



March 11, 2022
Project No. DNA-210196

**Addendum to the 2021 CCR Annual Groundwater Monitoring and Corrective Action Report
AES Puerto Rico LP, Guayama, Puerto Rico**

An Annual Groundwater Monitoring and Corrective Action Report (Annual Report) documenting the activities completed in 2021 for the Agremax Staging Area at AES Puerto Rico, LP in Guayama, PR (AES-PR) was completed and placed in the facilities operating record on January 31, 2022, as required by 40 CFR Part 257 §257.90(e)(1) through §257.90(e)(6).

This Addendum has been prepared in response to the United States Environmental Protection Agency's (USEPA's) letter of January 11, 2022, requesting that AES-PR provide additional information in the Annual Report, as follows:

- Groundwater flow direction(s) and rate(s);
- Laboratory analytical reports; and
- Statistical analyses, including a detailed discussion of the statistical analyses (e.g., statistical methods applied, confidence levels, normality test results).

While this information is not specifically referred to in 40 CFR §257.90(e) for inclusion in the annual reports, it has been routinely collected and maintained in AES-PR's files and is being provided in the appendices to this Addendum as follows:

- **Appendix A – Groundwater Flow Direction and Rate**
Includes a table summarizing the data and calculations used to determine groundwater flow rates and the groundwater contour maps for each sampling event with arrows to indicate the interpreted direction of groundwater flow.
- **Appendix B – Laboratory Analytical Reports**
Includes laboratory data packages with supporting information, such as, case narrative, sample and method summary, analytical results, quality control, and chain-of-custody documentation.
- **Appendix C – Statistical Analyses**
Includes a discussion of the statistical methods employed along with statistical evaluation findings and statistical software outputs.

APPENDIX A

GROUNDWATER FLOW DIRECTION AND RATE

Legend

- CCR Upgradient Monitoring Well
- CCR Downgradient Monitoring Well
- Temporary Monitoring Well
- Temporary Piezometer
- Groundwater Elevation Contour Line
- Groundwater Elevation in Feet above MSL
(Measured on 6-Apr-2021)
- Approximate Groundwater Flow Direction
- 0.014 ft/d Groundwater Flow Rate
(i.e., Velocity in feet per day)

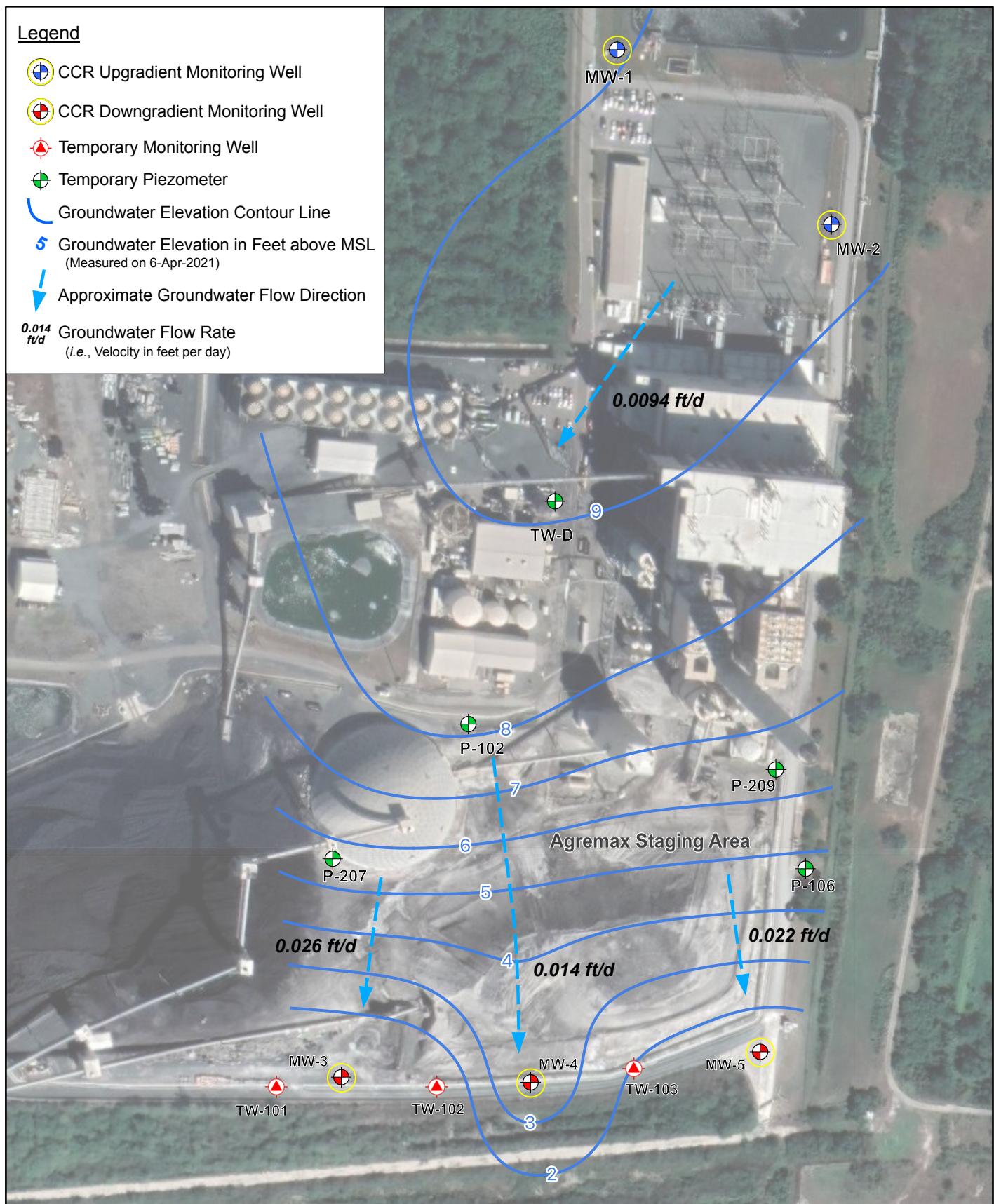
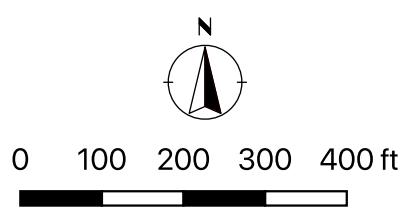


Figure A-1
April 2021 Groundwater Contour Map
AES Puerto Rico, LP
Guayama, Puerto Rico



