L	ND	.05	.05	0.050	0.050	100	100	58-144	1	20	
m&p-Xylene	mg/L	ND	.1	.1	0.10	0.10	99	99	64-138	0	20	
Methyl acetate	mg/L	ND	.05	.05	0.046	0.048	91	96	10-142	6	20	
Methyl-tert-butyl ether	mg/L	ND	.05	.05	0.047	0.047	94	93	48-164	0	20	
Methylene Chloride	mg/L	ND	.05	.05	0.049	0.047	98	95	35-165	3	20	
o-Xylene	mg/L	ND	.05	.05	0.051	0.051	100	101	63-136	1	20	
Styrene	mg/L	ND	.05	.05	0.042	0.043	83	86	63-141	3	20	
Tetrachloroethene	mg/L	ND	.05	.05	0.049	0.049	97	97	48-160	0	20	
Toluene	mg/L	ND	.05	.05	0.047	0.047	94	95	62-137	1	20	
trans-1,2-Dichloroethene	mg/L	ND	.05	.05	0.050	0.049	100	99	52-144	1	20	
trans-1,3-Dichloropropene	mg/L	ND	.05	.05	0.046	0.047	93	94	59-151	1	20	
Trichloroethene	mg/L	ND	.05	.05	0.043	0.043	86	87	62-142	1	20	
Trichlorofluoromethane	mg/L	ND	.05	.05	0.063	0.060	126	121	19-196	4	20	
Vinyl chloride	mg/L	ND	.05	.05	0.048	0.046	96	92	35-153	4	20	
4-Bromofluorobenzene (S)	%.						112	119	62-134			
Dibromofluoromethane (S)	%.						108	117	64-130			
Toluene-d8 (S)	%.						107	113	70-123			

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QUALIFIERS

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The Nelac Institute

LABORATORIES

PASI-N	Pace Analytical Services - New Orleans

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SRS Arecibo 7100830
Pace Project No.: 2018538

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2018538002	W-4-1	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538003	W-4-2	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538004	W-3-1	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538005	W-3-2	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538006	W-2-1	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538007	W-2-2	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538008	W-1-1	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538009	W-1-2	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538010	W-5-1	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538011	W-5-2	EPA 3010	MPRP/2591	EPA 6010	ICP/2518
2018538001	TB- 041515	EPA 8260	MSV/2878		
2018538002	W-4-1	EPA 8260	MSV/2878		
2018538003	W-4-2	EPA 8260	MSV/2878		
2018538004	W-3-1	EPA 8260	MSV/2878		
2018538005	W-3-2	EPA 8260	MSV/2878		
2018538006	W-2-1	EPA 8260	MSV/2878		
2018538007	W-2-2	EPA 8260	MSV/2878		
2018538008	W-1-1	EPA 8260	MSV/2878		
2018538009	W-1-2	EPA 8260	MSV/2878		
2018538010	W-5-1	EPA 8260	MSV/2878		
2018538011	W-5-2	EPA 8260	MSV/2878		
2018538012	FB-041515	EPA 8260	MSV/2878		

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