REMOVAL ASSESSMENT SAMPLING REPORT, REVISION 3

PROTECO SITE (OFF-SITE WELLS)

Peñuelas, Puerto Rico

SSID No.: A27M

DC No.: RST3-05-F-0013
TDD No.: TO-0370-0072
EPA Contract No: EP-S2-14-01

Prepared for:

U.S. Environmental Protection Agency, Region II
2890 Woodbridge Avenue
Edison, New Jersey 08837

Prepared by:

Removal Support Team 3
Weston Solutions, Inc.
Federal East Division
Edison, New Jersey 08837

August 2018

TABLE OF CONTENTS

LIST OF ATTACHMENTS

Attachment A: Figures

Attachment B: Tables

Attachment C: Photographic Documentation Log

Attachment D: Chains of Custody Record

Attachment E: Validated Data Package

1.0 Introduction:

On April 26, 2018, the U.S. Environmental Protection Agency (EPA) Region II with the support of Weston Solutions Inc., Removal Support Team 3 (RST 3) performed a Removal Assessment sampling event at the Proteco Site (Off-Site Wells). Water samples were collected for laboratory analysis from six potable wells and one irrigation well located down-gradient of the Proteco Site. The objective of the sampling event was to verify if contaminants associated with the Proteco Site are present in the well water.

1.1 Site Location and Description:

The Proteco Site (a.k.a. Proteccion Technica Ecologica or Servicios Carbareon) is located at PR off Road Number (No.) 385 (north of Road No. 2) in Peñuelas, Puerto Rico. Nine wells have been identified down-gradient of the Proteco Site including three residential wells (two wells in Seboruco Ward and one well in the Ceibas Ward), four Puerto Rico Electric Power Authority (PREPA) wells in the Tallaboa Valley, one Puerto Rico Aqueducts and Sewers Authority (PRASA) well (Carlos Andino Well) and one irrigation well at a plantain farm in the Seboruco Ward. All the wells are located within 1.5 to 2 miles of the Proteco Site.

Refer to Attachment A, Figure 1: Site Location Map and Figure 2: Proteco Site (Off-Site Wells) Sample Location Map.

1.2 Site History and Background:

Proteco was operated from 1975 to 1999 as a hazardous waste treatment, storage, disposal facility (TSDF) both before and after the Resource Conservation and Recovery Act (RCRA) was authorized in 1980. It operated under RCRA until its interim status was revoked due to numerous violations. The Proteco Site includes thousands of buried drums and 17 waste units, including surface impoundments and other land disposal features. Wastes accepted included (but not limited to): electroplating sludge, waste water treatment plant (WWTP) sludge, slurries, petroleum waste, pesticide waste and pharmaceutical waste. There is no secondary containment or leachate collection systems on these units. A RCRA closure took place between 1997 and 1999. The Proteco Site was abandoned in 2001. The contaminants of concern include mercury, tetrachloroethene (PCE), trichloroethene (TCE), trichloroethane (TCA), 1,1-dichloroethane (1,1, DCA), 1,2-DCA, 1,1-dichloroethene (DCE), and trans-1,2-DCE. The closest residence is approximately 1.5 miles from the Proteco Site. There are two active solid waste landfills to the west (Peñuelas Valley Landfill) and to the east (Ecosystems Landfill) of the Proteco Site.

Groundwater flow is reported to be to the north and west. There are three water bearing zones at the Proteco Site down to 200 feet below ground surface (bgs), which based on historical data, have reportedly been impacted. All the groundwater monitoring wells (44) at the Proteco Site are reported to either be damaged or no longer present. The westward component of groundwater flow is towards the Rio Tallaboa Valley (1.5 - 2 miles from the Proteco Site), where there are domestic and public drinking water wells, as well as groundwater springs that have reportedly been used in the past for drinking water supply. The Peñuelas Valley Landfill lies between the Proteco Site and the Rio Tallaboa Valley. The known groundwater users in the Rio Tallaboa Valley include: Carlos Andinos (PRASA) public supply well (380,000 gallons per day) which makes up

approximately 16 percent (%) of the combined flow with a surface water intake (mountains to the north); four Puerto Rico Electric Power Authority (PREPA) supply wells for 207 employees; three domestic wells serving 10 people in Seboruco and Cuebas; and one irrigation well.

Analytical data obtained by EPA's Pre-Remedial Section for the PRASA public supply well, prior to being combined with the water from the surface water intake, and spanning the years 2010 through 2017, does not indicate volatile organic compound (VOC) contamination. Analytical data obtained by the EPA's Pre-Remedial Section for the PREPA supply wells only covers water quality parameters. It should be noted that the PRASA and PREPA wells are all in the same general area, within approximately 1,800 feet of each other. A residential potable water survey was conducted by the EPA's Pre-Remedial Section with support from Weston Solutions, Inc., Site Assessment Team (SAT) in June 2017. The potable well survey identified three domestic wells within the vicinity of the Proteco Site, including two domestic wells in Seboruco and one domestic well in Cuebas. The two wells in Seboruco are located in the Rio Tallaboa Valley, but on the eastern edge as the elevation begins to rise, and are approximately 2,100 feet south southeast of the southernmost PREPA wells. These two domestic wells are located in the closest residential area to the Proteco Site, within 1.5 miles due west of the Proteco Site. The one domestic well in Cuebas is located approximately one-mile northeast of the northernmost PREPA well in the northern reaches of the valley, but also on the eastern edge as the elevation begins to rise. This domestic well is located approximately two miles northwest of the Proteco Site. In addition, EPA's Pre-Remedial Section and SAT discovered one irrigation well at a small plantain farm in the Tallaboa River Valley just off Route 385, within approximately 600 feet of a PREPA well.

2.0 Scope of Work:

RST 3 was tasked by EPA with collecting water samples, including quality assurance/quality control (QA/QC) samples, from eight wells, including three residential wells (two wells in the Seboruco Ward and one well in the Cuebas Ward), four PREPA wells in the Tallaboa Valley, and one irrigation well at a plantain farm in the Seboruco Ward. All the wells are located within 1.5 to 2 miles from the Proteco Site. The following analysis, including target compound list (TCL) VOCs, TCL semivolatile organic compounds (SVOCs), TCL pesticides, TCL polychlorinated biphenyls (PCBs), and target analyte list (TAL) metals, including mercury and cyanide, were requested by EPA. All the water samples collected during the event were submitted to the assigned laboratories for the requested analyses.

3.0 On-Site Personnel:

Name	Affiliation	Duties On-site
Carlos Huertas	EPA, Region II	On-Scene Coordinator
Guillermo Hernandez Lopez	Weston Solutions, Inc. RST 3, Region II	Site Project Manager, Site H&S, Site QA/QC, Sample Collection, Sample Management
Adriana Morocho	Weston Solutions, Inc. RST 3, Region II	Sample Collection
Bryan Gonzalez	Weston Solutions, Inc. RST 3, Region II	Sample Collection

EPA: U.S. Environmental Protection Agency
H&S: Health and Safety
RST 3: Removal Support Team 3
QA/QC: Quality Control/Quality Assurance

4.0 Site Activities and Observations:

On April 26, 2018, prior to initiating field sampling activities, the EPA On-Scene Coordinator (OSC) obtained access agreements at each well location, and discussed the approach for water sampling. Under EPA oversight, RST 3 collected eight water samples, including QA/QC samples, from seven potable wells, comprising three residential wells (Tallaboa Saliente 8, Tallaboa Saliente 9, Cuebas 1), three PREPA wells (PREPA Well 9, PREPA Well 10, PREPA Well 13), and one irrigation well (North Seboruco 10), all located in the vicinity of the Proteco Site. The PREPA Well 8 was not sampled because there was no power at the facility. Due to non-existing sampling port, North Seboruco 10 could not be sampled directly at the wellhead, however, a sample was collected from an irrigation hose connection which was the nearest available point associated with the well. Cuebas 1 was not sampled directly at the wellhead, however, a sample was collected from a PVC pipe installed between the wellhead and a pressurized tank. All the water samples were shipped same day to the assigned laboratories for the requested analysis.

Refer to Attachment C: Photographic Documentation Log**.**

5.0 Potable Well Sampling Methodology:

All field sampling activities were conducted in accordance with RST 3 Site-Specific Health and Safety Plan (HASP), Site-Specific Uniform Federal Policy (UFP) Quality Assurance Project Plan (QAPP), EPA's Environmental Response Team (ERT)/Scientific, Engineering, Response and Analytical Services (SERAS) contractor's Standard Operating Procedure (SOP) Number (No.) 2001: *General Field Sampling Guidelines* and SOP No. 2007: *Groundwater Well Sampling*. The sampled wells were selected by the EPA OSC. At each well location, water samples were collected from the associated spigot when available and from other available locations within the respective facilities as directed by EPA OSC, directly into designated sample containers after allowing the water to run for at least 15 minutes. All the samples were stored on ice in a cooler immediately following collection to maintain a temperature of 4 degrees Celsius (^{o}C). The samples were collected for a definitive data QA/QC objective, hence, one field duplicate and additional volumes of one filed sample designated for matrix spike/matrix spike duplicate (MS/MSD), were collected. A trip blank was placed in the storage/shipping cooler along with the samples. All sample information was transcribed into EPA's SCRIBE sample management database from which sample labels and chain of custody (COC) record were generated. All the water samples were shipped to the assigned laboratories for the requested analysis.

6.0 Laboratories Receiving Samples:

The following laboratories were utilized during the April 2018 potable well sampling event:

Laboratory Name/Location	Sample Matrix	Analyses
ALS Laboratory Group 960 West LeVoy Drive Salt Lake City, Utah (CLP Laboratory)	Water	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs

Laboratory Name/Location	Sample Matrix	Analyses
Bonner Analytical Testing Company 2703 Oak Grove Road Hattiesburg, Mississippi (CLP Laboratory)	Water	TAL Metals, including Mercury and Cyanide

CLP: Contract Laboratory Program TAL: Target Analyte List VOCs: Volatile Organic Compounds
TCL: Target Compound List PCBs: Polychlorinated Biphenyls SVOCs: Semivolatile Organic Compounds

7.0 Sample Collection and Dispatch:

On April 26, 2018, RST 3 collected eight water samples, including one field duplicate, from seven potable wells, and one trip blank for QC purposes. All the samples were documented under COC Record Nos. 2-042418-130945-0001, 2-042418-144249-0002, 2-042418-152812-0003, 2-042418-173313-0004, 2-042518-141213-0005, 2-042518-141926-0006, and 2-042518-143426-0007, and shipped via FedEx Airbill Nos. 7720-8006-8425, 7720-8006-8892, 7720-8006-8377, 7720-8006-8826, 7720-8006-9123, 7720-8006-8642, and 7720-8006-9329 to an EPA Contract Laboratory Program (CLP) laboratory, ALS Laboratory Group located in Salt Lake City, Utah for TCL VOCs, TCL SVOCs, TCL pesticides, and TCL PCBs, analyses. The trip blank sample was shipped along with the samples designated for TCL VOC analysis.

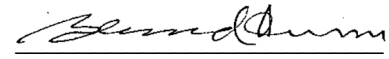
In addition, all the samples were also documented under COC Record Nos. 2-042418-174746-0008, 2-042418-175100-0009, 2-042518-145239-0010, and 2-042518-145406-0011, and shipped via FedEx Airbill Nos. 7720-7999-2258, 7720-7999-2270, 7720-7999-2188, 7720-7999-2740 to an EPA CLP laboratory, Bonner Analytical Testing Company located in Hattiesburg, Mississippi for TAL metals, including mercury and cyanide, analyses.

Refer to Attachment B, Table 1: Sample Collection Summary Table and Attachment D: Chains of Custody Record.

8.0 Analytical Results Summary:

The validated analytical results of the water samples collected during the April 2018 potable wells sampling event were compared with the EPA National Primary Drinking Water Regulations, which includes the EPA Maximum Contaminant Level for drinking water (revised November 2017), and EPA's Removal Management Levels for drinking water (revised May 2018). Based on the validated analytical results, target compounds and analytes were mostly not detected or detected at concentrations which were well below the EPA MCLs and/or the EPA RMLs.

Refer to Attachment A, Figure 2: Proteco Site (Off-Site Wells) Sample Location Map, Attachment B, Table 2: Validated Potable Well Water Analytical Results Summary Table – TCL VOCs, Table 3: Validated Potable Well Water Analytical Results Summary Table – TCL SVOCs, Table 4: Validated Potable Well Water Analytical Results Summary Table - TCL Pesticides and PCBs, Table 5: Validated Potable Well Water Analytical Results Summary Table - TAL Metals + Hg & CN, and Attachment E: Validated Data Package.