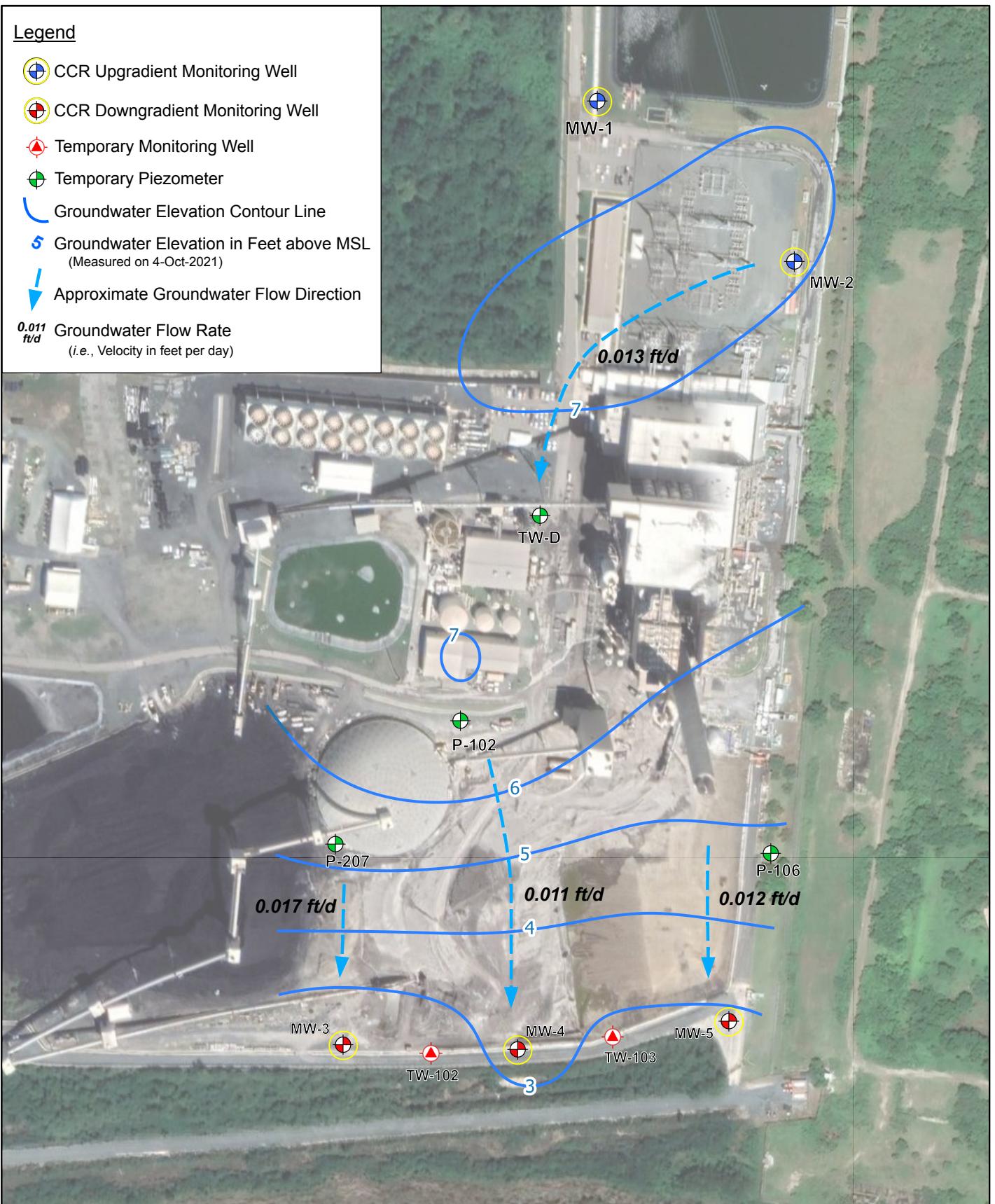


Figure A-2
October 2021 Groundwater Contour Map
AES Puerto Rico, LP
Guayama, Puerto Rico



0 100 200 300 400 ft



DNA-ENVIRONMENT, LLC

Determination of Groundwater Velocity (Flow Rate)
AES Puerto Rico LP, Guayama, Puerto Rico

April 2021 Sampling Event

		Calculations						
Uppermost Aquifer	Flow Path Direction	h_1 (ft)	h_2 (ft)	Δl (ft)	$\Delta h/\Delta l$ (ft/ft)	K_h	n_e	V (ft/d)
North	Southwest (MW-2 to TW-D)	9.24	9.07	681.24	0.00025	9.45	0.25	0.0094
South	South (P-207 to MW-3)	5.62	0.85	378.76	0.0126	0.56	0.27	0.026
	South (P-102 to MW-4)	8.14	3.75	628.89	0.0070	0.56	0.27	0.014
	South (P-106 to MW-5)	4.72	1.33	326.83	0.0104	0.56	0.27	0.022

October 2021 Sampling Event

		Calculations						
Uppermost Aquifer	Flow Path Direction	h_1 (ft)	h_2 (ft)	Δl (ft)	$\Delta h/\Delta l$ (ft/ft)	K_h	n_e	V (ft/d)
North	Southwest (MW-2 to TW-D)	7.03	6.79	681.24	0.00035	9.45	0.25	0.013
South	South (P-207 to MW-3)	5.31	2.23	378.76	0.0081	0.56	0.27	0.017
	South (P-102 to MW-4)	6.86	3.42	628.89	0.0055	0.56	0.27	0.011
	South (P-106 to MW-5)	4.78	2.87	326.83	0.0058	0.56	0.27	0.012

Notes:

ft = feet

ft/ft = feet per foot

ft/d = feet per day

h_1, h_2 = point of interpreted groundwater elevation

Δh = difference in groundwater elevation between points

Δl = distance between location 1 and 2

$\Delta h/\Delta l$ = hydraulic gradient

K_h = horizontal hydraulic conductivity estimated from slug tests in selected well points in 2017 and 2020.

n_e = effective porosity

V = groundwater flow velocity

Groundwater flow velocity equation: $V = [K_h * (\Delta h / \Delta l)] / n$

Flow path direction: include general flow direction and well point used in the calculations.

APPENDIX B

LABORATORY ANALYTICAL REPORTS

(SAMPLING EVENTS: APRIL 2021 AND OCTOBER 2021)

LABORATORY ANALYTICAL REPORT: APRIL 2021 SAMPLING EVENT



Environment Testing
America



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-197359-1

Client Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

For:

DNA-Environment, LLC
35 Calle Juan C Borbon
Ste 67-227
Guaynabo, Puerto Rico 00969-5375

Attn: Alberto Melendez

Authorized for release by:
7/6/2021 10:08:05 AM

Richard Wright, Senior Project Manager
(708)746-0045
Richard.Wright@Eurofinset.com

LINKS

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results through

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Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Case Narrative

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-197359-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-197359-1

Receipt

The samples were received on 4/9/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3° C.

Metals

Methods 6020, 6020A: The internal standard Terbium (Tb) was used to report the elements Lead and Thallium in batch 500-593225. This was due to the LCS being spiked with the trace digestion spike which contains Bismuth.

Method 6020: The following sample was diluted due to the abundance of sodium (Na): AES-MW5-040621 (500-197359-6). Elevated reporting limits (RLs) are provided for Boron (B) and Calcium (Ca).

Method 6020: The continuing calibration verification (CCV) associated with batch 500-593523 (lines 85 and 93), and with batch 500-593036 (lines 135 and 146) recovered above the upper control limit for Lithium. Samples AES-MW2-040621 (500-197359-2), AES-MW5-040621 (500-197359-6) and AES-FB-040621 (500-197359-7) were associated with these CCVs and were non-detects for the affected analyte; therefore, the data have been reported.

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

General Chemistry

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

Detection Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-040621

Lab Sample ID: 500-197359-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00081	J	0.0010	0.00023	mg/L	1		6020	Total Recoverable
Barium	0.043		0.0025	0.00073	mg/L	1		6020	Total Recoverable
Boron	0.21		0.050	0.013	mg/L	1		6020	Total Recoverable
Calcium	160		0.20	0.044	mg/L	1		6020	Total Recoverable
Cobalt	0.00090	J	0.0010	0.00040	mg/L	1		6020	Total Recoverable
Lithium	0.0015	J	0.0020	0.00050	mg/L	1		6020	Total Recoverable
Selenium	0.0049		0.0025	0.00098	mg/L	1		6020	Total Recoverable
Sulfate	460		20	9.5	mg/L	100		9056A	Total/NA
Total Dissolved Solids	1700		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	370		20	10	mg/L	10		SM 4500 Cl- E	Total/NA
Fluoride	0.76		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	7.08				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-MW2-040621

Lab Sample ID: 500-197359-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00067	J	0.0010	0.00023	mg/L	1		6020	Total Recoverable
Barium	0.16	F1	0.0025	0.00073	mg/L	1		6020	Total Recoverable
Boron	0.17		0.050	0.013	mg/L	1		6020	Total Recoverable
Calcium	130		0.20	0.044	mg/L	1		6020	Total Recoverable
Cobalt	0.00050	J	0.0010	0.00040	mg/L	1		6020	Total Recoverable
Lithium	0.00075	J	0.0020	0.00050	mg/L	1		6020	Total Recoverable
Sulfate	27		5.0	2.4	mg/L	25		9056A	Total/NA
Total Dissolved Solids	710		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	180	F1	10	5.0	mg/L	5		SM 4500 Cl- E	Total/NA
Fluoride	0.64		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	6.58				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-MW3-040621

Lab Sample ID: 500-197359-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0022		0.0010	0.00023	mg/L	1		6020	Total Recoverable
Barium	0.22		0.0025	0.00073	mg/L	1		6020	Total Recoverable
Boron	0.98		0.50	0.13	mg/L	10		6020	Total Recoverable
Calcium	320		2.0	0.44	mg/L	10		6020	Total Recoverable
Cobalt	0.0022		0.0010	0.00040	mg/L	1		6020	Total Recoverable
Lithium	0.0024		0.0020	0.00050	mg/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW3-040621 (Continued)

Lab Sample ID: 500-197359-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.19		0.0050	0.0025	mg/L	1		6020	Total Recoverable
Selenium	0.16		0.0025	0.00098	mg/L	1		6020	Total Recoverable
Sulfate	2400		100	48	mg/L	500		9056A	Total/NA
Total Dissolved Solids	11000		100	43	mg/L	1		SM 2540C	Total/NA
Chloride	4800		200	100	mg/L	100		SM 4500 Cl- E	Total/NA
Fluoride	1.9		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	6.75				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-MW4-040621

Lab Sample ID: 500-197359-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0037		0.0010	0.00023	mg/L	1		6020	Total Recoverable
Barium	0.043		0.0025	0.00073	mg/L	1		6020	Total Recoverable
Boron	2.9		1.0	0.25	mg/L	20		6020	Total Recoverable
Calcium	610		4.0	0.89	mg/L	20		6020	Total Recoverable
Chromium	0.0020 J		0.0050	0.0011	mg/L	1		6020	Total Recoverable
Cobalt	0.0013		0.0010	0.00040	mg/L	1		6020	Total Recoverable
Lead	0.00030 J		0.00050	0.00019	mg/L	1		6020	Total Recoverable
Lithium	0.66		0.0020	0.00050	mg/L	1		6020	Total Recoverable
Molybdenum	0.98		0.0050	0.0025	mg/L	1		6020	Total Recoverable
Selenium	0.0052		0.0025	0.00098	mg/L	1		6020	Total Recoverable
Sulfate	14000		400	190	mg/L	2000		9056A	Total/NA
Total Dissolved Solids	34000		500	220	mg/L	1		SM 2540C	Total/NA
Chloride	9800		400	200	mg/L	200		SM 4500 Cl- E	Total/NA
Fluoride	0.61		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	7.02				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-MW4-DUP-040621

Lab Sample ID: 500-197359-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0033		0.0010	0.00023	mg/L	1		6020	Total Recoverable
Barium	0.044		0.0025	0.00073	mg/L	1		6020	Total Recoverable
Boron	2.8		1.0	0.25	mg/L	20		6020	Total Recoverable
Calcium	590		4.0	0.89	mg/L	20		6020	Total Recoverable
Chromium	0.0017 J		0.0050	0.0011	mg/L	1		6020	Total Recoverable
Cobalt	0.0013		0.0010	0.00040	mg/L	1		6020	Total Recoverable
Lithium	0.61		0.0020	0.00050	mg/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-040621 (Continued)

Lab Sample ID: 500-197359-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.91		0.0050	0.0025	mg/L	1		6020	Total Recoverable
Selenium	0.0051		0.0025	0.00098	mg/L	1		6020	Total Recoverable
Sulfate	14000		400	190	mg/L	2000		9056A	Total/NA
Total Dissolved Solids	36000		500	220	mg/L	1		SM 2540C	Total/NA
Chloride	9800		400	200	mg/L	200		SM 4500 Cl- E	Total/NA
Fluoride	0.62		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AES-MW5-040621

Lab Sample ID: 500-197359-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.016		0.0010	0.00023	mg/L	1		6020	Total Recoverable
Barium	0.034		0.0025	0.00073	mg/L	1		6020	Total Recoverable
Boron	0.37		0.25	0.064	mg/L	5		6020	Total Recoverable
Calcium	660		1.0	0.22	mg/L	5		6020	Total Recoverable
Cobalt	0.0027		0.0010	0.00040	mg/L	1		6020	Total Recoverable
Lithium	0.0048	^2 ^+	0.0020	0.00050	mg/L	1		6020	Total Recoverable
Sulfate	2300		50	24	mg/L	250		9056A	Total/NA
Total Dissolved Solids	9200		100	43	mg/L	1		SM 2540C	Total/NA
Chloride	3800		200	100	mg/L	100		SM 4500 Cl- E	Total/NA
Fluoride	0.46		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	6.44				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-FB-040621

Lab Sample ID: 500-197359-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00041	J	0.0010	0.00023	mg/L	1		6020	Total Recoverable
Boron	0.59		0.050	0.013	mg/L	1		6020	Total Recoverable
Calcium	0.25		0.20	0.044	mg/L	1		6020	Total Recoverable
Lithium	0.0025	^2 ^+	0.0020	0.00050	mg/L	1		6020	Total Recoverable
Sulfate	0.50		0.20	0.095	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
9056A	Anions, Ion Chromatography	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
Field Sampling	Field Sampling	EPA	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-197359-1	AES-MW1-040621	Water	04/06/21 10:10	04/09/21 09:30	
500-197359-2	AES-MW2-040621	Water	04/06/21 11:32	04/09/21 09:30	
500-197359-3	AES-MW3-040621	Water	04/06/21 14:34	04/09/21 09:30	
500-197359-4	AES-MW4-040621	Water	04/06/21 16:26	04/09/21 09:30	
500-197359-5	AES-MW4-DUP-040621	Water	04/06/21 17:02	04/09/21 09:30	
500-197359-6	AES-MW5-040621	Water	04/06/21 18:00	04/09/21 09:30	
500-197359-7	AES-FB-040621	Water	04/06/21 18:05	04/09/21 09:30	

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Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-040621

Lab Sample ID: 500-197359-1

Matrix: Water

Date Collected: 04/06/21 10:10

Date Received: 04/09/21 09:30

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		04/12/21 08:05	04/13/21 01:44	1
Arsenic	0.00081	J	0.0010	0.00023	mg/L		04/12/21 08:05	04/13/21 18:47	1
Barium	0.043		0.0025	0.00073	mg/L		04/12/21 08:05	04/13/21 01:44	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		04/12/21 08:05	04/13/21 01:44	1
Boron	0.21		0.050	0.013	mg/L		04/12/21 08:05	04/16/21 12:27	1
Calcium	160		0.20	0.044	mg/L		04/12/21 08:05	04/13/21 01:44	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		04/12/21 08:05	04/13/21 01:44	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		04/12/21 08:05	04/13/21 01:44	1
Cobalt	0.00090	J	0.0010	0.00040	mg/L		04/12/21 08:05	04/13/21 01:44	1
Lead	0.00019	U	0.00050	0.00019	mg/L		04/12/21 08:05	04/13/21 18:47	1
Lithium	0.0015	J	0.0020	0.00050	mg/L		04/12/21 08:05	04/13/21 18:47	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		04/12/21 08:05	04/13/21 01:44	1
Selenium	0.0049		0.0025	0.00098	mg/L		04/12/21 08:05	04/13/21 01:44	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		04/12/21 08:05	04/13/21 18:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		04/15/21 10:35	04/16/21 10:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	460		20	9.5	mg/L			04/21/21 12:41	100
Total Dissolved Solids	1700		10	4.3	mg/L			04/13/21 02:26	1
Chloride	370		20	10	mg/L			04/14/21 13:41	10
Fluoride	0.76		0.10	0.056	mg/L			04/19/21 15:34	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.08				SU			04/06/21 10:10	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW2-040621

Lab Sample ID: 500-197359-2

Matrix: Water

Date Collected: 04/06/21 11:32

Date Received: 04/09/21 09:30

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		04/12/21 08:05	04/13/21 01:47	1
Arsenic	0.00067 J		0.0010	0.00023	mg/L		04/12/21 08:05	04/13/21 18:51	1
Barium	0.16 F1		0.0025	0.00073	mg/L		04/12/21 08:05	04/13/21 01:47	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		04/12/21 08:05	04/13/21 01:47	1
Boron	0.17		0.050	0.013	mg/L		04/12/21 08:05	04/16/21 12:31	1
Calcium	130		0.20	0.044	mg/L		04/12/21 08:05	04/13/21 01:47	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		04/12/21 08:05	04/13/21 01:47	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		04/12/21 08:05	04/13/21 01:47	1
Cobalt	0.00050 J		0.0010	0.00040	mg/L		04/12/21 08:05	04/13/21 01:47	1
Lead	0.00019	U	0.00050	0.00019	mg/L		04/12/21 08:05	04/13/21 18:51	1
Lithium	0.00075 J		0.0020	0.00050	mg/L		04/12/21 08:05	04/28/21 17:59	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		04/12/21 08:05	04/13/21 01:47	1
Selenium	0.00098	U	0.0025	0.00098	mg/L		04/12/21 08:05	04/13/21 01:47	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		04/12/21 08:05	04/13/21 18:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		04/15/21 10:35	04/16/21 10:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	27		5.0	2.4	mg/L			04/21/21 12:55	25
Total Dissolved Solids	710		10	4.3	mg/L			04/13/21 02:31	1
Chloride	180 F1		10	5.0	mg/L			04/14/21 13:41	5
Fluoride	0.64		0.10	0.056	mg/L			04/19/21 15:34	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.58				SU			04/06/21 11:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW3-040621

Lab Sample ID: 500-197359-3

Matrix: Water

Date Collected: 04/06/21 14:34

Date Received: 04/09/21 09:30

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		04/12/21 08:05	04/13/21 02:04	1
Arsenic	0.0022		0.0010	0.00023	mg/L		04/12/21 08:05	04/13/21 19:08	1
Barium	0.22		0.0025	0.00073	mg/L		04/12/21 08:05	04/13/21 02:04	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		04/12/21 08:05	04/13/21 02:04	1
Boron	0.98		0.50	0.13	mg/L		04/12/21 08:05	04/16/21 12:55	10
Calcium	320		2.0	0.44	mg/L		04/12/21 08:05	04/13/21 19:12	10
Cadmium	0.00017	U	0.00050	0.00017	mg/L		04/12/21 08:05	04/13/21 02:04	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		04/12/21 08:05	04/13/21 02:04	1
Cobalt	0.0022		0.0010	0.00040	mg/L		04/12/21 08:05	04/13/21 02:04	1
Lead	0.00019	U	0.00050	0.00019	mg/L		04/12/21 08:05	04/13/21 19:08	1
Lithium	0.0024		0.0020	0.00050	mg/L		04/12/21 08:05	04/13/21 19:08	1
Molybdenum	0.19		0.0050	0.0025	mg/L		04/12/21 08:05	04/13/21 02:04	1
Selenium	0.16		0.0025	0.00098	mg/L		04/12/21 08:05	04/13/21 02:04	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		04/12/21 08:05	04/13/21 19:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		04/15/21 10:35	04/16/21 10:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2400		100	48	mg/L			05/03/21 20:22	500
Total Dissolved Solids	11000		100	43	mg/L			04/13/21 02:39	1
Chloride	4800		200	100	mg/L			04/14/21 13:43	100
Fluoride	1.9		0.10	0.056	mg/L			04/19/21 15:34	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.75				SU			04/06/21 14:34	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-040621