Report prepared by:  8/7/2018

Bernard Nwosu — Date

For: RST 3 Site Project Manager

Report reviewed by:  8/7/2018

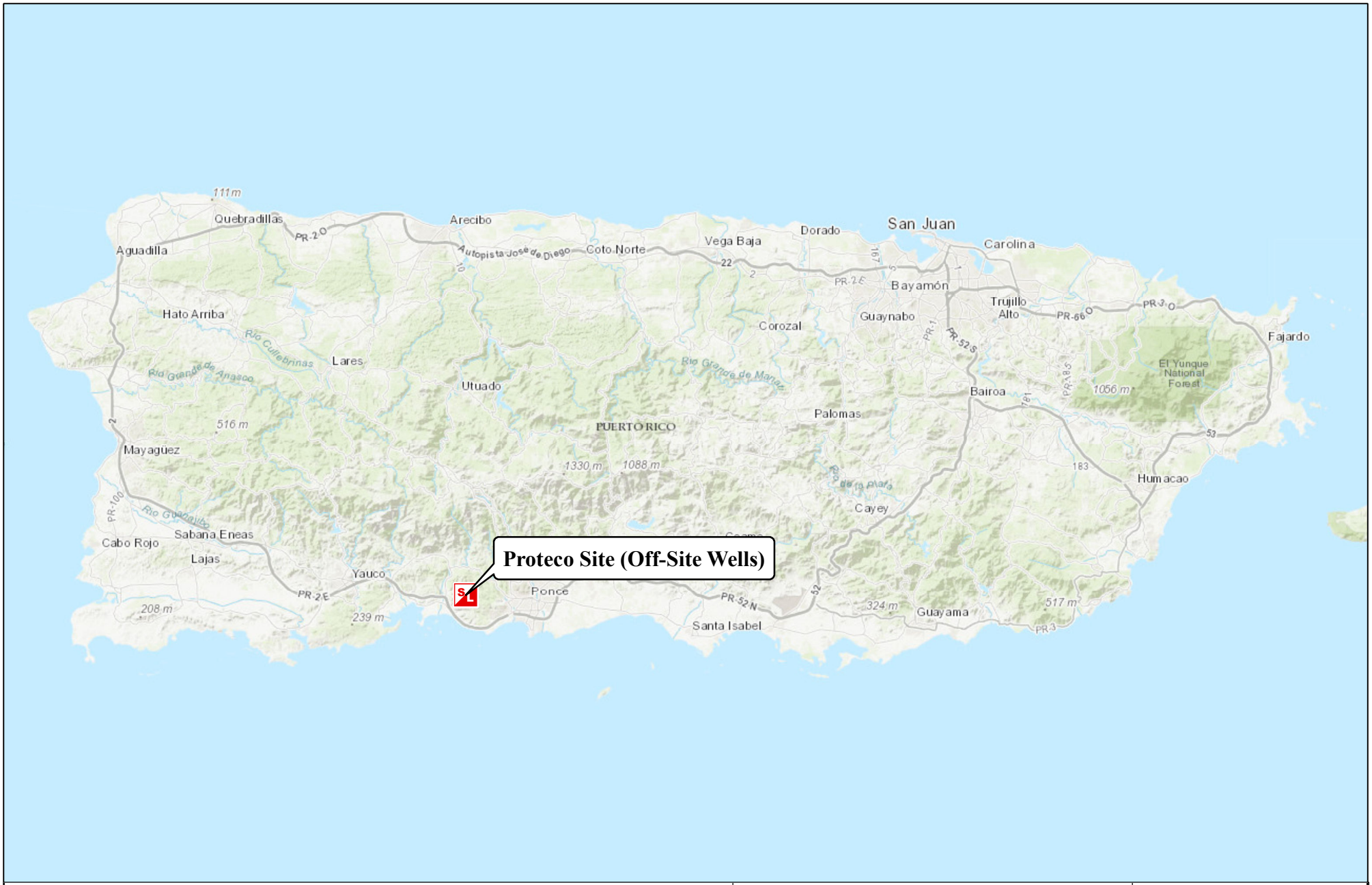
Bernard Nwosu — Date

RST 3 Group Leader

ATTACHMENT A

Figures

Figure 1: Site Location Map
Figure 2: Proteco Site (Off-Site Wells) Sample Location Map



Legend

Site Location

0 10 20 40 Miles

N

Weston Solutions, Inc.

In Association With
Avatar Environmental, LLC.,
H & S Environmental, Inc. and
Scientific and Environmental Associates, Inc.

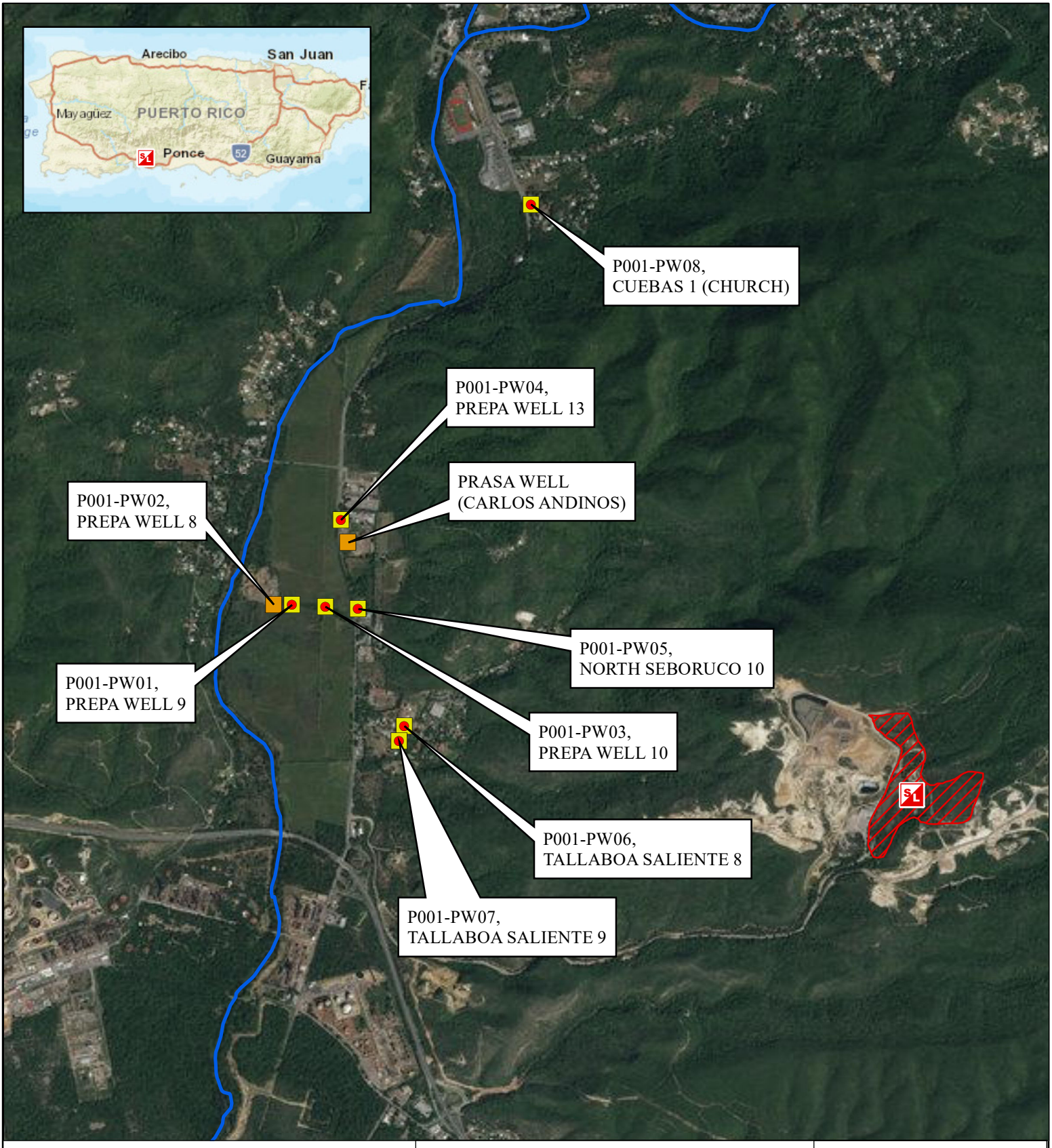
Figure 1: Site Location Map

Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

GIS ANALYST:	P. Buster
EPA OSC:	C. Huertas
RST SPM:	G. Hernandez
FILENAME:	180425_ProtectoSiteLocationMap.mxd

DATE MODIFIED: 8/7/2018



Legend

- Site Location
- Site Area
- Rio Tallaboa
- Well Location, Not Sampled
- Well Location, Sampled

N

0 0.25 0.5 1 Miles

Weston Solutions, Inc.

In Association With
Avatar Environmental, LLC.,
H & S Environmental, Inc. and
Scientific and Environmental Associates, Inc.

Figure 2: Proteco Site (Off-Site Wells) Sample Location Map

Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

DATE MODIFIED: 8/7/2018

GIS ANALYST:	P. Buster
EPA OSC:	C. Huertas
RST SPM:	G. Hernandez
FILENAME:	180510_ProtectoSampleLocationMap.mxd

Document Path: \\fsed2data1\gisdata\RST_3\00100162\MXD\180510_ProtecoSampleLocationMapRevised.mxd

ATTACHMENT B

Tables

Table 1: Sample Collection Summary Table
Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico
April 26, 2018

Well Identification	RST 3 Sample No.	CLP Sample No.	Sample Date	Sample Time	Well Depth	Sample Matrix	Sample Type	Analyses
PREPA Well 9	P001-PW01-01	BE225	4/26/2018	9:24	150 feet	Potable Well Water	Field Sample	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, and TAL Metals, inclucing Hg & CN
PREPA Well 10	*P001-PW03-01	BE227	4/26/2018	9:56	150 feet	Potable Well Water	Field Sample	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, and TAL Metals, inclucing Hg & CN
PREPA Well 10	P001-PW03-02	BE228	4/26/2018	9:56	150 feet	Potable Well Water	Field Duplicate	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, and TAL Metals, inclucing Hg & CN
PREPA Well 13	P001-PW04-01	BE229	4/26/2018	8:45	155 feet	Potable Well Water	Field Sample	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, and TAL Metals, inclucing Hg & CN
North Seboruco 10	P001-PW05-01	BE231	4/26/2018	11:45	60 feet	Irrigation Well Water	Field Sample	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, and TAL Metals, inclucing Hg & CN
**Tallaboa Saliente 8	P001-PW06-01	BE232	4/26/2018	11:02	200 feet	Potable Well Water	Field Sample	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, and TAL Metals, inclucing Hg & CN
**Tallaboa Saliente 9	P001-PW07-01	BE233	4/26/2018	11:19	84-85 feet	Potable Well Water	Field Sample	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, and TAL Metals, inclucing Hg & CN
**Cuebas 1	P001-PW08-01	BE234	4/26/2018	12:30	100 feet	Potable Well Water	Field Sample	TCL VOCs, TCL SVOCs, TCL Pesticides, TCL PCBs, and TAL Metals, inclucing Hg & CN
NA	TB-180426	BE230	4/26/2018	12:50	NA	DI Water	Trip Blank	VOCs

Notes:
RST 3 - Removal Support Team 3.
CLP - Contract Laboratory Program.
TCL - Target Compound List.
VOCs- Volatile Organic Compounds.
SVOCs- Semivolatile Organic Compounds.
PCBs- Polychlorinated biphenyls.
No. - Number.
TAL - Target Analyte List.
Hg - Mercury.
CN - Cyanide.
NA - Not Applicable.
DI Water - Deionized Water.
*Sample designated for matrix spike/matrix spike duplicate (MS/MSD).
**Residental well depth information was provided by EPA. All other well depth information, including North Seboruco and PREPA wells, were obtained by RST 3 directly from the facility's personnel.

Table 2: Validated Potable Water Analytical Results Summary Table - VOCs
Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico
April 26, 2018

RST 3 Sample Number	EPA RML[1]	EPA MCL[2]	P001-PW01-01	P001-PW03-01	P001-PW03-02	P001-PW04-01	P001-PW05-01	P001-PW06-01	P001-PW07-01	P001-PW08-01	TB-180426
CLP Sample Number			BE225	BE227	BE228	BE229	BE231	BE232	BE233	BE234	BE230
Sample Date			4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018
Sample Matrix			Potable Well Water	Potable Well Water	Potable Well Water	Potable Well Water	Irrigation Well Water	Potable Well Water	Potable Well Water	Potable Well Water	DI Water
VOC											
Dichlorodifluoromethane	200	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	190	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	1.9	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	7.5	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	21,000	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5,200	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	280	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	10,000	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	14,000	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	810	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl acetate	20,000	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride	110	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	360	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl ether	1,400	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	280	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	36	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone	5,600	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	83	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	22	80	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8	0.5 U	0.5 U
1,1,1-Trichloroethane	8,000	200	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	13,000	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	46	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	33	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	13	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	2.8	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Notes
RST 3: Removal Support Team 3.
CLP: Contract Laboratory Program.
VOCs: Volatile Organic Compounds.
NS: Not Specified.
U: Not Detected.
J: Estimated Result.
All data presented in micrograms per liter (µg/L).

[1]U.S. Environmental Protection Agency (EPA) Removal Management Levels (RMLs) for tapwater corresponding to a 10^{-4} Risk Level for carcinogens or a Hazard Quotient (HQ) of 1 for non-carcinogens, May 2018.

[2]EPA Maximum Contaminant Levels (MCLs) for drinking water, November 2017.

Table 2: Validated Potable Water Analytical Results Summary Table - VOCs
Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico
April 26, 2018

RST 3 Sample Number	EPA RML[1]	EPA MCL[2]	P001-PW01-01	P001-PW03-01	P001-PW03-02	P001-PW04-01	P001-PW05-01	P001-PW06-01	P001-PW07-01	P001-PW08-01	TB-180426
CLP Sample Number			BE225	BE227	BE228	BE229	BE231	BE232	BE233	BE234	BE230
Sample Date			4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018
Sample Matrix			Potable Well Water	Potable Well Water	Potable Well Water	Potable Well Water	Irrigation Well Water	Potable Well Water	Potable Well Water	Potable Well Water	DI Water
VOC											
1,2-Dichloropropane	8.2	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	13	80	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	NS	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methyl-2-Pentanone	6,300	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	1,100	1,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	NS	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.41	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	41	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	38	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibromochloromethane	87	80	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.18 J	0.5 U	0.5 U
1,2-Dibromoethane	0.75	0.05	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	78	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	150	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	190	NS*	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	190	NS*	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	1,200	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	330	80	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	450	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	7.6	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	NS	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	48	75	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	300	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.033	0.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	4	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	7	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Notes
RST 3: Removal Support Team 3.
CLP: Contract Laboratory Program.
VOCs: Volatile Organic Compounds.
NS: Not Specified.
U: Not Detected.
J: Estimated Result.
All data presented in micrograms per liter (µg/L).
[1]U.S. Environmental Protection Agency (EPA) Removal Management Levels (RMLs) for tapwater corresponding to a 10^{-4} Risk Level for carcinogens or a Hazard Quotient (HQ) of 1 for non-carcinogens, May 2018.
[2]EPA Maximum Contaminant Levels (MCLs) for drinking water, November 2017.
*No specified MCL for o-xylene and m,p-xylene. The MCL for xylene (total) is 10,000 µg/L.