Lab Sample ID: 500-197359-4

Matrix: Water

Date Collected: 04/06/21 16:26

Date Received: 04/09/21 09:30

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		04/12/21 08:05	04/13/21 02:08	1
Arsenic	0.0037		0.0010	0.00023	mg/L		04/12/21 08:05	04/13/21 19:22	1
Barium	0.043		0.0025	0.00073	mg/L		04/12/21 08:05	04/13/21 02:08	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		04/12/21 08:05	04/13/21 02:08	1
Boron	2.9		1.0	0.25	mg/L		04/12/21 08:05	04/16/21 12:58	20
Calcium	610		4.0	0.89	mg/L		04/12/21 08:05	04/15/21 16:14	20
Cadmium	0.00017	U	0.00050	0.00017	mg/L		04/12/21 08:05	04/13/21 02:08	1
Chromium	0.0020	J	0.0050	0.0011	mg/L		04/12/21 08:05	04/13/21 02:08	1
Cobalt	0.0013		0.0010	0.00040	mg/L		04/12/21 08:05	04/13/21 02:08	1
Lead	0.00030	J	0.00050	0.00019	mg/L		04/12/21 08:05	04/13/21 19:22	1
Lithium	0.66		0.0020	0.00050	mg/L		04/12/21 08:05	04/13/21 19:22	1
Molybdenum	0.98		0.0050	0.0025	mg/L		04/12/21 08:05	04/13/21 02:08	1
Selenium	0.0052		0.0025	0.00098	mg/L		04/12/21 08:05	04/13/21 02:08	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		04/12/21 08:05	04/13/21 19:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		04/15/21 10:35	04/16/21 10:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14000		400	190	mg/L			04/21/21 13:49	2000
Total Dissolved Solids	34000		500	220	mg/L			04/13/21 02:42	1
Chloride	9800		400	200	mg/L			04/14/21 13:43	200
Fluoride	0.61		0.10	0.056	mg/L			04/19/21 15:34	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.02				SU			04/06/21 16:26	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-040621

Lab Sample ID: 500-197359-5

Matrix: Water

Date Collected: 04/06/21 17:02

Date Received: 04/09/21 09:30

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		04/12/21 08:05	04/13/21 02:18	1
Arsenic	0.0033		0.0010	0.00023	mg/L		04/12/21 08:05	04/13/21 19:29	1
Barium	0.044		0.0025	0.00073	mg/L		04/12/21 08:05	04/13/21 02:18	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		04/12/21 08:05	04/13/21 02:18	1
Boron	2.8		1.0	0.25	mg/L		04/12/21 08:05	04/16/21 13:02	20
Calcium	590		4.0	0.89	mg/L		04/12/21 08:05	04/15/21 16:18	20
Cadmium	0.00017	U	0.00050	0.00017	mg/L		04/12/21 08:05	04/13/21 02:18	1
Chromium	0.0017	J	0.0050	0.0011	mg/L		04/12/21 08:05	04/13/21 02:18	1
Cobalt	0.0013		0.0010	0.00040	mg/L		04/12/21 08:05	04/13/21 02:18	1
Lead	0.00019	U	0.00050	0.00019	mg/L		04/12/21 08:05	04/13/21 19:29	1
Lithium	0.61		0.0020	0.00050	mg/L		04/12/21 08:05	04/13/21 19:29	1
Molybdenum	0.91		0.0050	0.0025	mg/L		04/12/21 08:05	04/13/21 02:18	1
Selenium	0.0051		0.0025	0.00098	mg/L		04/12/21 08:05	04/13/21 02:18	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		04/12/21 08:05	04/13/21 19:29	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		04/15/21 10:35	04/16/21 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14000		400	190	mg/L			04/21/21 14:03	2000
Total Dissolved Solids	36000		500	220	mg/L			04/13/21 02:44	1
Chloride	9800		400	200	mg/L			04/14/21 13:43	200
Fluoride	0.62		0.10	0.056	mg/L			04/19/21 15:34	1

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW5-040621

Lab Sample ID: 500-197359-6

Matrix: Water

Date Collected: 04/06/21 18:00

Date Received: 04/09/21 09:30

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		04/12/21 08:05	04/13/21 02:21	1
Arsenic	0.016		0.0010	0.00023	mg/L		04/12/21 08:05	04/13/21 19:36	1
Barium	0.034		0.0025	0.00073	mg/L		04/12/21 08:05	04/13/21 02:21	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		04/12/21 08:05	04/13/21 02:21	1
Boron	0.37		0.25	0.064	mg/L		04/12/21 08:05	04/16/21 13:05	5
Calcium	660		1.0	0.22	mg/L		04/12/21 08:05	04/15/21 16:21	5
Cadmium	0.00017	U	0.00050	0.00017	mg/L		04/12/21 08:05	04/13/21 02:21	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		04/12/21 08:05	04/13/21 02:21	1
Cobalt	0.0027		0.0010	0.00040	mg/L		04/12/21 08:05	04/13/21 02:21	1
Lead	0.00019	U	0.00050	0.00019	mg/L		04/12/21 08:05	04/13/21 19:36	1
Lithium	0.0048 ^2 ^+		0.0020	0.00050	mg/L		04/12/21 08:05	04/13/21 02:21	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		04/12/21 08:05	04/13/21 02:21	1
Selenium	0.00098	U	0.0025	0.00098	mg/L		04/12/21 08:05	04/13/21 02:21	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		04/12/21 08:05	04/13/21 19:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		04/15/21 10:35	04/16/21 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2300		50	24	mg/L		04/21/21 14:17		250
Total Dissolved Solids	9200		100	43	mg/L		04/13/21 02:47		1
Chloride	3800		200	100	mg/L		04/14/21 13:44		100
Fluoride	0.46		0.10	0.056	mg/L		04/19/21 15:34		1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.44				SU		04/06/21 18:00		1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-FB-040621

Lab Sample ID: 500-197359-7

Matrix: Water

Date Collected: 04/06/21 18:05

Date Received: 04/09/21 09:30

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		04/12/21 08:05	04/13/21 02:25	1
Arsenic	0.00041	J	0.0010	0.00023	mg/L		04/12/21 08:05	04/13/21 19:43	1
Barium	0.00073	U	0.0025	0.00073	mg/L		04/12/21 08:05	04/13/21 02:25	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		04/12/21 08:05	04/13/21 02:25	1
Boron	0.59		0.050	0.013	mg/L		04/12/21 08:05	04/16/21 13:09	1
Calcium	0.25		0.20	0.044	mg/L		04/12/21 08:05	04/13/21 02:25	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		04/12/21 08:05	04/13/21 02:25	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		04/12/21 08:05	04/13/21 02:25	1
Cobalt	0.00040	U	0.0010	0.00040	mg/L		04/12/21 08:05	04/13/21 02:25	1
Lead	0.00019	U	0.00050	0.00019	mg/L		04/12/21 08:05	04/13/21 19:43	1
Lithium	0.0025	^2 ^+	0.0020	0.00050	mg/L		04/12/21 08:05	04/13/21 02:25	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		04/12/21 08:05	04/13/21 02:25	1
Selenium	0.00098	U	0.0025	0.00098	mg/L		04/12/21 08:05	04/13/21 02:25	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		04/12/21 08:05	04/13/21 19:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		04/15/21 10:35	04/16/21 10:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.50		0.20	0.095	mg/L			04/21/21 14:58	1
Total Dissolved Solids	4.3	U	10	4.3	mg/L			04/13/21 02:50	1
Chloride	1.0	U	2.0	1.0	mg/L			04/14/21 13:44	1
Fluoride	0.056	U	0.10	0.056	mg/L			05/03/21 16:10	1

Eurofins TestAmerica, Chicago

Definitions/Glossary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Metals

Prep Batch: 592735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total Recoverable	Water	3005A	
500-197359-2	AES-MW2-040621	Total Recoverable	Water	3005A	
500-197359-3	AES-MW3-040621	Total Recoverable	Water	3005A	
500-197359-4	AES-MW4-040621	Total Recoverable	Water	3005A	
500-197359-5	AES-MW4-DUP-040621	Total Recoverable	Water	3005A	
500-197359-6	AES-MW5-040621	Total Recoverable	Water	3005A	
500-197359-7	AES-FB-040621	Total Recoverable	Water	3005A	
MB 500-592735/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-592735/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-197359-2 MS	AES-MW2-040621	Total Recoverable	Water	3005A	
500-197359-2 MSD	AES-MW2-040621	Total Recoverable	Water	3005A	
500-197359-2 DU	AES-MW2-040621	Total Recoverable	Water	3005A	