Table 3: Validated Potable Water Analytical Results Summary Table - SVOCs
Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico
April 26, 2018

RST 3 Sample Number	EPA RML[1]	EPA MCL[2]	P001-PW01-01	P001-PW03-01	P001-PW03-02	P001-PW04-01	P001-PW05-01	P001-PW06-01	P001-PW07-01	P001-PW08-01
CLP Sample Number			BE225	BE227	BE228	BE229	BE231	BE232	BE233	BE234
Sample Date			4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018
Sample Matrix			Potable Well Water	Potable Well Water	Potable Well Water	Potable Well Water	Irrigation Well Water	Potable Well Water	Potable Well Water	Potable Well Water
SVOC										
1,4-Dioxane	46	NS	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzaldehyde	1,900	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Phenol	5,800	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Bis(2-chloroethyl) ether	1.4	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
2-Chlorophenol	91	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylphenol	930	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
2,2'-Oxybis(1-chloropropane)	710	NS	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ
Acetophenone	1,900	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
4-Methylphenol	1,900	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
N-Nitroso-di-n propylamine	1.1	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachloroethane	6.2	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Nitrobenzene	13	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Isophorone	3,800	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitrophenol	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dimethylphenol	360	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bis(2-chloroethoxy)methane	59	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dichlorophenol	46	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	6.1	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chloroaniline	37	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Hexachlorobutadiene	6.5	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Caprolactam	9,900	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
4-Chloro-3-methylphenol	1,400	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	36	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorocyclo-pentadiene	0.41	50	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
2,4,6-Trichlorophenol	12	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4,5-Trichlorophenol	1,200	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1'-Biphenyl	0.83	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloronaphthalene	750	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Nitroaniline	190	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dimethylphthalate	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,6-Dinitrotoluene	4.9	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthylene	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3-Nitroaniline	NS	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Acenaphthene	530	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes
RST 3: Removal Support Team 3.
CLP: Contract Laboratory Program.
SVOCs: Semivolatile Organic Compounds.
NS: Not Specified.
U: Not Detected.
J: Estimated Result.
All data presented in micrograms per liter (µg/L).
[1]U.S. Environmental Protection Agency (EPA) Removal Management Levels (RMLs) for tapwater corresponding to a 10^{-4} Risk Level for carcinogens or a Hazard Quotient (HQ) of 1 for non-carcinogens, May 2018.
[2]EPA Maximum Contaminant Levels (MCLs) for drinking water, November 2017.

Table 3: Validated Potable Water Analytical Results Summary Table - SVOCs
Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico
April 26, 2018

RST 3 Sample Number	EPA RML[1]	EPA MCL[2]	P001-PW01-01	P001-PW03-01	P001-PW03-02	P001-PW04-01	P001-PW05-01	P001-PW06-01	P001-PW07-01	P001-PW08-01
CLP Sample Number			BE225	BE227	BE228	BE229	BE231	BE232	BE233	BE234
Sample Date			4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018
Sample Matrix			Potable Well Water	Potable Well Water	Potable Well Water	Potable Well Water	Irrigation Well Water	Potable Well Water	Potable Well Water	Potable Well Water
SVOCs										
2,4-Dinitrophenol	39	NS	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ	10.0 UJ
4-Nitrophenol	NS	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Dibenzofuran	7.9	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,4-Dinitrotoluene	24	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Diethylphthalate	15,000	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Fluorene	290	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorophenyl-phenyl ether	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Nitroaniline	78	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
4,6-Dinitro-2-methylphenol	1.5	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
N-Nitrosodiphenylamine	1,200	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2,4,5-Tetrachlorobenzene	1.7	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Bromophenyl-phenylether	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	0.98	1	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Atrazine	30	3	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Pentachlorophenol	4.1	1	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Phenanthrene	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Anthracene	1,800	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbazole	NS	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Di-n-butylphthalate	900	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Fluoranthene	800	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Pyrene	120	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Butylbenzylphthalate	1,600	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
3,3'-Dichlorobenzidine	13	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Benzo(a)anthracene	3	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chrysene	2,500	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bis(2-ethylhexyl)phthalate	400	6	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-octylphthalate	200	NS	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Benzo(b)fluoranthene	25	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(k)fluoranthene	250	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(a)pyrene	2.5	0.2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Indeno(1,2,3-cd)pyrene	25	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dibenzo(a,h)anthracene	2.5	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzo(g,h,i)perylene	NS	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2,3,4,6-Tetrachlorophenol	240	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Notes
RST 3: Removal Support Team 3.
CLP: Contract Laboratory Program.
SVOCs: Semivolatile Organic Compounds.
NS: Not Specified.
U: Not Detected.
J: Estimated Result.
All data presented in micrograms per liter (µg/L).
[1]U.S. Environmental Protection Agency (EPA) Removal Management Levels (RMLs) for tapwater corresponding to a 10^{-4} Risk Level for carcinogens or a Hazard Quotient (HQ) of 1 for non-carcinogens, May 2018.
[2]EPA Maximum Contaminant Levels (MCLs) for drinking water, November 2017.

Table 4: Validated Potable Water Analytical Results Summary Table - Pesticides and PCBs
Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico
April 26, 2018

RST 3 Sample Number	EPA RML[1]	EPA MCL[2]	P001-PW01-01	P001-PW03-01	P001-PW03-02	P001-PW04-01	P001-PW05-01	P001-PW06-01	P001-PW07-01	P001-PW08-01
CLP Sample Number			BE225	BE227	BE228	BE229	BE231	BE232	BE233	BE234
Sample Date			4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018
Sample Matrix			Potable Well Water	Potable Well Water	Potable Well Water	Potable Well Water	Irrigation Well Water	Potable Well Water	Potable Well Water	Potable Well Water
Pesticide										
alpha-BHC	0.72	NS	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
beta-BHC	2.5	NS	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
delta-BHC	NS	NS	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (Lindane)	3.6	0.2	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor	0.14	0.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Aldrin	0.092	NS	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor epoxide	0.12	0.2	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Endosulfan I	NS	NS	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dieldrin	0.18	NS	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	4.6	NS	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin	2.3	2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan II	NS	NS	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDD	0.063	NS	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan sulfate	NS	NS	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	10	NS	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Methoxychlor	37	40	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Endrin ketone	NS	NS	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin aldehyde	NS	NS	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
cis-Chlordane	NS	NS	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
trans-Chlordane	NS	NS	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Toxaphene	7.1	3	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
PCB										
Aroclor 1016	1.4	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1221	0.47	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1232	0.47	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1242	0.78	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1248	0.78	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1254	0.4	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1260	0.78	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1262	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor 1268	NS	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes

RST 3: Removal Support Team 3.

CLP: Contract Laboratory Program.

PCBs: Polychlorinated Biphenyls.

NS: Not Specified.

U: Not Detected.

J: Estimated Result.

All data presented in micrograms per liter (µg/L).

[1]U.S. Environmental Protection Agency (EPA) Removal Management Levels (RMLs) for tapwater corresponding to a 10^{-4} Risk Level for carcinogens or a Hazard Quotient (HQ) of 1 for non-carcinogens, May 2018.

[2]EPA Maximum Contaminant Levels (MCLs) for drinking water, November 2017.

Table 5: Validated Potable Water Analytical Results Summary Table - TAL Metals + Hg & CN
Proteco Site (Off-Site Wells)
Penuelas, Puerto Rico
April 26, 2018

RST 3 Sample Number	EPA RML[1]	EPA MCL[2]	P001-PW01-01	P001-PW03-01	P001-PW03-02	P001-PW04-01	P001-PW05-01	P001-PW06-01	P001-PW07-01	P001-PW08-01
CLP Sample Number			MBE225	MBE227	MBE228	MBE229	MBE231	MBE232	MBE233	MBE234
Sample Date			4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018	4/26/2018
Sample Matrix			Potable Well Water	Potable Well Water	Potable Well Water	Potable Well Water	Irrigation Well Water	Potable Well Water	Potable Well Water	Potable Well Water
TAL Metal + Hg & CN										
Aluminum	20,000	NS	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Antimony	7.8	6	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	5.2	10	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J	0.18 J	1.0 U
Barium	3,800	2,000	23.2	18.8 J	19.0	19.5	24.4	23.0	52.7	53.9
Beryllium	25	4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	9.2	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	NS	NS	62,100	63,900 J	63,800	60,700	74,800	74,200	99,100	125,000
Chromium	NS	100	0.33 J	0.39 J	0.47 J	0.28 J	0.97 J	0.55 J	0.26 J	0.09 J
Cobalt	6	NS	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Copper	800	1,300	1.5 J	1.8 J	2.3	0.48 J	0.49 J	1.0 J	0.66 J	0.84 J
Iron	14,000	NS	200 U	200 U	200 U	200 U	16.8 J	127 J	95.8 J	79.3 J
Lead	15	15	0.22 J	1.0 U	1.0 U	1.0 U	1.0 U	0.30 J	0.57 J	1.0 U
Magnesium	NS	NS	9,330	9,600 J	9,480	9,650	10,600	26,100	11,200	11,700
Manganese	430	NS	3.3	1.0 U	1.0 U	1.0 U	2.0	27.8	6.1	128
Nickel	390	NS	1.2	1.1 J	1.0	0.89 J	1.4	1.2	1.6	2.2
Potassium	NS	NS	938	974	975	1,010	1,030	9,520	3,180	998
Selenium	100	50	0.58 J	5.0 U	5.0 U	5.0 U	0.59 J	5.0 U	1.2 J	1.8 J
Silver	94	NS	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	NS	NS	15,300	16,000 J	15,600	15,100	22,100	337,000	61,300	37,700
Thallium	0.2	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	86	NS	5.3	5.5 J	5.5	5.7	5.0 U	5.0 U	5.0 U	5.0 U
Zinc	6,000	NS	5.4	0.92 J	1.3 J	0.47 J	1.6 J	8.5	105	12.7
Mercury	0.63	2	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Cyanide	1.5	200	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U

Notes
RST 3: Removal Support Team 3.
CLP: Contract Laboratory Program.
TAL: Target Analyte List.
Hg: Mercury; CN: Cyanide.
NS: Not Specified.
U: Not Detected.
J: Estimated Result.
All data presented in micrograms per liter (µg/L)
[1]U.S. Environmental Protection Agency (EPA) Removal Management Levels (RMLs) for tapwater corresponding to a 10^{-4} Risk Level for carcinogens or a Hazard Quotient (HQ) of 1 for non-carcinogens, May 2018.
[2]EPA Maximum Contaminant Levels (MCLs) for drinking water, November 2017.

ATTACHMENT C

Photographic Documentation Log

Photographic Documentation Log

Proteco Site (Off-Site Wells)
Peñuelas, Puerto Rico
April 26, 2018

Photograph 1: View showing the PREPA Well 13 identification sign.

Photograph 2: View showing sampling port at PREPA Well 13.

Photograph 3: View showing PREPA Well 8 identification sign. The well was not sampled due to lack of power supply.

Photograph 4: View showing PREPA Well 8 flow guage without power.

Photograph 5: View of Weston Solutions, Inc., Removal Support Team 3 (RST 3) personnel collecting sample from a spigot at PREPA Well 9.

Photograph 6: Outside view of Tallaboa Saliente 9 sampling location.

Photograph 7: View of the sampling spigot at Tallaboa Saliente 9.

Photograph 8: Outside view of Tallaboa Saliente 8.

Photograph 9: View of the wellhead for North Seboruco 10.

Photograph 10: View of the irrigation system hose from which sample for North Seboruco 10 was collected.

Photograph 10: View of the shed for Cuebas 1 wellhead. Note the PVC pipe from which sample was collected.

Photograph 9: View of inside the shed for Cuebas 1 wellhead and associated PVC piping.

Photographic Documentation Log

Proteco Site (Off-Site Wells)
Peñuelas, Puerto Rico
April 26, 2018

Photograph 11: View of the sampling port at Cuebas 1 where sample was collected directly from the PVC pipe.

ATTACHMENT D

Chains of Custody Record

1812011

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 8006 8425

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 1

BE231
EPW14027

No: 2-042418-130945-0001

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Roxy Olson
Lab Phone: 801-266-7700

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW01-01	BE225	Potable Water/ RST	Grab	SVOCs(7)	1002 (4 C) (2)	P001-PW01	04/26/2018 09:24	
P001-PW03-01	BE227	Potable Water/ RST	Grab	SVOCs(7)	1016 (4 C) (2)	P001-PW03	04/26/2018 09:56	
P001-PW03-02	BE228	Potable Water/ RST	Grab	SVOCs(7)	1020 (4 C) (2)	P001-PW03	04/26/2018 09:56	

Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days	**Shipment for Case Complete? N**
	Samples Transferred From Chain of Custody #
Analysis Key: SVOCs=CLP SVOCs	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	GUILLERMO HERNANDEZ/WESTON	4/26/18/1500	ALS	04/30 0948	Good

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 8006 8892

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 2

No: 2-042418-144249-0002

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Roxy Olson
Lab Phone: 801-266-7700

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW01-01	BE225	Potable Water/ RST	Grab	PEST (7)	1003 (4 C) (2)	P001-PW01	04/26/2018 09:24	
P001-PW03-02	BE228	Potable Water/ RST	Grab	PEST (7)	1021 (4 C) (2)	P001-PW03	04/26/2018 09:56	
P001-PW04-01	BE229	Potable Water/ RST	Grab	PEST (7)	1025 (4 C) (2)	P001-PW04	04/26/2018 08:45	

Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: PEST =CLP Pesticides (including Lindane) and PCBs

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	GUILLERMO HERNANDEZ / WESTON	4/26/18 / 1500	ALS	4/27/2018 0902	good

BE231

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 8006 8377

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 3

No: 2-042418-152812-0003

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Roxy Olson
Lab Phone: 801-266-7700

EPW14027

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW03-01	BE227	Potable Water/ RST	Grab	PEST (7)	1017 (4 C) (6)	P001-PW03	04/26/2018 09:56	~~ALS 4/28/2018~~

Sample(s) to be used for Lab QC: P001-PW03-01 Tag 1017 - Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: PEST =CLP Pesticides (including Lindane) and PCBs

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Guillermo Hernandez / WESTON	4/26/18/1500	ALS	4/28/2018 906	good

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 8006 8826

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 4

No: 2-042418-173313-0004

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Roxy Olson
Lab Phone: 801-266-7700

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW04-01	BE229	Potable Water/ RST	Grab	SVOCs(7)	1024 (4 C) (2)	P001-PW04	04/26/2018 08:45	
P001-PW05-01	BE231	Potable Water/ RST	Grab	SVOCs(7)	1028 (4 C) (2)	P001-PW05	04/26/2018 11:45	
P001-PW06-01	BE232	Potable Water/ RST	Grab	SVOCs(7)	1032 (4 C) (2)	P001-PW06	04/26/2018 11:02	

Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SVOCs=CLP SVOCs

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Guillermo Hernandez/CRESTON	4/26/18/1500	ALS	4/26/2018/1504	good

SDG 47611

1811785

BE231

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 8006 9123

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 5

No: 2-042518-141213-0005

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Roxy Olson
Lab Phone: 801-266-7700

EMW4027

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW05-01	BE231	Potable Water/ RST	Grab	PEST (7)	1029 (4 C) (2)	P001-PW05	04/26/2018 11:45	
P001-PW06-01	BE232	Potable Water/ RST	Grab	PEST (7)	1033 (4 C) (2)	P001-PW06	04/26/2018 11:02	
P001-PW07-01	BE233	Potable Water/ RST	Grab	PEST (7)	1037 (4 C) (2)	P001-PW07	04/26/2018 11:19	

Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: PEST =CLP Pesticides (including Lindane) and PCBs

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Guillermo Hernandez / Weston	4/26/18/1500	Meredith Stewart FTS	4/27/2018/747	good

BEN21

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 8006 8642

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 6

No: 2-042518-141926-0006

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Roxy Olson
Lab Phone: 801-266-7700

EPA 4617

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW07-01	BE233	Potable Water/ RST	Grab	SVOCs(7)	1036 (4 C) (2)	P001-PW07	04/26/2018 11:19	4/27/2018
P001-PW08-01	BE234	Potable Water/ RST	Grab	SVOCs(7), PEST (7)	1040 (4 C), 1041 (4 C) (4)	P001-PW08	04/26/2018 12:30	

Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: SVOCs=CLP SVOCs, PEST =CLP Pesticides (including Lindane) and PCBs

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Guillermo Manjarrez/WESTON	4/26/18/1500	RLS	4/27/2018/947	good

1811878

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 8006 9329

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 7

No: 2-042518-143426-0007

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Roxy Olson
Lab Phone: 801-266-7700

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW01-01	BE225	Potable Water/ RST	Grab	VOCs(7)	1001 (HCl) (3)	P001-PW01	04/26/2018 09:24	
P001-PW03-01	BE227	Potable Water/ RST	Grab	VOCs(7)	1015 (HCl) (3)	P001-PW03	04/26/2018 09:56	
P001-PW03-02	BE228	Potable Water/ RST	Grab	VOCs(7)	1019 (HCl) (3)	P001-PW03	04/26/2018 09:56	
P001-PW04-01	BE229	Potable Water/ RST	Grab	VOCs(7)	1023 (HCl) (3)	P001-PW04	04/26/2018 08:45	
TB-180426	BE230	DI water/ RST	Grab	VOCs(7)	1043 (HCl) (3)	Trip Blank	04/26/2018 12:50	
P001-PW05-01	BE231	Potable Water/ RST	Grab	VOCs(7)	1027 (HCl) (3)	P001-PW05	04/26/2018 11:45	
P001-PW06-01	BE232	Potable Water/ RST	Grab	VOCs(7)	1031 (HCl) (3)	P001-PW06	04/26/2018 11:02	
P001-PW07-01	BE233	Potable Water/ RST	Grab	VOCs(7)	1035 (HCl) (3)	P001-PW07	04/26/2018 11:19	
P001-PW08-01	BE234	Potable Water/ RST	Grab	VOCs(7)	1039 (HCl) (3)	P001-PW08	04/26/2018 12:30	

Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: VOCs=CLP VOCs

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Guillermo Hernandez / Tetra Tech	4/26/18/1500	ALS	4/26/2018/1500	good

51559

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 7999 2258

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 1

EPW14029
MBE225

No: 2-042418-174746-0008

Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW01-01	MBE225	Potable Water/ RST	Grab	ICP-MS(7)	1004 (HNO3 pH<2) (1)	P001-PW01	04/26/2018 09:24	
P001-PW03-01	MBE227	Potable Water/ RST	Grab	ICP-MS(7)	1018 (HNO3 pH<2) (3)	P001-PW03	04/26/2018 09:56	
P001-PW03-02	MBE228	Potable Water/ RST	Grab	ICP-MS(7)	1022 (HNO3 pH<2) (1)	P001-PW03	04/26/2018 09:56	
P001-PW04-01	MBE229	Potable Water/ RST	Grab	ICP-MS(7)	1026 (HNO3 pH<2) (1)	P001-PW04	04/26/2018 08:45	

Sample(s) to be used for Lab QC: P001-PW03-01 Tag 1018 - Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-MS=CLP Metals (including Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Guillermo Hernandez / WESTON	4/26/18 1500	P. Aish Bon	4/27/18 0911	good

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 7999 2270

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 2

EPW14029
MBE227

No: 2-042418-175100-0009
Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW01-01	MBE225	Potable Water/ RST	Grab	CN(7)	1005 (NaOH pH>12) (1)	P001-PW01	04/26/2018 09:24	
P001-PW03-01	MBE227	Potable Water/ RST	Grab	CN(7)	1003 (NaOH pH>12) (3)	P001-PW03	04/26/2018 09:56	
P001-PW03-02	MBE228	Potable Water/ RST	Grab	CN(7)	1009 (NaOH pH>12) (1)	P001-PW03	04/26/2018 09:56	
P001-PW04-01	MBE229	Potable Water/ RST	Grab	CN(7)	1004 (NaOH pH>12) (1)	P001-PW04	04/26/2018 08:45	

Sample(s) to be used for Lab QC: P001-PW03-01 Tag 1003 - Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: CN=CLP Cyanide

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Giovanni Hernandez/WESTON	4/26/18 /1500	J. Arthur Bonner	4/27/18 0911	good

2

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018

CarrierName: FedEx

AirbillNo: 7720 7999 2188

CHAIN OF CUSTODY RECORD

Case #: 47611

Cooler #: 3

EPW14029

MBE227

No: 2-042518-145239-0010

Lab: Bonner Analytical Testing Company

Lab Contact: Chris Bonner

Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW05-01	MBE231	Potable Water/ RST	Grab	CN(7), ICP-MS(7)	1005 (NaOH pH>12), 1030 (HNO3 pH<2) (2)	P001-PW05	04/26/2018 11:45	
P001-PW06-01	MBE232	Potable Water/ RST	Grab	CN(7), ICP-MS(7)	1006 (NaOH pH>12), 1034 (HNO3 pH<2) (2)	P001-PW06	04/26/2018 11:02	
P001-PW07-01	MBE233	Potable Water/ RST	Grab	CN(7)	1007 (NaOH pH>12) (1)	P001-PW07	04/26/2018 11:19	
P001-PW08-01	MBE234	Potable Water/ RST	Grab	CN(7)	1008 (NaOH pH>12) (1)	P001-PW08	04/26/2018 12:30	

Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: CN=CLP Cyanide, ICP-MS=CLP Metals (including Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Guillermo Hernandez / WESTON	4/26/18 / 1500	P. Ash Bon	0911 4/27/18	good

COPY

ORIGINAL IN CSF: MBE225

Signature: P. Ash

3

USEPA CLP COC (LAB COPY)

DateShipped: 4/26/2018
CarrierName: FedEx
AirbillNo: 7720 7999 2740

CHAIN OF CUSTODY RECORD

Case #: 47611
Cooler #: 4

EPA14029
MBE225

No: 2-042518-145406-0011

Lab: Bonner Analytical Testing Company
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
P001-PW07-01	MBE233	Potable Water/ RST	Grab	ICP-MS(7)	1038 (HNO3 pH<2) (1)	P001-PW07	04/26/2018 11:19	
P001-PW08-01	MBE234	Potable Water/ RST	Grab	ICP-MS(7)	1042 (HNO3 pH<2) (1)	P001-PW08	04/26/2018 12:30	

Special Instructions: Preliminary turn around time: 7 days. Validated data turn around around time: 14 days

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: ICP-MS=CLP Metals (including Hg)

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Guillermo Hernandez / WESTON	4/26/18 / 1500	P. Adk Bonner	0911 4/27/18	good

ATTACHMENT E

Validated Data Packages

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
DESA/HWSB/HWSS
2890, Woodbridge Avenue, Edison, NJ 08837

EXECUTIVE NARRATIVE

Case No. : 47611
Site: Proteco Portable Wells
Number of Samples: 9 (Water)
Analysis: TVOA, SVOA, PEST, ARO

SDG No.: BE231
Laboratory: ALS Environmental (SLC)
Sampling dates: 4/26/2018
Validation SOP: HW-34A (Rev1), HW 35 (Rev1), HW 36 (Rev 1), HW-37 (Rev 0)

QAPP:
Contractor: Weston Solutions, Inc.
Reference: DCN: RST3-04-D-0170

SUMMARY OF DEFINITIONS:
Critical: Results have an unacceptable level of uncertainty and should not be used for making decisions. Data have been qualified "R" rejected.
Major: A level of uncertainty exists that may not meet the data quality objectives for the project. A bias is likely to be present in the results. Data has been qualified "J" estimated. "J+" and "J-" represent likely direction of the bias.
Minor: The level of uncertainty is acceptable. No significant bias in the data was observed.

Critical Findings:
None.

Major Findings:
TVOA: None
SVOA Samples BE225, BE227, BE228, BE229, BE231, BE232, BE233 and BE234 have analytes that have been qualified "J", "J+" or "J-".
Pest: None
ARO: None

Minor Findings:
One or more analytes in one or more samples are qualified "J" due to results between MDL and CRQL.

COMMENTS:	The site specific QAPP does not provide the project action levels for the samples from this site.

Reviewer Name(s): Reginald St-Juste/ Raxa Shelley

Approver's Signature: **Date: 05/11/18**

Name: Russell Arnone

Affiliation: USEPA/R2/HWSB/HWSS

Data Qualifier Definitions (National Functional Guidelines)			
Qualifier Symbol	**Explanation**		
	INORGANICS	**ORGANICS**	**CHLORINATED DIOXIN/FURAN**
U	The analyte was analyzed for, but was not detected above the level of the reported quantitation limit.	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method	The analyte was analyzed for but not detected. The value preceding the "U" may represent the adjusted Contract Required Quantitation Limit (see DLM02.X, Exhibit D, Section 1.2 and Table 2), or the sample specific estimated detection limit (EDL, see Method 8290A, Section 11.9.5).
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL.	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to an issue with the quality of the data generated because certain QC criteria were not met, or the concentration of the analyte was below the adjusted CRQL).
J+	The result is an estimated quantity, but the result may be biased high.	The result is an estimated quantity, but the result may be biased high.	
J–	The result is an estimated quantity, but the result may be biased low.	The result is an estimated quantity, but the result may be biased low.	
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.	The analyte was not detected (see definition of "U" flag, above). The reported value should be considered approximate.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
N		The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.	
NJ		The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	
C		This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).	
X		This qualifier applies to pesticide and Aroclor results when GC/MS analysis was attempted but was unsuccessful.	

DATA ASSESSMENT

ANALYSIS: TVOA

The current SOP HW-34A (Revision 1) September 2016, USEPA Region II for the evaluation of Trace Volatile organic data generated through Statement of Work SOM02.2 and any future editorial revisions of SOM02.2 has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi-Automated Screening Results Report. Tentatively Identified Compounds (TICs) for TVOA organic fraction is not validated.

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as unusable, "R". Use professional judgment to qualify detects and non-detects for aqueous sample whose temperature is above 6 degree or below 2degree C Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. DEUTERATED MONITORING COMPOUNDS (DMC's)

All samples are spiked with DMC compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured DMC recovery limits were outside Table 6 of the SOP HW 34A (Rev 1), qualifications were applied as per Table 7 of the SOP HW 34A (Rev 1) to all the samples and analytes as shown below.

No problems were found for this criterion.

3. MATRIX SPIKE/ MATRIX SPIKE RECOVERY:

MS/MSD data is generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data.

Not applicable.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on

the amount of contamination present in the QA blanks, the analytes are qualified as per Table 5 of SOP HW-34A (Rev 1).

A) Method blank contamination:

No problems were found for this criterion.

B) Field or rinse blank contamination:

Not applicable.

C) Trip blank contamination: BE230

No problems were found for this criterion.

D) Storage Blank associated with VOA samples only:

No problems were found for this criterion.

E) Tentatively Identified Compounds:

Tentatively Identified Compounds (TICs) for TVOA organic fraction are not validated.

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene. If the mass calibration is in error, all associated data will be classified as unusable "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. All analytes for for initial calibration, ICV and continuing calibration should meet the minimum RRF criteria as listed in Table 2 of SOP HW 34A (Rev 1). If RRF is less than minimum RRF specified in Table 2 for all target analytes, use professional judgment

and all detects in the sample will be qualified as "J+" or "R". All non-detects for that compound will be rejected "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration.

Percent RSD must be less than maximum %RSD in Table 2 of SOP HW 34A (Rev 1) for all target analytes. For the Initial Calibration Verification ICV/opening or closing CCV %D must be within the inclusive opening or closing maximum %D limits as listed in Table 2 of SOP HW 34A (Rev 1) for all Target compounds. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and Non-detects are flagged "UJ" for %D values outside criteria only. If %RSD exceeds QC criteria, detects may be qualified as "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

7. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must be in the range as specified in Table 9 of SOP HW 34A (Rev 1) of the associated continuing calibration internal standard area. The retention time of the internal standards must be within the range as specified in Table 9 of SOP HW 34A (Rev 1). If the area count is greater than, all positive results quantitated using that IS are qualified as estimated "J-", and non-detects are not qualified. If the area count is less than the associated standard, all positive results for compounds quantitated with that IS are qualified as estimated "J+" and all non-detects are qualified "R".

If an internal standard retention time were not met as specified in Table 9 of SOP HW 34A (Rev 1), the reviewer will use professional judgment to determine either partial or total rejection of the data for that sample fraction. Qualifications were applied to the samples and analytes as shown below. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

8. FIELD DUPLICATES: BE227/BE228

No problems were found for this criterion.

9. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within a window of 0.06 RRT units of the standard compound and have ion spectra which has a ratio of the primary and secondary m/z intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

10. CONTRACT PROBLEMS NON-COMPLIANCE:

No problems were found for this criterion.

11. FIELD DOCUMENTATION:

No problems were identified.

12. OTHER PROBLEMS:

None

13. DILUTIONS, RE-EXTRACTIONS & REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used. See summary report and EDD for applicable samples and analytes.