Analysis Batch: 593036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total Recoverable	Water	6020	592735
500-197359-2	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-3	AES-MW3-040621	Total Recoverable	Water	6020	592735
500-197359-4	AES-MW4-040621	Total Recoverable	Water	6020	592735
500-197359-5	AES-MW4-DUP-040621	Total Recoverable	Water	6020	592735
500-197359-6	AES-MW5-040621	Total Recoverable	Water	6020	592735
500-197359-7	AES-FB-040621	Total Recoverable	Water	6020	592735
MB 500-592735/1-A	Method Blank	Total Recoverable	Water	6020	592735
LCS 500-592735/2-A	Lab Control Sample	Total Recoverable	Water	6020	592735
500-197359-2 MS	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 MSD	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 DU	AES-MW2-040621	Total Recoverable	Water	6020	592735

Analysis Batch: 593225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total Recoverable	Water	6020	592735
500-197359-2	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-3	AES-MW3-040621	Total Recoverable	Water	6020	592735
500-197359-3	AES-MW3-040621	Total Recoverable	Water	6020	592735
500-197359-4	AES-MW4-040621	Total Recoverable	Water	6020	592735
500-197359-5	AES-MW4-DUP-040621	Total Recoverable	Water	6020	592735
500-197359-6	AES-MW5-040621	Total Recoverable	Water	6020	592735
500-197359-7	AES-FB-040621	Total Recoverable	Water	6020	592735
MB 500-592735/1-A	Method Blank	Total Recoverable	Water	6020	592735
LCS 500-592735/2-A	Lab Control Sample	Total Recoverable	Water	6020	592735
500-197359-2 MS	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 MSD	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 DU	AES-MW2-040621	Total Recoverable	Water	6020	592735

Prep Batch: 593462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	7470A	
500-197359-2	AES-MW2-040621	Total/NA	Water	7470A	
500-197359-3	AES-MW3-040621	Total/NA	Water	7470A	
500-197359-4	AES-MW4-040621	Total/NA	Water	7470A	
500-197359-5	AES-MW4-DUP-040621	Total/NA	Water	7470A	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Metals (Continued)

Prep Batch: 593462 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-6	AES-MW5-040621	Total/NA	Water	7470A	
500-197359-7	AES-FB-040621	Total/NA	Water	7470A	
MB 500-593462/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-593462/15-A	Lab Control Sample	Total/NA	Water	7470A	
500-197359-2 MS	AES-MW2-040621	Total/NA	Water	7470A	
500-197359-2 MSD	AES-MW2-040621	Total/NA	Water	7470A	
500-197359-2 DU	AES-MW2-040621	Total/NA	Water	7470A	

Analysis Batch: 593523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-4	AES-MW4-040621	Total Recoverable	Water	6020	592735
500-197359-5	AES-MW4-DUP-040621	Total Recoverable	Water	6020	592735
500-197359-6	AES-MW5-040621	Total Recoverable	Water	6020	592735

Analysis Batch: 593675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	7470A	593462
500-197359-2	AES-MW2-040621	Total/NA	Water	7470A	593462
500-197359-3	AES-MW3-040621	Total/NA	Water	7470A	593462
500-197359-4	AES-MW4-040621	Total/NA	Water	7470A	593462
500-197359-5	AES-MW4-DUP-040621	Total/NA	Water	7470A	593462
500-197359-6	AES-MW5-040621	Total/NA	Water	7470A	593462
500-197359-7	AES-FB-040621	Total/NA	Water	7470A	593462
MB 500-593462/12-A	Method Blank	Total/NA	Water	7470A	593462
LCS 500-593462/15-A	Lab Control Sample	Total/NA	Water	7470A	593462
500-197359-2 MS	AES-MW2-040621	Total/NA	Water	7470A	593462
500-197359-2 MSD	AES-MW2-040621	Total/NA	Water	7470A	593462
500-197359-2 DU	AES-MW2-040621	Total/NA	Water	7470A	593462

Analysis Batch: 593722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total Recoverable	Water	6020	592735
500-197359-2	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-3	AES-MW3-040621	Total Recoverable	Water	6020	592735
500-197359-4	AES-MW4-040621	Total Recoverable	Water	6020	592735
500-197359-5	AES-MW4-DUP-040621	Total Recoverable	Water	6020	592735
500-197359-6	AES-MW5-040621	Total Recoverable	Water	6020	592735
500-197359-7	AES-FB-040621	Total Recoverable	Water	6020	592735
MB 500-592735/1-A	Method Blank	Total Recoverable	Water	6020	592735
LCS 500-592735/2-A	Lab Control Sample	Total Recoverable	Water	6020	592735
500-197359-2 MS	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 MSD	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 DU	AES-MW2-040621	Total Recoverable	Water	6020	592735

Analysis Batch: 595863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-2	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 MS	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 MSD	AES-MW2-040621	Total Recoverable	Water	6020	592735
500-197359-2 DU	AES-MW2-040621	Total Recoverable	Water	6020	592735

Eurofins TestAmerica, Chicago

QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

General Chemistry

Analysis Batch: 592917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	SM 2540C	
500-197359-2	AES-MW2-040621	Total/NA	Water	SM 2540C	
500-197359-3	AES-MW3-040621	Total/NA	Water	SM 2540C	
500-197359-4	AES-MW4-040621	Total/NA	Water	SM 2540C	
500-197359-5	AES-MW4-DUP-040621	Total/NA	Water	SM 2540C	
500-197359-6	AES-MW5-040621	Total/NA	Water	SM 2540C	
500-197359-7	AES-FB-040621	Total/NA	Water	SM 2540C	
MB 500-592917/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-592917/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-197359-2 MS	AES-MW2-040621	Total/NA	Water	SM 2540C	
500-197359-2 MSD	AES-MW2-040621	Total/NA	Water	SM 2540C	
500-197359-1 DU	AES-MW1-040621	Total/NA	Water	SM 2540C	

Analysis Batch: 593305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	SM 4500 Cl- E	
500-197359-2	AES-MW2-040621	Total/NA	Water	SM 4500 Cl- E	
500-197359-3	AES-MW3-040621	Total/NA	Water	SM 4500 Cl- E	
500-197359-4	AES-MW4-040621	Total/NA	Water	SM 4500 Cl- E	
500-197359-5	AES-MW4-DUP-040621	Total/NA	Water	SM 4500 Cl- E	
500-197359-6	AES-MW5-040621	Total/NA	Water	SM 4500 Cl- E	
500-197359-7	AES-FB-040621	Total/NA	Water	SM 4500 Cl- E	
MB 500-593305/52	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-593305/53	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-197359-2 MS	AES-MW2-040621	Total/NA	Water	SM 4500 Cl- E	
500-197359-2 MSD	AES-MW2-040621	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 593977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	SM 4500 F C	
500-197359-2	AES-MW2-040621	Total/NA	Water	SM 4500 F C	
500-197359-3	AES-MW3-040621	Total/NA	Water	SM 4500 F C	
500-197359-4	AES-MW4-040621	Total/NA	Water	SM 4500 F C	
500-197359-5	AES-MW4-DUP-040621	Total/NA	Water	SM 4500 F C	
500-197359-6	AES-MW5-040621	Total/NA	Water	SM 4500 F C	
MB 500-593977/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-593977/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-197359-2 MS	AES-MW2-040621	Total/NA	Water	SM 4500 F C	
500-197359-2 MSD	AES-MW2-040621	Total/NA	Water	SM 4500 F C	

Analysis Batch: 594439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	9056A	
500-197359-2	AES-MW2-040621	Total/NA	Water	9056A	
500-197359-4	AES-MW4-040621	Total/NA	Water	9056A	
500-197359-5	AES-MW4-DUP-040621	Total/NA	Water	9056A	
500-197359-6	AES-MW5-040621	Total/NA	Water	9056A	
500-197359-7	AES-FB-040621	Total/NA	Water	9056A	
MB 500-594439/3	Method Blank	Total/NA	Water	9056A	
LCS 500-594439/4	Lab Control Sample	Total/NA	Water	9056A	
500-197359-2 MS	AES-MW2-040621	Total/NA	Water	9056A	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

General Chemistry (Continued)

Analysis Batch: 594439 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-2 MSD	AES-MW2-040621	Total/NA	Water	9056A	

Analysis Batch: 596441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-3	AES-MW3-040621	Total/NA	Water	9056A	
MB 500-596441/3	Method Blank	Total/NA	Water	9056A	
LCS 500-596441/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 596495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-7	AES-FB-040621	Total/NA	Water	SM 4500 F C	
MB 500-596495/15	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-596495/16	Lab Control Sample	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 592771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	Field Sampling	
500-197359-2	AES-MW2-040621	Total/NA	Water	Field Sampling	
500-197359-3	AES-MW3-040621	Total/NA	Water	Field Sampling	
500-197359-4	AES-MW4-040621	Total/NA	Water	Field Sampling	
500-197359-6	AES-MW5-040621	Total/NA	Water	Field Sampling	

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 500-592735/1-A

Matrix: Water

Analysis Batch: 593036

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L	D	04/12/21 08:05	04/13/21 01:37	1
Barium	0.00073	U	0.0025	0.00073	mg/L		04/12/21 08:05	04/13/21 01:37	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		04/12/21 08:05	04/13/21 01:37	1
Calcium	0.044	U	0.20	0.044	mg/L		04/12/21 08:05	04/13/21 01:37	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		04/12/21 08:05	04/13/21 01:37	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		04/12/21 08:05	04/13/21 01:37	1
Cobalt	0.00040	U	0.0010	0.00040	mg/L		04/12/21 08:05	04/13/21 01:37	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		04/12/21 08:05	04/13/21 01:37	1
Selenium	0.00098	U	0.0025	0.00098	mg/L		04/12/21 08:05	04/13/21 01:37	1

Lab Sample ID: MB 500-592735/1-A

Matrix: Water

Analysis Batch: 593225

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00023	U	0.0010	0.00023	mg/L	D	04/12/21 08:05	04/13/21 18:40	1
Lead	0.00019	U	0.00050	0.00019	mg/L		04/12/21 08:05	04/13/21 18:40	1
Lithium	0.00050	U	0.0020	0.00050	mg/L		04/12/21 08:05	04/13/21 18:40	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		04/12/21 08:05	04/13/21 18:40	1

Lab Sample ID: MB 500-592735/1-A

Matrix: Water

Analysis Batch: 593722

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.013	U	0.050	0.013	mg/L	D	04/12/21 08:05	04/16/21 12:07	1

Lab Sample ID: LCS 500-592735/2-A

Matrix: Water

Analysis Batch: 593036

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.500	0.463		mg/L	D	93	80 - 120
Barium	2.00	1.91		mg/L		95	80 - 120
Beryllium	0.0500	0.0547		mg/L		109	80 - 120
Calcium	10.0	9.47		mg/L		95	80 - 120
Cadmium	0.0500	0.0485		mg/L		97	80 - 120
Chromium	0.200	0.210		mg/L		105	80 - 120
Cobalt	0.500	0.529		mg/L		106	80 - 120
Molybdenum	1.00	0.962		mg/L		96	80 - 120
Selenium	0.100	0.0951		mg/L		95	80 - 120

Lab Sample ID: LCS 500-592735/2-A

Matrix: Water

Analysis Batch: 593225

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0974		mg/L	D	97	80 - 120
Lead	0.100	0.107		mg/L		107	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-592735/2-A

Matrix: Water

Analysis Batch: 593225

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lithium	0.500	0.526		mg/L	105	80 - 120	
Thallium	0.100	0.109		mg/L	109	80 - 120	

Lab Sample ID: LCS 500-592735/2-A

Matrix: Water

Analysis Batch: 593722

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Boron	1.00	1.09		mg/L	109	80 - 120	

Lab Sample ID: 500-197359-2 MS

Matrix: Water

Analysis Batch: 593036

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	0.0013	U	0.500	0.491		mg/L	98	75 - 125	
Barium	0.16	F1	2.00	2.08		mg/L	96	75 - 125	
Beryllium	0.00053	U	0.0500	0.0517		mg/L	103	75 - 125	
Calcium	130		10.0	142	4	mg/L	96	75 - 125	
Cadmium	0.00017	U	0.0500	0.0505		mg/L	101	75 - 125	
Chromium	0.0011	U	0.200	0.200		mg/L	100	75 - 125	
Cobalt	0.00050	J	0.500	0.489		mg/L	98	75 - 125	
Molybdenum	0.0025	U	1.00	1.03		mg/L	103	75 - 125	
Selenium	0.00098	U	0.100	0.0912		mg/L	91	75 - 125	

Lab Sample ID: 500-197359-2 MS

Matrix: Water

Analysis Batch: 593225

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.00067	J	0.100	0.104		mg/L	103	75 - 125	
Lead	0.00019	U	0.100	0.103		mg/L	103	75 - 125	
Thallium	0.00057	U	0.100	0.105		mg/L	105	75 - 125	

Lab Sample ID: 500-197359-2 MS

Matrix: Water

Analysis Batch: 593722

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	0.17		1.00	1.17		mg/L	101	75 - 125	

Lab Sample ID: 500-197359-2 MS

Matrix: Water

Analysis Batch: 595863

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lithium	0.00075	J	0.500	0.476		mg/L	95	75 - 125	

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QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-197359-2 MSD

Matrix: Water

Analysis Batch: 593036

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Antimony	0.0013	U	0.500	0.478		mg/L	96	75 - 125	3	20	
Barium	0.16	F1	2.00	2.02		mg/L	93	75 - 125	3	20	
Beryllium	0.00053	U	0.0500	0.0504		mg/L	101	75 - 125	3	20	
Calcium	130		10.0	138	4	mg/L	57	75 - 125	3	20	
Cadmium	0.00017	U	0.0500	0.0487		mg/L	97	75 - 125	3	20	
Chromium	0.0011	U	0.200	0.197		mg/L	99	75 - 125	1	20	
Cobalt	0.00050	J	0.500	0.481		mg/L	96	75 - 125	2	20	
Molybdenum	0.0025	U	1.00	0.999		mg/L	100	75 - 125	3	20	
Selenium	0.00098	U	0.100	0.0906		mg/L	91	75 - 125	1	20	

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Lab Sample ID: 500-197359-2 MSD

Matrix: Water

Analysis Batch: 593225

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Arsenic	0.00067	J	0.100	0.103		mg/L	103	75 - 125	1	20	
Lead	0.00019	U	0.100	0.102		mg/L	102	75 - 125	0	20	
Thallium	0.00057	U	0.100	0.103		mg/L	103	75 - 125	2	20	

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Lab Sample ID: 500-197359-2 MSD

Matrix: Water

Analysis Batch: 593722

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Boron	0.17		1.00	1.16		mg/L	100	75 - 125	1	20	

Lab Sample ID: 500-197359-2 MSD

Matrix: Water

Analysis Batch: 595863

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Lithium	0.00075	J	0.500	0.488		mg/L	97	75 - 125	2	20	

Lab Sample ID: 500-197359-2 DU

Matrix: Water

Analysis Batch: 593036

Analyte	Sample	Sample	Spike	DU	DU	Unit	D	DU	DU	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Antimony	0.0013	U		0.0013	U	mg/L				NC	20
Barium	0.16	F1		0.156		mg/L				0.5	20
Beryllium	0.00053	U		0.00053	U	mg/L				NC	20
Calcium	130			134		mg/L				1	20
Cadmium	0.00017	U		0.00017	U	mg/L				NC	20
Chromium	0.0011	U		0.0011	U	mg/L				NC	20
Cobalt	0.00050	J		0.000493	J	mg/L				2	20
Molybdenum	0.0025	U		0.0025	U	mg/L				NC	20
Selenium	0.00098	U		0.00098	U	mg/L				NC	20

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QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-197359-2 DU

Matrix: Water

Analysis Batch: 593225

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	0.00067	J	0.000732	J	mg/L		9	20
Lead	0.00019	U	0.00019	U	mg/L		NC	20
Thallium	0.00057	U	0.00057	U	mg/L		NC	20

Lab Sample ID: 500-197359-2 DU

Matrix: Water

Analysis Batch: 593722

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Boron	0.17		0.163		mg/L		2	20

Lab Sample ID: 500-197359-2 DU

Matrix: Water

Analysis Batch: 595863

Client Sample ID: AES-MW2-040621

Prep Type: Total Recoverable

Prep Batch: 592735

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Lithium	0.00075	J	0.000536	J F5	mg/L		33	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-593462/12-A

Matrix: Water

Analysis Batch: 593675

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 593462

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		04/15/21 10:35	04/16/21 09:48	1

Lab Sample ID: LCS 500-593462/15-A

Matrix: Water

Analysis Batch: 593675

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 593462

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00200	0.00189		mg/L		94	80 - 120

Lab Sample ID: 500-197359-2 MS

Matrix: Water

Analysis Batch: 593675

Client Sample ID: AES-MW2-040621

Prep Type: Total/NA

Prep Batch: 593462

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD
Mercury	0.000098	U	0.00100	0.000929		mg/L		93	75 - 125

Lab Sample ID: 500-197359-2 MSD

Matrix: Water

Analysis Batch: 593675

Client Sample ID: AES-MW2-040621

Prep Type: Total/NA

Prep Batch: 593462

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Mercury	0.000098	U	0.00100	0.000971		mg/L		97	75 - 125