ANALYSIS: SVOA

The current SOP HW-35A (Revision 1) September 2016, USEPA Region II for the evaluation of Semi-Volatile organic data generated through Statement of Work SOM02.2 and any future editorial revisions of SOM02.2 has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi-Automated Screening Results Report. Tentatively Identified Compounds (TICs) for BNA organic fraction is not validated.

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded, qualifications will be applied as per SOP HW-35A (Rev 1).

The following samples are not properly cooled and the extraction is performed within the technical holding time and the extracts are analyzed within the analysis technical holding time. Detects are qualified J. Non-detects are qualified UJ.

BE225, BE227 and BE228

2. DEUTERATED MONITORING COMPOUNDS (DMCs)

All samples are spiked with DMC compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured DMC recovery limits were outside Table 6 of SOP HW-35A (Revision 1), qualifications were applied as per Table 7 of SOP HW-35A (Revision 1) to all the samples and analytes as shown below.

No problems were found for this criterion.

3. MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):

MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

Not applicable.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on the amount of contamination present in the QA blanks, the analytes are qualified as per Table 5 of SOP HW-35A (Rev 1).

A) Method blank contamination:

No problems were found for this criterion.

B) Field or rinse blank contamination:

Not applicable

C) Tentatively Identified Compounds:

Tentatively Identified Compounds (TICs) for BNA organic fraction are not validated.

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for Semi-volatiles is Decafluorotriphenyl-phosphine (DFTPP). If the mass calibration is in error, all associated data will be classified as unusable "R".

No problems were found for this criterion.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. All analytes for initial calibration, ICV and continuing calibration should meet the minimum RRF criteria as listed in Table 2 of SOP HW 35A (Rev 1). If RRF is less than minimum RRF as specified in Table 2 for all target analytes, use professional judgment and all detects in the sample will be qualified as "J+" or "R". All non-detects for that compound will be rejected "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance.

Percent RSD must be less than maximum %RSD in Table 2 of SOP HW 35A (Rev 1) for all target analytes. For the Initial calibration verification ICV/opening or closing CCV %D must be within the inclusive opening or closing maximum %D limits as listed in Table 2 of SOP HW 35A (Rev 1) for all Target compounds. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and Non-detects are flagged "UJ" for %D values outside criteria only. If %RSD exceeds QC criteria, detects may be qualified as "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

The following samples are associated with an ICV with target analyte % Difference exceeding criteria. Detects are qualified as estimated J. Non-detects are qualified as estimated UJ

2,2'-Oxybis(1-chloropropane) BE225, BE227, BE228, BE229, BE231, BE232, BE233 and BE234

The following samples are associated with an opening or closing CCV with %Differenceexceeding criteria. Detects are qualified as estimated J. Non-detects are qualified as estimated UJ.

2,4-Dinitrophenol BE225, BE227, BE228, BE229, BE231, BE232, BE233 and BE234

7. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must be in the range as specified in Table 10 of SOP HW 35A (Rev 1) of the associated continuing calibration internal standard area. The retention time of the internal standards must be within the range as specified in Table 10 of SOP HW 35A (Rev 1). If the area count is greater than, all positive results quantitated using that IS are qualified as estimated "J-", and non-detects are not qualified. If the area count is less than the associated standard, all positive results for compounds quantitated with that IS are qualified as estimated "J+" and all non-detects are qualified "R".

If an internal standard retention time were not met as specified in Table 10 of SOP HW 35A (Rev 1), the reviewer will use professional judgment to determine either partial or total rejection of the data for that sample fraction. Qualifications were applied to the samples and analytes as shown below. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

8. FIELD DUPLICATES: BE227/BE228

No problems were found for this criterion.

9. COMPOUND IDENTIFICATION:

A) Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within 0.06 RRT units of the standard compound and have ion spectra which have a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

10. CONTRACT PROBLEMS NON-COMPLIANCE:

None

11. FIELD DOCUMENTATION:

No problems were identified.

12. OTHER PROBLEMS:

None

13. DILUTIONS, RE-EXTRACTIONS and REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used. See summary report and EDD for applicable samples and analytes.

ANALYSIS: PEST

The current SOP HW-36A (Revision 1) October 2016, USEPA Region II for the evaluation of Pesticides data generated through Statement of Work SOM02.2, and any future editorial revisions of SOM02.2 has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi-Automated Screening Results Report.

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". Use professional judgment to qualify the non-detects (sample quantitation limits), if the holding times are grossly exceeded. If the holding times are grossly exceeded. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate recovery were outside Table 7 of the SOP HW-36A (Revision 1), qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

3. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD):

MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. LABORATORY CONTROL RECOVERY (LCS):

LCS data is generated to determine the long-term precision and accuracy of the analytical method. The LCS may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

5. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on the concentration of the analyte in the blank, the analytes are qualified as non-detects, "U". Qualifications were applied to the samples and analytes as shown below.

A) Method/Instrument blank contamination:

No qualification applied due to instrument blank contamination.

B) Field or rinse blank contamination:

Not applicable.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

For the PESTICIDE fraction, if %RSD exceeds 20% for all analytes except alpha-BHC and delta-BHC 25%, for the two surrogates and Toxaphene 30%, qualify all associated positive

results "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) The Percent Difference (%D) for each of the SCP and surrogate in the PEM used for CCV must be greater than or equal to -25% and less than or equal to 25.0%. The Percent Difference (%D) between the calibration Factor (CF) for each of the SCP and surrogate in the Calibration Verification Standard (CS3) and the mean calibration factor from the initial calibration must be greater than or equal to -25% and less than or equal to 25.0%. The Percent Difference not within limits, detected associated compounds are qualified "J" and non-detected associated compounds are qualified "UJ". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

7. FIELD DUPLICATES:

Samples BE227 and BE228:
No problems were found for this criterion.

8. COMPOUND IDENTIFICATION:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract. Qualifications were applied to the samples and analytes as shown below.

Percent Differences	**Qualifier**
0% - 25%	No qualification
26% - 70%	J
71% - 200% (interference detected, either column)	JN
> 50% (pesticide value < CRQL, value raised to CRQL)	U
> 200%	R

The following samples were qualified for % difference on the two columns.

BE227MS, BE227MSD

9. CONTRACT PROBLEMS NON-COMPLIANCE:

None.

10. FIELD DOCUMENTATION:

No problems were identified.

11. OTHER PROBLEMS:

None.

12. DILUTIONS, RE-EXTRACTIONS & REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used. See summary report and EDD for applicable samples and analytes.

ANALYSIS: ARO

The current SOP HW-37A (Revision 0) June 2015, USEPA Region II for the evaluation of ARO data generated through Statement of Work SOM02.2 and any future editorial revisions of SOM02.2 has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi-Automated Screening Results Report.

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". Use professional judgment to qualify the non-detects (sample quantitation limits), if the holding times are grossly exceeded. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate recovery were outside Table 5 of the SOP HW-37A (Revision 0), qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

3. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD):

MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other QC criteria for additional qualification of data. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. Laboratory Control Samples (LCS):

LCS data provides information on the accuracy of the analytical method and laboratory performance. If LCS recoveries fell outside of the acceptable limits, qualifications were applied to the associated samples and compounds as shown below.

No problems were found for this criterion.

5. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations. Depending on the concentration of the analyte in the blank, the analytes are qualified as non-detects U. Qualifications were applied to the samples and analytes as shown below.

A) Method/Instrument blank contamination:

No problems were found for this criterion.

B) Field or rinse blank contamination:

Not applicable.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Percent Relative Standard Deviation (%RSD):

For the ARO fraction, if %RSD exceeds 20% for all analytes and the two surrogates, qualify all associated positive results "J" and use professional judgment to qualify non-detects. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Difference (%D):

For opening CCV, or closing CCV that is used as an opening CCV for the next 12-hour period, if %D exceeds 25% for analytes and the two surrogates, qualify all associated positive results "J" and non-detects "UJ".

For closing CCV, if %D exceeds 50% for all analytes and the two surrogates, qualify all associated positive results "J" and non-detects "UJ". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

7. FIELD DUPLICATES:

Samples BE227 and BE228:
No problems were found for this criterion.

8. COMPOUND IDENTIFICATION:

A) ARO Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract. Qualifications were applied to the samples and analytes as shown below.

Percent Differences	**Qualifier**
0% - 25%	No qualification
26% - 200%	Professional Judgment
101% - 200% (interference detected, either column)	JN
> 50% (pesticide value < CRQL, value raised to CRQL)	U
> 200%	R

The following samples were qualified for % difference on the two columns.

No problems were found for this criterion.

9. CONTRACT PROBLEMS NON-COMPLIANCE:

None.

10. FIELD DOCUMENTATION:

No problems were identified.

11. OTHER PROBLEMS:

None.

12. DILUTIONS, RE-EXTRACTIONS & RE-ANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used. See summary report and EDD for applicable samples and analytes.

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: ABLKW1	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: ABLKW2	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: ALCSW1	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	1.0		ug/L	1.0		1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Spike	1.1		ug/L	1.1		1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: ALCSW2	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	1.1		ug/L	1.1		1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Spike	0.98	J	ug/L	0.98	J	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE225	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-PW01	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:24:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE225	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-PW01	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:24:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE225	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-PW01	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:24:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE225	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: P001-PW01	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 09:24:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE227	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE227	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE227	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE227	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE227MS	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	3.5		ug/L	3.5		1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Spike	3.5		ug/L	3.5		1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE227MS	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Spike	0.48		ug/L	0.48		1.0	YES	S3VEM
Heptachlor	Spike	0.48		ug/L	0.48		1.0	YES	S3VEM
Aldrin	Spike	0.49		ug/L	0.49		1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.0033	JP	1.0	YES	S3VEM
Dieldrin	Spike	0.94		ug/L	0.94		1.0	YES	S3VEM
4,4'-DDE	Target	0.039	J	ug/L	0.039	J	1.0	YES	S3VEM
Endrin	Spike	0.94		ug/L	0.94		1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	J	ug/L	0.10	J	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Spike	0.82		ug/L	0.82		1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.052	J	ug/L	0.052	J	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.025	JP	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE227MSD	Method: Aroclors	Matrix: Water	MA Number:
Sample Location:	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Spike	3.4		ug/L	3.4		1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Spike	3.4		ug/L	3.4		1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE227MSD	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Spike	0.48		ug/L	0.48		1.0	YES	S3VEM
Heptachlor	Spike	0.48		ug/L	0.48		1.0	YES	S3VEM
Aldrin	Spike	0.50		ug/L	0.50		1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.0032	JP	1.0	YES	S3VEM
Dieldrin	Spike	0.95		ug/L	0.95		1.0	YES	S3VEM
4,4'-DDE	Target	0.040	J	ug/L	0.040	J	1.0	YES	S3VEM
Endrin	Spike	0.94		ug/L	0.94		1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10		ug/L	0.10		1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Spike	0.85		ug/L	0.85		1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.057	J	ug/L	0.057	J	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.030	JP	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE228	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE228	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE228	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE228	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE229	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-PW04	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 08:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE229	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-PW04	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 08:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE229	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-PW04	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 08:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE229	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: P001-PW04	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 08:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethyl Acetate	TIC	0.51	JN	ug/L	0.51	JN	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE230	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: Trip Blank	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 12:50:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethyl Acetate	TIC	0.89	JN	ug/L	0.89	JN	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE231	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-PW05	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE231	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-PW05	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE231	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-PW05	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE231	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: P001-PW05	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 11:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE232	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-PW06	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:02:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE232	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-PW06	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:02:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE232	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-PW06	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:02:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE232	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: P001-PW06	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 11:02:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethyl Acetate	TIC	1.5	JN	ug/L	1.5	JN	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE233	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-PW07	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:19:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE233	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-PW07	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:19:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE233	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-PW07	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 11:19:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Unknown 5-Chloro-1-methylimidazole	TIC	3.4	J	ug/L	3.4	J	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE233	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: P001-PW07	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 11:19:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	1.8		ug/L	1.8		1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.18	J	ug/L	0.18	J	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE234	Method: Aroclors	Matrix: Water	MA Number:
Sample Location: P001-PW08	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 12:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aroclor-1016	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1221	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1232	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1242	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1248	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1254	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1260	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1262	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM
Aroclor-1268	Target	1.0	U	ug/L	1.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE234	Method: Pesticides	Matrix: Water	MA Number:
Sample Location: P001-PW08	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 12:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE234	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location: P001-PW08	pH: 6.0	Sample Date: 04/26/2018	Sample Time: 12:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Trichloroethylene	TIC	3.8	JN	ug/L	3.8	JN	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: BE234	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location: P001-PW08	pH: 1.0	Sample Date: 04/26/2018	Sample Time: 12:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: PBLKW1	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: PBLKW2	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDE	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: PLCSW1	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Spike	0.042	J	ug/L	0.042	J	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Spike	0.044	J	ug/L	0.044	J	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Spike	0.091	J	ug/L	0.091	J	1.0	YES	S3VEM
4,4'-DDE	Spike	0.089	J	ug/L	0.089	J	1.0	YES	S3VEM
Endrin	Spike	0.089	J	ug/L	0.089	J	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Spike	0.072	J	ug/L	0.072	J	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Spike	0.044	J	ug/L	0.044	J	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: PLCSW2	Method: Pesticides	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
alpha-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
beta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
delta-BHC	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
gamma-BHC (Lindane)	Spike	0.043	J	ug/L	0.043	J	1.0	YES	S3VEM
Heptachlor	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Aldrin	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Heptachlor epoxide	Spike	0.048	J	ug/L	0.048	J	1.0	YES	S3VEM
Endosulfan I	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
Dieldrin	Spike	0.092	J	ug/L	0.092	J	1.0	YES	S3VEM
4,4'-DDE	Spike	0.088	J	ug/L	0.088	J	1.0	YES	S3VEM
Endrin	Spike	0.093	J	ug/L	0.093	J	1.0	YES	S3VEM
Endosulfan II	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
4,4'-DDD	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endosulfan sulfate	Spike	0.076	J	ug/L	0.076	J	1.0	YES	S3VEM
4,4'-DDT	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Methoxychlor	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Endrin ketone	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
Endrin aldehyde	Target	0.10	U	ug/L	0.10	U	1.0	YES	S3VEM
cis-Chlordane	Target	0.050	U	ug/L	0.050	U	1.0	YES	S3VEM
trans-Chlordane	Spike	0.042	J	ug/L	0.042	J	1.0	YES	S3VEM
Toxaphene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: SBLK09	Method: Semivolatiles	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,4-Dioxane	Target	2.0	U	ug/L	2.0	U	1.0	YES	S3VEM
Benzaldehyde	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Bis(2-chloroethyl) ether	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2-Chlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,2'-Oxybis(1-chloropropane)	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
Acetophenone	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitroso-di-n propylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachloroethane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Nitrobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Isophorone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitrophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dimethylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-chloroethoxy)methane	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Naphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chloroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Hexachlorobutadiene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Caprolactam	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4-Chloro-3-methylphenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Methylnaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorocyclo-pentadiene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
2,4,6-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4,5-Trichlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,1'-Biphenyl	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Chloronaphthalene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2-Nitroaniline	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dimethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,6-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Acenaphthylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Acenaphthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrophenol	Target	10	UJ	ug/L	10	U	1.0	YES	S3VEM
4-Nitrophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Dibenzofuran	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,4-Dinitrotoluene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Diethylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluorene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Chlorophenyl-phenyl ether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Nitroaniline	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
4,6-Dinitro-2-methylphenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
N-Nitrosodiphenylamine	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
1,2,4,5-Tetrachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
4-Bromophenyl-phenylether	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Hexachlorobenzene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Atrazine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pentachlorophenol	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Phenanthrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Carbazole	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Di-n-butylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Fluoranthene	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Butylbenzylphthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
3,3'-Dichlorobenzidine	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(a)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Chrysene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bis(2-ethylhexyl)phthalate	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Di-n-octylphthalate	Target	10	U	ug/L	10	U	1.0	YES	S3VEM
Benzo(b)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(k)fluoranthene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(a)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Indeno(1,2,3-cd)pyrene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibenzo(a,h)anthracene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Benzo(g,h,i)perylene	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
2,3,4,6-Tetrachlorophenol	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: VBLKT1	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14027/BE231** | **Lab Name: ALS Environmental (SLC)**

Sample Number: VHBLKT1	Method: Trace Volatiles	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methyl tert-butyl ether	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
4-Methyl-2-Pentanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	YES	S3VEM
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project	GroupID: 47611/EPW14027/BE231	Lab Name: ALS Environmental (SLC)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
DESA/HWSB/HWSS
2890, Woodbridge Avenue, Edison, NJ 08837

EXECUTIVE NARRATIVE

Case No.: 47611
Site: Proteco Potable Wells
Number of Samples: 8 (Water)
Analysis: Metals (ICP-MS), Hg

SDG No.: MBE225
Laboratory: Bonner Analytical Testing Co.
Sampling dates: 4/26/18
Validation SOP: HW-3b, and -3c (Rev. 1)

QAPP

Contractor: Weston Solutions
Reference: DCN # RST3-04-D-0170

SUMMARY OF DEFINITIONS:

Critical: Results have an unacceptable level of uncertainty and should not be used for making decisions. Data have been qualified "R" rejected.
Major: A level of uncertainty exists that may not meet the data quality objectives for the project. A bias is likely to be present in the results. Data has been qualified "J" estimated. "J+" and "J-" represent likely direction of the bias.
Minor: The level of uncertainty is acceptable. No significant bias in the data was observed.

Critical Findings:
None

Major Findings:
ICP-MS: Sample MBE227 has analytes that have been qualified J, J+ or J-.

Minor Findings:
One or more analytes in one or more samples are qualified "J" due to results between MDL and CRQL.

COMMENT:	The site specific QAPP did not specify the project action levels for this site.

Reviewer Name(s): Israel Okwuonu

Approver's Signature: **Date: 05/11/18**

Name: Russell Arnone

Affiliation: USEPA/R2/HWSB/HWSS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
DESA/HWSB/HWSS
2890, Woodbridge Avenue, Edison, NJ 08837

Data Qualifier Definitions (National Functional Guidelines)			
Qualifier Symbol	**Explanation**		
	INORGANICS	**ORGANICS**	**CHLORINATED DIOXIN/FURAN**
U	The analyte was analyzed for, but was not detected above the level of the reported quantitation limit.	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method	The analyte was analyzed for but not detected. The value preceding the "U" may represent the adjusted Contract Required Quantitation Limit (see DLM02.X, Exhibit D, Section 1.2 and Table 2), or the sample specific estimated detection limit (EDL, see Method 8290A, Section 11.9.5).
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL.	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to an issue with the quality of the data generated because certain QC criteria were not met, or the concentration of the analyte was below the adjusted CRQL).
J+	The result is an estimated quantity, but the result may be biased high.	The result is an estimated quantity, but the result may be biased high.	
J–	The result is an estimated quantity, but the result may be biased low.	The result is an estimated quantity, but the result may be biased low.	
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.	The analyte was not detected (see definition of "U" flag, above). The reported value should be considered approximate.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
N		The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.	
NJ		The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	
C		This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).	
X		This qualifier applies to pesticide and Aroclor results when GC/MS analysis was attempted but was unsuccessful.	

DATA ASSESSMENT

ANALYSIS: METALS ICP-MS

The current SOP HW-3b (Revision 1) September, 2016 USEPA Region II for the evaluation of ICP-MS metals generated through Statement of Work ISOM02.2, and any future editorial revisions of ISOM02.2, has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi- Automated Screening Results Report.

1. HOLDING TIME AND PRESERVATION

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time or pH (aqueous samples are not within the acceptable range, the data may not be valid. Those analytes detected in the samples whose holding time (180 days) or pH (≤2) have not been met, will be qualified as estimated, "J"; the non-detects will be flagged as unusable, "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. CALIBRATION

Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for the metals on the Inorganic Target Analyte List (TAL). Initial Calibration Verification (ICV) demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. Continuing Calibration Verification (CCV) demonstrates that the initial calibration is still valid by checking the performance of the instrument on a continuing basis.

A) INITIAL CALIBRATION

A blank and at least five calibration standards shall be used to establish each analytical curve. At least one of these standards shall be at or below the CRQL. The calibration curve shall be fitted using linear regression or weighted linear regression. The curve may be forced through zero. The curve must have a correlation coefficient ≥ 0.995. The percent differences calculated for all of the non-zero standards must be within ±30% of the true value of the standard. The y-intercept of the curve must be less than the CRQL. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) INITIAL AND CONTINUING CALIBRATION VERIFICATION

Immediately after each system has been calibrated, the accuracy of the initial calibration must be verified and documented for each target analyte by the analysis of an ICV solution(s).
The CCV standard shall be analyzed at a frequency of every two hours during an analytical run. The CCV standard shall also be analyzed at the beginning of the run, and again after the last analytical sample. The percent recovery acceptable limits for ICV/CCV are 90 – 110%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

3. BLANK CONTAMINATION

Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Calibration blanks (ICB and CCB) are used to ensure a stable instrument baseline before and during the analysis of analytical samples. The preparation blank is used to assess the level of contamination introduced to the analytical samples throughout the sample preparation process. Field and rinse blanks measure cross-contamination of samples during field operations. Qualifications were applied to the samples and analytes as shown below.

The following samples have analyte results less than or equal to CRQLs. The associated CCB analyte results are less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.

Aluminum MBE231RE, MBE234RE

Antimony MBE232, MBE233

Cobalt MBE225, MBE227, MBE228, MBE229, MBE231, MBE232, MBE233, MBE234

Manganese MBE227, MBE228, MBE229

Vanadium MBE231, MBE232, MBE233, MBE234

The following samples have analyte results greater than or equal to MDLs and less than or equal to CRQLs. The associated ICB analyte results are greater than or equal to MDLs and less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.

Antimony MBE232, MBE233

Vanadium MBE231, MBE232, MBE233, MBE234

The following samples have analyte results greater than or equal to MDLs and less than or equal to CRQLs. The associated PB analyte results are greater than or equal to MDLs and less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.

Manganese MBE227, MBE228, MBE229

Vanadium MBE231, MBE232, MBE233, MBE234

4. **INTERFERENCE CHECK SAMPLE**

The Interference Check Sample (ICS) verifies the analytical instrument's ability to overcome interferences typical of those found in samples. The laboratory should have analyzed and reported ICS results for all elements being reported from the analytical run and for all interferents (target and non-target) for these reported elements. The ICS consists of two solutions: Solution A and Solution AB. Solution A consists of the interferents, and Solution AB consists of the analytes mixed with the interferents. Results for the analysis of ICS Solution must fall within the control limits of ± 20% or ±2X CRQL (whichever is greater) of the true value for the analytes and interferents included in the solution. If results that are ≥ MDL are observed for analytes that are not present in the ICS solution, the possibility of false positives exists. If negative results are observed for analytes that are not present in the ICS solution, and their absolute value is ≥ MDL, the possibility of false negatives in the samples exists. In general, ICP sample data can be accepted if the concentrations of Al, Ca, Fe, and

Mg in the sample are found to be less than or equal to their respective concentrations in the ICS. Qualifications were applied to the samples and analytes as shown below.

The recovery of Vanadium in the Interference Check Sample fell below the lower limit of 80%. However, the concentrations of Aluminum, Calcium, Iron and Magnesium in the samples were found to be less than their respective concentrations in the Interference Check Sample. Therefore, no action was taken.

5. SPIKE SAMPLE ANALYSIS

The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The spike Percent Recovery (%R) shall be within the established acceptance limits of 75 – 125%. However, spike recovery limits do not apply when the sample concentration is ≥ 4x the spike added. For a matrix spike analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the matrix spike sample.

No problems were found for this criterion.

6. DUPLICATE SAMPLE ANALYSIS

The objective of duplicate sample analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. A control limit of 35% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values ≥ five times (5x) the Contract Required Quantitation Limit (CRQL). A control limit of the CRQL shall be used if either the sample or duplicate value is < 5x the CRQL. For a duplicate sample analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the duplicate sample.

The following sample is associated with a Duplicate sample that has analyte results less than or equal to 5x CRQL in Duplicate or original samples and the absolute difference between analyte results in the Duplicate and original samples are greater than CRQLs. Detects are qualified as J. Non-detects are qualified as UJ.

Cobalt, Nickel MBE227

7. FIELD DUPLICATE: MBE227/MBE228

Field duplicates may be taken and analyzed as an indication of overall precision. These analyses measure both field and laboratory precision. A control limit of 20% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values ≥ five times (5x) the Contract Required Quantitation Limit (CRQL). A control limit of the CRQL shall be used if either the sample or duplicate value is < 5x the CRQL. For field duplicates analysis that does not meet the technical criteria, the action was applied to only the field sample and it's duplicate.

No problems were found for this criterion.

8. LABORATORY CONTROL SAMPLE

The Laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous/water, soil/sediment, wipe, and filter LCSs shall be analyzed for each analyte utilizing the same sample preparations, analytical methods, and Quality Assurance/Quality Control (QA/QC) procedures as employed for the samples. All LCS Percent Recoveries (%R) must fall within the control limits of 70-130%, except for Sb and Ag which

must fall within the control limits of 50-150%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

9. ICP SERIAL DILUTION

The serial dilution of samples quantitated by Inductively Coupled Plasma determines whether or not significant physical or chemical interferences exist due to sample matrix. If the analyte concentration is sufficiently high [concentration in the original sample is > 50 times (50x) the Method Detection Limit (MDL)], the Percent Difference (%D) between the original determination and the serial dilution analysis (a five-fold dilution) after correction for dilution shall be less than 15. For a serial dilution analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the serial dilution sample.

The following aqueous sample is associated with Serial Dilution (SD) sample that has analyte percent different %D greater than 10% but less than 100%. The original sample analyte concentrations are greater than 50x MDLs. Detects are qualified as estimated J. Non-detects are not qualified.

Calcium, Magnesium, Sodium, Vanadium MBE227

10. ICP-MS TUNE ANALYSIS

The Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) tune serves as an initial demonstration of instrument stability and precision. Prior to calibration, the laboratory shall analyze or scan the ICP-MS tuning solution at least five times (5x) consecutively. The tuning solution contains 100 µg/L of Be, Mg, Co, In, and Pb. The solution shall contain all required isotopes of the above elements. The laboratory shall make any adjustments necessary to bring peak width within the instrument manufacturer's specifications and adjust mass resolution to within 0.1 u over the range of 6-210 u. The Percent Relative Standard Deviation (%RSD) of the absolute signals for all analytes in the tuning solution must be < 5%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

11. ICP-MS INTERNAL STANDARDS

The analysis of Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) internal standards determines the existence and magnitude of instrument drift and physical interferences. The criteria for evaluation of internal standard results apply to all analytical and Quality Control (QC) samples analyzed during the run, beginning with the calibration.
All samples analyzed during a run, with the exception of the ICP-MS tune, shall contain internal standards. A minimum of five internal standards shall be added to each sample. The laboratory shall monitor the same internal standards throughout the entire analytical run and shall assign each analyte to at least one internal standard. The Percent Relative Intensity (%RI) in the sample shall fall within 60-125% of the response in the calibration blank. If the %RI of the response in the sample falls outside of these limits, the laboratory shall reanalyze the original sample at a two-fold dilution with internal standard added. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

12. PERCENT SOLIDS

The laboratory is required to perform the percent solids determination prior to sample preparation and analysis. All results of a sample with percent solids less than 50% are qualified estimated, "J". Qualifications were applied to the samples and analytes as shown below.

Not applicable.

ANALYSIS: MERCURY

The current SOP HW-3c (Revision 1) September, 2016 USEPA Region II for the evaluation of Mercury generated through Statement of Work ISOM02.2, and any future editorial revisions of ISOM02.2, has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi- Automated Screening Results Report.

1. HOLDING TIME AND PRESERVATION

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time, pH (aqueous samples), or cooler temperature are not within the acceptable range, the data may not be valid. Those analytes detected in the samples whose holding time (28 days) and pH ($\leq$2) have not been met, will be qualified as estimated, "J"; the non-detects (sample quantitation limits) will be flagged as unusable, "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. CALIBRATION

Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for mercury. Initial Calibration Verification (ICV) demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. Continuing Calibration Verification (CCV) demonstrates that the initial calibration is still valid by checking the performance of the instrument on a continuing basis.