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 500-197359-2 DU

Client Sample ID: AES-MW2-040621

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 593675

Prep Batch: 593462

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.000098	U	0.000098	U	mg/L		NC	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 500-594439/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 594439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.095	U	0.20	0.095	mg/L			04/21/21 12:14	1

Lab Sample ID: LCS 500-594439/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 594439

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate	5.00	5.08		mg/L		102	80 - 120

Lab Sample ID: 500-197359-2 MS

Client Sample ID: AES-MW2-040621

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 594439

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Sulfate	27		62.5	92.8		mg/L		105	80 - 120

Lab Sample ID: 500-197359-2 MSD

Client Sample ID: AES-MW2-040621

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 594439

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Sulfate	27		62.5	93.6		mg/L		106	80 - 120	1	15

Lab Sample ID: MB 500-596441/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 596441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.095	U	0.20	0.095	mg/L			05/03/21 09:48	1

Lab Sample ID: LCS 500-596441/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 596441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate	5.00	5.18		mg/L		104	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-592917/1

Matrix: Water

Analysis Batch: 592917

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	4.3	U	10	4.3	mg/L			04/13/21 02:19	1

Lab Sample ID: LCS 500-592917/2

Matrix: Water

Analysis Batch: 592917

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	250	244		mg/L		98	80 - 120

Lab Sample ID: 500-197359-2 MS

Matrix: Water

Analysis Batch: 592917

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	710		250	952		mg/L		98	75 - 125

Lab Sample ID: 500-197359-2 MSD

Matrix: Water

Analysis Batch: 592917

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD	Limit
Total Dissolved Solids	710		250	1010		mg/L		122	75 - 125	6	20

Lab Sample ID: 500-197359-1 DU

Matrix: Water

Analysis Batch: 592917

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD	Limit
Total Dissolved Solids	1700		1660		mg/L			4	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-593305/52

Matrix: Water

Analysis Batch: 593305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	2.0	1.0	mg/L			04/14/21 13:40	1

Lab Sample ID: LCS 500-593305/53

Matrix: Water

Analysis Batch: 593305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Chloride	20.0	20.7		mg/L		104	85 - 115

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: SM 4500 CI- E - Chloride, Total (Continued)

Lab Sample ID: 500-197359-2 MS

Matrix: Water

Analysis Batch: 593305

Client Sample ID: AES-MW2-040621

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits		
Chloride	180	F1	20.0	192	4	mg/L	86	75 - 125			

Lab Sample ID: 500-197359-2 MSD

Matrix: Water

Analysis Batch: 593305

Client Sample ID: AES-MW2-040621

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Chloride	180	F1	20.0	192	4	mg/L	86	75 - 125		0	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-593977/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 593977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.056	U	0.10	0.056	mg/L			04/19/21 15:34	1

Lab Sample ID: LCS 500-593977/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 593977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Fluoride	10.0	11.3		mg/L	113	80 - 120	

Lab Sample ID: 500-197359-2 MS

Client Sample ID: AES-MW2-040621

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 593977

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Fluoride	0.64		5.00	6.38		mg/L	115	75 - 125	

Lab Sample ID: 500-197359-2 MSD

Client Sample ID: AES-MW2-040621

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 593977

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Fluoride	0.64		5.00	6.34		mg/L	114	75 - 125		1	20

Lab Sample ID: MB 500-596495/15

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 596495

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.056	U	0.10	0.056	mg/L			05/03/21 13:13	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 500-596495/16

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 596495

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	11.0		mg/L	110	80 - 120	

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Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-040621

Lab Sample ID: 500-197359-1

Matrix: Water

Date Collected: 04/06/21 10:10

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593036	04/13/21 01:44	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593225	04/13/21 18:47	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593722	04/16/21 12:27	FXG	TAL CHI
Total/NA	Prep	7470A			593462	04/15/21 10:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	593675	04/16/21 10:27	MJG	TAL CHI
Total/NA	Analysis	9056A		100	594439	04/21/21 12:41	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	592917	04/13/21 02:26	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		10	593305	04/14/21 13:41	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	593977	04/19/21 15:34	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	592771	04/06/21 10:10	JMH	TAL CHI

Client Sample ID: AES-MW2-040621

Lab Sample ID: 500-197359-2

Matrix: Water

Date Collected: 04/06/21 11:32

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593036	04/13/21 01:47	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593225	04/13/21 18:51	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593722	04/16/21 12:31	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	595863	04/28/21 17:59	FXG	TAL CHI
Total/NA	Prep	7470A			593462	04/15/21 10:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	593675	04/16/21 10:29	MJG	TAL CHI
Total/NA	Analysis	9056A		25	594439	04/21/21 12:55	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	592917	04/13/21 02:31	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	593305	04/14/21 13:41	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	593977	04/19/21 15:34	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	592771	04/06/21 11:32	JMH	TAL CHI

Client Sample ID: AES-MW3-040621

Lab Sample ID: 500-197359-3

Matrix: Water

Date Collected: 04/06/21 14:34

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593036	04/13/21 02:04	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593225	04/13/21 19:08	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW3-040621

Lab Sample ID: 500-197359-3

Matrix: Water

Date Collected: 04/06/21 14:34

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		10	593225	04/13/21 19:12	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		10	593722	04/16/21 12:55	FXG	TAL CHI
Total/NA	Prep	7470A			593462	04/15/21 10:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	593675	04/16/21 10:37	MJG	TAL CHI
Total/NA	Analysis	9056A		500	596441	05/03/21 20:22	EAT	TAL CHI
Total/NA	Analysis	SM 2540C		1	592917	04/13/21 02:39	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		100	593305	04/14/21 13:43	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	593977	04/19/21 15:34	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	592771	04/06/21 14:34	JMH	TAL CHI

Client Sample ID: AES-MW4-040621

Lab Sample ID: 500-197359-4

Matrix: Water

Date Collected: 04/06/21 16:26

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593036	04/13/21 02:08	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593225	04/13/21 19:22	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		20	593523	04/15/21 16:14	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		20	593722	04/16/21 12:58	FXG	TAL CHI
Total/NA	Prep	7470A			593462	04/15/21 10:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	593675	04/16/21 10:39	MJG	TAL CHI
Total/NA	Analysis	9056A		2000	594439	04/21/21 13:49	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	592917	04/13/21 02:42	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		200	593305	04/14/21 13:43	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	593977	04/19/21 15:34	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	592771	04/06/21 16:26	JMH	TAL CHI

Client Sample ID: AES-MW4-DUP-040621

Lab Sample ID: 500-197359-5

Matrix: Water

Date Collected: 04/06/21 17:02

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593036	04/13/21 02:18	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593225	04/13/21 19:29	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		20	593523	04/15/21 16:18	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-040621

Lab Sample ID: 500-197359-5

Matrix: Water

Date Collected: 04/06/21 17:02

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		20	593722	04/16/21 13:02	FXG	TAL CHI
Total/NA	Prep	7470A			593462	04/15/21 10:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	593675	04/16/21 10:48	MJG	TAL CHI
Total/NA	Analysis	9056A		2000	594439	04/21/21 14:03	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	592917	04/13/21 02:44	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		200	593305	04/14/21 13:43	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	593977	04/19/21 15:34	MS	TAL CHI

Client Sample ID: AES-MW5-040621

Lab Sample ID: 500-197359-6

Matrix: Water

Date Collected: 04/06/21 18:00

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593036	04/13/21 02:21	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593225	04/13/21 19:36	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		5	593523	04/15/21 16:21	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		5	593722	04/16/21 13:05	FXG	TAL CHI
Total/NA	Prep	7470A			593462	04/15/21 10:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	593675	04/16/21 10:50	MJG	TAL CHI
Total/NA	Analysis	9056A		250	594439	04/21/21 14:17	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	592917	04/13/21 02:47	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		100	593305	04/14/21 13:44	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	593977	04/19/21 15:34	MS	TAL CHI
Total/NA	Analysis	Field Sampling		1	592771	04/06/21 18:00	JMH	TAL CHI

Client Sample ID: AES-FB-040621

Lab Sample ID: 500-197359-7

Matrix: Water

Date Collected: 04/06/21 18:05

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593036	04/13/21 02:25	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593225	04/13/21 19:43	FXG	TAL CHI
Total Recoverable	Prep	3005A			592735	04/12/21 08:05	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	593722	04/16/21 13:09	FXG	TAL CHI
Total/NA	Prep	7470A			593462	04/15/21 10:35	MJG	TAL CHI
Total/NA	Analysis	7470A		1	593675	04/16/21 10:53	MJG	TAL CHI
Total/NA	Analysis	9056A		1	594439	04/21/21 14:58	PSP	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-197359-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-FB-040621