A) INITIAL CALIBRATION

A blank and at least five calibration standards shall be employed to establish the analytical curve. At least one of the calibration standards shall be at or below the Contract Required Quantitation Limit (CRQL). The calibration curve shall be fitted using linear regression or weighted linear regression. The curve may be forced through zero. The calibration curves for mercury shall possess a correlation coefficient of ≥ 0.995 to ensure the linearity over the calibrated range. The percent differences calculated for all of the non-zero standards must fall within ±30% of the true value of the standard. The y-intercept of the curve must be less than the CRQL. All sample results shall be reported from an analysis within the calibrated range. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) INITIAL AND CONTINUING CALIBRATION VERIFICATION

Immediately after each system has been calibrated, the accuracy of the initial calibration must be verified and documented for mercury by the analysis of an ICV solution(s). The CCV standard shall be analyzed at a frequency of every hour during an analytical run. The CCV standard shall also be analyzed at the beginning of the run, and again after the last analytical sample. The percent recovery acceptable limits for ICV/CCV are 85 – 115%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

3. BLANK CONTAMINATION

Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. SPIKE SAMPLE ANALYSIS

The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The spike Percent Recovery (%R) shall be within the established acceptance limits of 75 – 125%. However, spike recovery limits do not apply when the sample concentration is ≥ 4x the spike added. For a matrix spike analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the matrix spike sample.

No problems were found for this criterion.

5. DUPLICATE SAMPLE ANALYSIS

The objective of duplicate sample analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. A control limit of 20% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values ≥ five times (5x) the Contract Required Quantitation Limit (CRQL). A control limit of the CRQL shall be used if either the sample or duplicate value is < 5x the CRQL. For a duplicate sample analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the duplicate sample.

No problems were found for this criterion.

6. FIELD DUPLICATE: MBE227/MBE228

Field duplicates may be taken and analyzed as an indication of overall precision. These analyses measure both field and laboratory precision. A control limit of 20% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values ≥ five times (5x) the Contract Required Quantitation Limit (CRQL). A control limit of the CRQL shall be used if either the sample or duplicate value is < 5x the CRQL. For field duplicates analysis that does not meet the technical criteria, the action was applied to only the field sample and it's duplicate.

No problems were found for this criterion.

7. PERCENT SOLIDS

The laboratory is required to perform the percent solids determination prior to sample preparation and analysis. Qualifications were applied to the samples and analytes as shown below.

Not applicable.

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: LCS01	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Spike	40.1		ug/L	40.1		1	YES	S3VEM
Antimony	Spike	4.0		ug/L	4.0		1	YES	S3VEM
Arsenic	Spike	2.1		ug/L	2.1		1	YES	S3VEM
Barium	Spike	20.4		ug/L	20.4		1	YES	S3VEM
Beryllium	Spike	2.1		ug/L	2.1		1	YES	S3VEM
Cadmium	Spike	1.9		ug/L	1.9		1	YES	S3VEM
Calcium	Spike	928		ug/L	928		1	YES	S3VEM
Chromium	Spike	3.9		ug/L	3.9		1	YES	S3VEM
Cobalt	Spike	2.1		ug/L	2.1		1	YES	S3VEM
Copper	Spike	4.1		ug/L	4.1		1	YES	S3VEM
Iron	Spike	394		ug/L	394		1	YES	S3VEM
Lead	Spike	2.1		ug/L	2.1		1	YES	S3VEM
Magnesium	Spike	1050		ug/L	1050		1	YES	S3VEM
Manganese	Spike	2.1		ug/L	2.1		1	YES	S3VEM
Nickel	Spike	2.1		ug/L	2.1		1	YES	S3VEM
Potassium	Spike	1030		ug/L	1030		1	YES	S3VEM
Selenium	Spike	10.7		ug/L	10.7		1	YES	S3VEM
Silver	Spike	2.0		ug/L	2.0		1	YES	S3VEM
Sodium	Spike	1020		ug/L	1020		1	YES	S3VEM
Thallium	Spike	2.0		ug/L	2.0		1	YES	S3VEM
Vanadium	Spike	11.5		ug/L	11.5		1	YES	S3VEM
Zinc	Spike	4.1		ug/L	4.1		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE225	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: P001-PW01	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:24:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE225	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: P001-PW01	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:24:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	20.0	U	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Arsenic	Target	0.20	J	ug/L	0.20	J	1	YES	S3VEM
Barium	Target	23.2		ug/L	23.2	*	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	62100		ug/L	62100	*	1	YES	S3VEM
Chromium	Target	0.33	J	ug/L	0.33	J	1	YES	S3VEM
Cobalt	Target	1.0	U	ug/L	0.13	J*	1	YES	S3VEM
Copper	Target	1.5	J	ug/L	1.5	J	1	YES	S3VEM
Iron	Target	200	U	ug/L	200	U	1	YES	S3VEM
Lead	Target	0.22	J	ug/L	0.22	J	1	YES	S3VEM
Magnesium	Target	9330		ug/L	9330	*	1	YES	S3VEM
Manganese	Target	3.3		ug/L	3.3		1	YES	S3VEM
Nickel	Target	1.2		ug/L	1.2	*	1	YES	S3VEM
Potassium	Target	938		ug/L	938		1	YES	S3VEM
Selenium	Target	0.58	J	ug/L	0.58	J	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	15300		ug/L	15300	*	1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	5.3		ug/L	5.3	*	1	YES	S3VEM
Zinc	Target	5.4		ug/L	5.4		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	20.0	U	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Barium	Target	18.8	J	ug/L	18.8	*	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	63900	J	ug/L	63900	*	1	YES	S3VEM
Chromium	Target	0.39	J	ug/L	0.39	J	1	YES	S3VEM
Cobalt	Target	1.0	UJ	ug/L	0.14	J*	1	YES	S3VEM
Copper	Target	1.8	J	ug/L	1.8	J	1	YES	S3VEM
Iron	Target	200	U	ug/L	200	U	1	YES	S3VEM
Lead	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Magnesium	Target	9600	J	ug/L	9600	*	1	YES	S3VEM
Manganese	Target	1.0	U	ug/L	0.26	J	1	YES	S3VEM
Nickel	Target	1.1	J	ug/L	1.1	*	1	YES	S3VEM
Potassium	Target	974		ug/L	974		1	YES	S3VEM
Selenium	Target	5.0	U	ug/L	5.0	U	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	16000	J	ug/L	16000	*	1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	5.5	J	ug/L	5.5	*	1	YES	S3VEM
Zinc	Target	0.92	J	ug/L	0.92	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227D	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227D	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	20.0	U	1	YES	S3VEM
Antimony	Target	0.45	J	ug/L	0.45	J	1	YES	S3VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Barium	Target	24.3		ug/L	24.3		1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	0.13	J	ug/L	0.13	J	1	YES	S3VEM
Calcium	Target	65100		ug/L	65100		1	YES	S3VEM
Chromium	Target	0.56	J	ug/L	0.56	J	1	YES	S3VEM
Cobalt	Target	1.6		ug/L	1.6	*	1	YES	S3VEM
Copper	Target	3.3		ug/L	3.3		1	YES	S3VEM
Iron	Target	200	U	ug/L	200	U	1	YES	S3VEM
Lead	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Magnesium	Target	9660		ug/L	9660		1	YES	S3VEM
Manganese	Target	0.61	J	ug/L	0.61	J	1	YES	S3VEM
Nickel	Target	2.4		ug/L	2.4	*	1	YES	S3VEM
Potassium	Target	957		ug/L	957		1	YES	S3VEM
Selenium	Target	0.55	J	ug/L	0.55	J	1	YES	S3VEM
Silver	Target	0.059	J	ug/L	0.059	J	1	YES	S3VEM
Sodium	Target	15900		ug/L	15900		1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	6.0		ug/L	6.0		1	YES	S3VEM
Zinc	Target	2.5		ug/L	2.5		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227L	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	100	U	ug/L	100	U	5	YES	S3VEM
Antimony	Target	10.0	U	ug/L	10.0	U	5	YES	S3VEM
Arsenic	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Barium	Target	16.6	J	ug/L	16.6	J*	5	YES	S3VEM
Beryllium	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Cadmium	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Calcium	Target	55300		ug/L	55300	*	5	YES	S3VEM
Chromium	Target	10.0	U	ug/L	10.0	U	5	YES	S3VEM
Cobalt	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Copper	Target			ug/L		J	5	YES	S3VEM
Iron	Target	1000	U	ug/L	1000	U	5	YES	S3VEM
Lead	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Magnesium	Target	8450		ug/L	8450	*	5	YES	S3VEM
Manganese	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Nickel	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Potassium	Target	850	J	ug/L	850	J	5	YES	S3VEM
Selenium	Target			ug/L		J	5	YES	S3VEM
Silver	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Sodium	Target	14200		ug/L	14200	*	5	YES	S3VEM
Thallium	Target	5.0	U	ug/L	5.0	U	5	YES	S3VEM
Vanadium	Target	4.6	J	ug/L	4.6	J*	5	YES	S3VEM
Zinc	Target	10.0	U	ug/L	10.0	U	5	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227S	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Spike	0.97		ug/L	0.97		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227S	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Antimony	Spike	96.9		ug/L	96.9		1	YES	S3VEM
Arsenic	Spike	38.3		ug/L	38.3		1	YES	S3VEM
Barium	Spike	1910		ug/L	1910		1	YES	S3VEM
Beryllium	Spike	48.1		ug/L	48.1		1	YES	S3VEM
Cadmium	Spike	46.5		ug/L	46.5		1	YES	S3VEM
Chromium	Spike	190		ug/L	190		1	YES	S3VEM
Cobalt	Spike	471		ug/L	471		1	YES	S3VEM
Copper	Spike	233		ug/L	233		1	YES	S3VEM
Lead	Spike	20.7		ug/L	20.7		1	YES	S3VEM
Manganese	Spike	480		ug/L	480		1	YES	S3VEM
Nickel	Spike	473		ug/L	473		1	YES	S3VEM
Selenium	Spike	95.2		ug/L	95.2		1	YES	S3VEM
Silver	Spike	47.1		ug/L	47.1		1	YES	S3VEM
Thallium	Spike	52.4		ug/L	52.4		1	YES	S3VEM
Vanadium	Spike	546		ug/L	546		1	YES	S3VEM
Zinc	Spike	445		ug/L	445		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE228	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE228	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 1.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	20.0	U	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Barium	Target	19.0		ug/L	19.0	*	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	63800		ug/L	63800	*	1	YES	S3VEM
Chromium	Target	0.47	J	ug/L	0.47	J	1	YES	S3VEM
Cobalt	Target	1.0	U	ug/L	0.22	J*	1	YES	S3VEM
Copper	Target	2.3		ug/L	2.3		1	YES	S3VEM
Iron	Target	200	U	ug/L	200	U	1	YES	S3VEM
Lead	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Magnesium	Target	9480		ug/L	9480	*	1	YES	S3VEM
Manganese	Target	1.0	U	ug/L	0.37	J	1	YES	S3VEM
Nickel	Target	1.0		ug/L	1.0	*	1	YES	S3VEM
Potassium	Target	975		ug/L	975		1	YES	S3VEM
Selenium	Target	5.0	U	ug/L	5.0	U	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	15600		ug/L	15600	*	1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	5.5		ug/L	5.5	*	1	YES	S3VEM
Zinc	Target	1.3	J	ug/L	1.3	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE229	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: P001-PW04	pH: 1.	Sample Date: 04/26/2018	Sample Time: 08:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE229	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: P001-PW04	pH: 1.	Sample Date: 04/26/2018	Sample Time: 08:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	20.0	U	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Barium	Target	19.5		ug/L	19.5	*	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	60700		ug/L	60700	*	1	YES	S3VEM
Chromium	Target	0.28	J	ug/L	0.28	J	1	YES	S3VEM
Cobalt	Target	1.0	U	ug/L	0.14	J*	1	YES	S3VEM
Copper	Target	0.48	J	ug/L	0.48	J	1	YES	S3VEM
Iron	Target	200	U	ug/L	200	U	1	YES	S3VEM
Lead	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Magnesium	Target	9650		ug/L	9650	*	1	YES	S3VEM
Manganese	Target	1.0	U	ug/L	0.32	J	1	YES	S3VEM
Nickel	Target	0.89	J	ug/L	0.89	J*	1	YES	S3VEM
Potassium	Target	1010		ug/L	1010		1	YES	S3VEM
Selenium	Target	5.0	U	ug/L	5.0	U	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	15100		ug/L	15100	*	1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	5.7		ug/L	5.7	*	1	YES	S3VEM
Zinc	Target	0.47	J	ug/L	0.47	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE231	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: P001-PW05	pH: 1.	Sample Date: 04/26/2018	Sample Time: 11:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE231	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: P001-PW05	pH: 1.	Sample Date: 04/26/2018	Sample Time: 11:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	9.3	J	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Barium	Target	24.4		ug/L	24.4	*	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	74800		ug/L	74800	*	1	YES	S3VEM
Chromium	Target	0.97	J	ug/L	0.97	J	1	YES	S3VEM
Cobalt	Target	1.0	U	ug/L	0.14	J*	1	YES	S3VEM
Copper	Target	0.49	J	ug/L	0.49	J	1	YES	S3VEM
Iron	Target	16.8	J	ug/L	16.8	J	1	YES	S3VEM
Lead	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Magnesium	Target	10600		ug/L	10600	*	1	YES	S3VEM
Manganese	Target	2.0		ug/L	2.0		1	YES	S3VEM
Nickel	Target	1.4		ug/L	1.4	*	1	YES	S3VEM
Potassium	Target	1030		ug/L	1030		1	YES	S3VEM
Selenium	Target	0.59	J	ug/L	0.59	J	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	22100		ug/L	22100	*	1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	5.0	U	ug/L	4.7	J*	1	YES	S3VEM
Zinc	Target	1.6	J	ug/L	1.6	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE232	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: P001-PW06	pH: 1.	Sample Date: 04/26/2018	Sample Time: 11:02:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE232	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: P001-PW06	pH: 1.	Sample Date: 04/26/2018	Sample Time: 11:02:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	20.0	U	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	0.35	J	1	YES	S3VEM
Arsenic	Target	0.48	J	ug/L	0.48	J	1	YES	S3VEM
Barium	Target	23.0		ug/L	23.0	*	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	74200		ug/L	74200	*	1	YES	S3VEM
Chromium	Target	0.55	J	ug/L	0.55	J	1	YES	S3VEM
Cobalt	Target	1.0	U	ug/L	0.26	J*	1	YES	S3VEM
Copper	Target	1.0	J	ug/L	1.0	J	1	YES	S3VEM
Iron	Target	127	J	ug/L	127	J	1	YES	S3VEM
Lead	Target	0.30	J	ug/L	0.30	J	1	YES	S3VEM
Magnesium	Target	26100		ug/L	26100	*	1	YES	S3VEM
Manganese	Target	27.8		ug/L	27.8		1	YES	S3VEM
Nickel	Target	1.2		ug/L	1.2	*	1	YES	S3VEM
Potassium	Target	9520		ug/L	9520		1	YES	S3VEM
Selenium	Target	5.0	U	ug/L	5.0	U	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	337000		ug/L	337000	D*	4	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	5.0	U	ug/L	0.093	J*	1	YES	S3VEM
Zinc	Target	8.5		ug/L	8.5		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE233	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: P001-PW07	pH: 1.	Sample Date: 04/26/2018	Sample Time: 11:19:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE233	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: P001-PW07	pH: 1.	Sample Date: 04/26/2018	Sample Time: 11:19:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	20.0	U	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	0.15	J	1	YES	S3VEM
Arsenic	Target	0.18	J	ug/L	0.18	J	1	YES	S3VEM
Barium	Target	52.7		ug/L	52.7	*	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	99100		ug/L	99100	*	1	YES	S3VEM
Chromium	Target	0.26	J	ug/L	0.26	J	1	YES	S3VEM
Cobalt	Target	1.0	U	ug/L	0.30	J*	1	YES	S3VEM
Copper	Target	0.66	J	ug/L	0.66	J	1	YES	S3VEM
Iron	Target	95.8	J	ug/L	95.8	J	1	YES	S3VEM
Lead	Target	0.57	J	ug/L	0.57	J	1	YES	S3VEM
Magnesium	Target	11200		ug/L	11200	*	1	YES	S3VEM
Manganese	Target	6.1		ug/L	6.1		1	YES	S3VEM
Nickel	Target	1.6		ug/L	1.6	*	1	YES	S3VEM
Potassium	Target	3180		ug/L	3180		1	YES	S3VEM
Selenium	Target	1.2	J	ug/L	1.2	J	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	61300		ug/L	61300	*	1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	5.0	U	ug/L	2.6	J*	1	YES	S3VEM
Zinc	Target	105		ug/L	105		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE234	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location: P001-PW08	pH: 1.	Sample Date: 04/26/2018	Sample Time: 12:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE234	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location: P001-PW08	pH: 1.	Sample Date: 04/26/2018	Sample Time: 12:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	8.8	J	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Barium	Target	53.9		ug/L	53.9	*	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	125000		ug/L	125000	*	1	YES	S3VEM
Chromium	Target	0.085	J	ug/L	0.085	J	1	YES	S3VEM
Cobalt	Target	1.0	U	ug/L	0.44	J*	1	YES	S3VEM
Copper	Target	0.84	J	ug/L	0.84	J	1	YES	S3VEM
Iron	Target	79.3	J	ug/L	79.3	J	1	YES	S3VEM
Lead	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Magnesium	Target	11700		ug/L	11700	*	1	YES	S3VEM
Manganese	Target	128		ug/L	128		1	YES	S3VEM
Nickel	Target	2.2		ug/L	2.2	*	1	YES	S3VEM
Potassium	Target	998		ug/L	998		1	YES	S3VEM
Selenium	Target	1.8	J	ug/L	1.8	J	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	37700		ug/L	37700	*	1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	5.0	U	ug/L	3.9	J*	1	YES	S3VEM
Zinc	Target	12.7		ug/L	12.7		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Mercury by Cold Vapor	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Mercury	Target	0.20	U	ug/L	0.20	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE225** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Metals by ICP-MS	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Aluminum	Target	20.0	U	ug/L	20.0	U	1	YES	S3VEM
Antimony	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Arsenic	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Barium	Target	10.0	U	ug/L	10.0	U	1	YES	S3VEM
Beryllium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Cadmium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Calcium	Target	500	U	ug/L	500	U	1	YES	S3VEM
Chromium	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Cobalt	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Copper	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM
Iron	Target	200	U	ug/L	200	U	1	YES	S3VEM
Lead	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Magnesium	Target	500	U	ug/L	500	U	1	YES	S3VEM
Manganese	Target	0.072	J	ug/L	0.072	J	1	YES	S3VEM
Nickel	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Potassium	Target	500	U	ug/L	500	U	1	YES	S3VEM
Selenium	Target	5.0	U	ug/L	5.0	U	1	YES	S3VEM
Silver	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Sodium	Target	500	U	ug/L	500	U	1	YES	S3VEM
Thallium	Target	1.0	U	ug/L	1.0	U	1	YES	S3VEM
Vanadium	Target	0.13	J	ug/L	0.13	J	1	YES	S3VEM
Zinc	Target	2.0	U	ug/L	2.0	U	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project	GroupID: 47611/EPW14029/MBE225	Lab Name: Bonner Analytical Testing Co.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
DESA/HWSB/HWSS
2890, Woodbridge Avenue, Edison, NJ 08837

EXECUTIVE NARRATIVE

Case No.:47611
Site: Proteco Portables Wells
Number of Samples: 8 (Water)
Analysis: CN

SDG No.: MBE227
Laboratory: Bonner Analytical Testing Co.
Sampling dates: 4/26/18
Validation SOP: HW-3c (Rev 1)

QAPP
Contractor: Weston Solutions
Reference: DCN # RST3-04-D-0170

SUMMARY OF DEFINITIONS:

Critical: Results have an unacceptable level of uncertainty and should not be used for making decisions. Data have been qualified "R" rejected.
Major: A level of uncertainty exists that may not meet the data quality objectives for the project. A bias is likely to be present in the results. Data has been qualified "J" estimated. "J+" and "J-" represent likely direction of the bias.
Minor: The level of uncertainty is acceptable. No significant bias in the data was observed.

Critical Findings:
None

Major Findings:
None

Minor Findings:
None

COMMENT: The site specific QAPP did not specify the project action levels for this site.

Reviewer Name(s): Jianwei Huang

Approver's Signature: **Date: 05/10/18**

Name: Russell Arnone

Affiliation: USEPA/R2/HWSB/HWSS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
DESA/HWSB/HWSS
2890, Woodbridge Avenue, Edison, NJ 08837

Data Qualifier Definitions (National Functional Guidelines)			
Qualifier Symbol	**Explanation**		
	INORGANICS	**ORGANICS**	**CHLORINATED DIOXIN/FURAN**
U	The analyte was analyzed for, but was not detected above the level of the reported quantitation limit.	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method	The analyte was analyzed for but not detected. The value preceding the "U" may represent the adjusted Contract Required Quantitation Limit (see DLM02.X, Exhibit D, Section 1.2 and Table 2), or the sample specific estimated detection limit (EDL, see Method 8290A, Section 11.9.5).
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL.	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to an issue with the quality of the data generated because certain QC criteria were not met, or the concentration of the analyte was below the adjusted CRQL).
J+	The result is an estimated quantity, but the result may be biased high.	The result is an estimated quantity, but the result may be biased high.	
J–	The result is an estimated quantity, but the result may be biased low.	The result is an estimated quantity, but the result may be biased low.	
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.	The analyte was not detected (see definition of "U" flag, above). The reported value should be considered approximate.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
N		The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification”.	
NJ		The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	
C		This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).	
X		This qualifier applies to pesticide and Aroclor results when GC/MS analysis was attempted but was unsuccessful.	

DATA ASSESSMENT

ANALYSIS: CYANIDE

The current SOP HW-3c (Rev 1) September 2016, USEPA Region II for the evaluation of Cyanide generated through Statement of Work ISOM02.2, and any future editorial revisions of ISOM02.2 has been applied. Data have been reviewed according to TDF specifications, the National Functional Guidelines Report and the CCS Semi- Automated Screening Results Report.

1. HOLDING TIME AND PRESERVATION

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time, pH (aqueous samples), or cooler temperature are not within the acceptable range, the data may not be valid. Those analytes detected in the samples whose holding time (14 days) and pH (≥12) have not been met, will be qualified as estimated, "J"; the non-detects (sample quantitation limits) will be flagged as unusable, "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

2. CALIBRATION

Method requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data for cyanide. Initial Calibration Verification (ICV) demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. Continuing Calibration Verification (CCV) demonstrates that the initial calibration is still valid by checking the performance of the instrument on a continuing basis.

A) INITIAL CALIBRATION

A blank and at least five calibration standards shall be employed to establish the analytical curve. At least one of the calibration standards shall be at or below the Contract Required Quantitation Limit (CRQL). The calibration curve shall be fitted using linear regression or weighted linear regression. The curve may be forced through zero. The calibration curve for cyanide shall possess a correlation coefficient of ≥ 0.995 to ensure the linearity over the calibrated range. The percent differences calculated for all of the non-zero standards must be within ±30% of the true value of the standard. The y-intercept of the curve must be less than the CRQL. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) INITIAL AND CONTINUING CALIBRATION VERIFICATION

Immediately after each system has been calibrated, the accuracy of the initial calibration must be verified and documented for cyanide by the analysis of an ICV solution(s).
The CCV standard shall be analyzed at a frequency of every hour during an analytical run. The CCV standard shall also be analyzed at the beginning of the run, and again after the last analytical sample. The percent recovery acceptable limits for ICV/CCV are 85 – 115%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

3. BLANK CONTAMINATION

Quality assurance (QA) blanks, i.e., method, field, or rinse blanks are prepared to identify any contamination, which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations. Qualifications were applied to the samples and analytes as shown below.

The following samples have analyte results less than or equal to CRQLs. The associated CCB analyte results are less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.

Cyanide MBE225, MBE227, MBE228, MBE229, MBE231, MBE232, MBE233, MBE234

The following samples have analyte results greater than or equal to MDLs and less than or equal to CRQLs. The associated ICB analyte results are greater than or equal to MDLs and less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.

Cyanide MBE225, MBE227, MBE228, MBE229, MBE231, MBE232, MBE233, MBE234

The following samples have analyte results greater than or equal to MDLs and less than or equal to CRQLs. The associated PB analyte results are greater than or equal to MDLs and less than or equal to CRQLs. Detects are qualified as U. Sample results are reported at CRQLs.

Cyanide MBE225, MBE227, MBE228, MBE229, MBE231, MBE232, MBE233, MBE234

4. SPIKE SAMPLE ANALYSIS

The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The spike Percent Recovery (%R) shall be within the established acceptance limits of 75 – 125%. However, spike recovery limits do not apply when the sample concentration is ≥ 4x the spike added. For a matrix spike analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the matrix spike sample.

No problems were found for this criterion.

5. DUPLICATE SAMPLE ANALYSIS

The objective of duplicate sample analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. A control limit of 20% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values ≥ five times (5x) the Contract Required Quantitation Limit (CRQL). A control limit of the CRQL shall be used if either the sample or duplicate value is < 5x the CRQL. For a duplicate sample analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the duplicate sample.

No problems were found for this criterion.

6. FIELD DUPLICATE (MBE227/MBE228)

Field duplicates may be taken and analyzed as an indication of overall precision. These analyses measure both field and laboratory precision. A control limit of 20% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values ≥ five times (5x) the Contract Required Quantitation Limit (CRQL). A control limit of the CRQL shall be used if either the sample or duplicate value is < 5x the CRQL. For field duplicates analysis that does not meet the technical criteria, the action was applied to only the field sample and it's duplicate.

No problems were found for this criterion.

7. PERCENT SOLIDS

The laboratory is required to perform the percent solids determination prior to sample preparation and analysis. Qualifications were applied to the samples and analytes as shown below.

Not applicable.

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE225	Method: Cyanide	Matrix: Water	MA Number:
Sample Location: P001-PW01	pH: 13.	Sample Date: 04/26/2018	Sample Time: 09:24:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	10.0	U	ug/L	7.9	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227	Method: Cyanide	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 13.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	10.0	U	ug/L	6.7	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227D	Method: Cyanide	Matrix: Water	MA Number:
Sample Location:	pH: 13.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	7.4	J	ug/L	7.4	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE227S	Method: Cyanide	Matrix: Water	MA Number:
Sample Location:	pH: 13.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Spike	103		ug/L	103		1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE228	Method: Cyanide	Matrix: Water	MA Number:
Sample Location: P001-PW03	pH: 13.	Sample Date: 04/26/2018	Sample Time: 09:56:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	10.0	U	ug/L	7.4	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE229	Method: Cyanide	Matrix: Water	MA Number:
Sample Location: P001-PW04	pH: 13.	Sample Date: 04/26/2018	Sample Time: 08:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	10.0	U	ug/L	6.2	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE231	Method: Cyanide	Matrix: Water	MA Number:
Sample Location: P001-PW05	pH: 13.	Sample Date: 04/26/2018	Sample Time: 11:45:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	10.0	U	ug/L	6.3	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE232	Method: Cyanide	Matrix: Water	MA Number:
Sample Location: P001-PW06	pH: 13.	Sample Date: 04/26/2018	Sample Time: 11:02:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	10.0	U	ug/L	7.5	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE233	Method: Cyanide	Matrix: Water	MA Number:
Sample Location: P001-PW07	pH: 13.	Sample Date: 04/26/2018	Sample Time: 11:19:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	10.0	U	ug/L	7.2	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: MBE234	Method: Cyanide	Matrix: Water	MA Number:
Sample Location: P001-PW08	pH: 13.	Sample Date: 04/26/2018	Sample Time: 12:30:00
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	10.0	U	ug/L	7.1	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project | **GroupID: 47611/EPW14029/MBE227** | **Lab Name: Bonner Analytical Testing Co.**

Sample Number: PBW01	Method: Cyanide	Matrix: Water	MA Number:
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture:		% Solids:	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Cyanide	Target	6.1	J	ug/L	6.1	J	1	YES	S3VEM

Sample Summary Report

Project Name: PROTECO POTABLE WELLS Project	GroupID: 47611/EPW14029/MBE227	Lab Name: Bonner Analytical Testing Co.