Lab Sample ID: 500-197359-7

Matrix: Water

Date Collected: 04/06/21 18:05

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	592917	04/13/21 02:50	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	593305	04/14/21 13:44	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	596495	05/03/21 16:10	MS	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-197359-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
California	State	2903	04-30-21 *
Georgia (DW)	State	939	04-30-21 *
Illinois	NELAP	IL00035	04-29-22
Indiana	State	C-IL-02	06-29-21
Iowa	State	082	05-01-22
Kansas	NELAP	E-10161	10-31-21
Kentucky (UST)	State	AI # 108083	04-29-21 *
Kentucky (WW)	State	KY90023	12-31-21
Louisiana	NELAP	02046	06-30-21
Mississippi	State	NA	04-30-20 *
North Carolina (WW/SW)	State	291	12-31-21
Oklahoma	State	8908	08-31-21
South Carolina	State	77001003	04-29-21 *
USDA	US Federal Programs	P330-18-00018	02-11-24
Wisconsin	State	999580010	08-31-21
Wyoming	State	8TMS-Q	04-30-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Chicago

Eurofins TestAmerica, Chicago

 2417 Bond Street
 University Park, IL 60484
 Phone (708) 534-5200 Fax (708) 534-5211

Chain of Custody Record

eurofins

 Environment Testing
 America

1
Client Information
 Client Contact:
 Alberto Melendez

Company:
 DNA-Environment, LLC

Address:
 35 Calle Juan C Bobon Ste 67-227

Sample:
 Vicente Perez

Lab/P.M.:
 Wright, Richard

E-Mail:
 Richard.Wright@Eurofinset.com

Phone:
 (787) 209-6386

PWSID:
 PWSID:

Carrier Tracking No(s):
 CCC No:
 500-96242-40352-1

State of Origin:
 Page:
 Page 1 of 1

Job #:
500-197359
Preservation Codes:

A - HCl	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O3S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2SO3
G - Ammonia	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCA4
K - EDTA	W - pH 4.5
L - EDA	Z - other (specify)
Other:	

Analysis Requested
Due Date Requested:
TAT Requested (days):
 10 Days (Regular TAT)

Compliance Project:
 X Yes No

PO #:
WO #:
Email:
 alberto.melendez@dnenv.com

Project Name:
 CCR Groundwater Monitoring

Site:
 AES Puerto Rico LP, Guayanilla, Puerto Rico

SSOW#:
Field Filtered Sample (Yes or No)
Perform MS/MSD (Yes or No)
SM4500_CL_E-Chloride, Field pH, SM4500_SO4_E-Sulfate,
SM4500_F_C-Fluoride, SM2540C-TDS
6020 - Total Metals, 7470A-Total Mercury
Total Number of containers
Special Instructions/Note:
Field Preservation Code:
Sample Date:
Sample Time:
Sample Type:
 (C=comp, G=grab)
 (W=water, S=solids,
 O=water/oil,
 B=tissue, A=air)

Matrix:
Preservation Code:
Date:
Time:
Received By:
Date/Time:
Company:
Relinquished by:
Date/Time:
Company:
Received by:
Date/Time:
Company:
Relinquished by:
Date/Time:
Company:
Empty Kit Relinquished by:
Date/Time:
Company:
Relinquished by:
Date/Time:
Company:
Custody Seals Intact:
A Yes □ No
Possible Hazard Identification
 Non-Hazard

 Flammable

 Skin Irritant

 Poison B

 Unknown

 Radioactive

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client

 Disposal/Bv Lab

 Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

 Date: **4/17/21** Time: **11:30 AM** Company: **DNA** Received By: **John Deemer** Date/Time: **4/19/21 0930** Company: **ETM**
Relinquished by:
Date/Time:
Company:
Custody Seal No.:
Empty No.
Page:
 Ver. 01/16/2019

Do Not Lift Using This Tag

J



500-197359 Wayb

ORIGIN ID:NRRAG (787) 209-6386
ALBERTO HELENDEZ
DNA ENVIRONMENT, LLC
35 CALLE JUAN C. BORBON
STE 67-227
GUANABO, PR 00969
UNITED STATES US

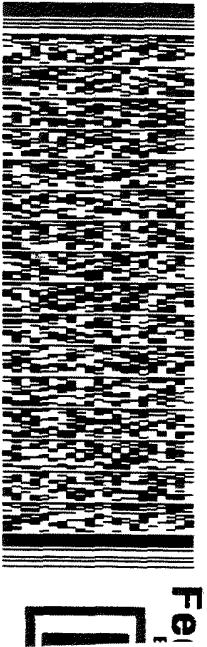
SHIP DATE: 07APR21
ACT AMT: 39.00 LB
CAD: 6998634/SSFE2201
DIMS: 23x13x13 IN

To RICHARD WRIGHT
EUROFINS TEST AMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 60484

(TODAY) 634-6200
REF: DEPT:

(US)

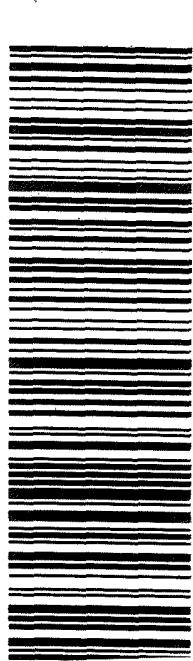


REL:

2 0 3
MPS# 7856 8985 4961
THU - 08 APR 10:30A
PRIORITY OVERN
0430

XH JOTA

60
US - 1L



1L-US ORD
60484
NSF
NCR
THU - 08 APR 10:30A
PRIORITY OVERN
0430

XH JOTA

Mfr# 7856 8985 4950
0431
3 0 3
MPS# 7856 8985 4972

0430

REL:



1L-US

ORD

60484

NSF

NCR

THU - 08 APR 10:30A

PRIORITY OVERN

0430

REL:

1L-US

REF:

DEPT:

REL:

1L-US

REL:

1L-US

REF:

DEPT:

REL:

1L-US

Login Sample Receipt Checklist

Client: DNA-Environment, LLC

Job Number: 500-197359-1

Login Number: 197359

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-197359-2

Client Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

For:

DNA-Environment, LLC
35 Calle Juan C Borbon
Ste 67-227
Guaynabo, Puerto Rico 00969-5375

Attn: Alberto Melendez

Authorized for release by:

7/6/2021 10:15:32 AM

Richard Wright, Senior Project Manager
(708)746-0045

Richard.Wright@Eurofinset.com

LINKS

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The
Expert

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Case Narrative

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-197359-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-197359-2

Receipt

The samples were received on 4/9/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition.

RAD

Methods 903.0, 9315: Radium 226 prep batch 160-506127

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. The following samples are affected:

AES-MW1-040621 (500-197359-1), AES-MW2-040621 (500-197359-2), AES-MW2-040621 (500-197359-2[MS]), AES-MW2-040621 (500-197359-2[MSD]), AES-MW3-040621 (500-197359-3), AES-MW4-040621 (500-197359-4), AES-MW4-DUP-040621 (500-197359-5), AES-MW5-040621 (500-197359-6), AES-FB-040621 (500-197359-7), (LCS 160-506127/1-A), (MB 160-506127/25-A), (500-197405-D-3-A) and (500-197405-E-3-B DU)

Methods 904.0, 9320: Radium-228 prep batch 160-506128:

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. The following samples are affected: AES-MW1-040621 (500-197359-1), AES-MW2-040621 (500-197359-2), AES-MW2-040621 (500-197359-2[MS]), AES-MW2-040621 (500-197359-2[MSD]), AES-MW3-040621 (500-197359-3), AES-MW4-040621 (500-197359-4), AES-MW4-DUP-040621 (500-197359-5), AES-MW5-040621 (500-197359-6), AES-FB-040621 (500-197359-7), (LCS 160-506128/1-A), (MB 160-506128/25-A), (500-197405-D-3-B) and (500-197405-E-3-C DU)

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

Detection Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-040621

Lab Sample ID: 500-197359-1

No Detections.

Client Sample ID: AES-MW2-040621

Lab Sample ID: 500-197359-2

No Detections.

Client Sample ID: AES-MW3-040621

Lab Sample ID: 500-197359-3

No Detections.

Client Sample ID: AES-MW4-040621

Lab Sample ID: 500-197359-4

No Detections.

Client Sample ID: AES-MW4-DUP-040621

Lab Sample ID: 500-197359-5

No Detections.

Client Sample ID: AES-MW5-040621

Lab Sample ID: 500-197359-6

No Detections.

Client Sample ID: AES-FB-040621

Lab Sample ID: 500-197359-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-197359-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-197359-1	AES-MW1-040621	Water	04/06/21 10:10	04/09/21 09:30	
500-197359-2	AES-MW2-040621	Water	04/06/21 11:32	04/09/21 09:30	
500-197359-3	AES-MW3-040621	Water	04/06/21 14:34	04/09/21 09:30	
500-197359-4	AES-MW4-040621	Water	04/06/21 16:26	04/09/21 09:30	
500-197359-5	AES-MW4-DUP-040621	Water	04/06/21 17:02	04/09/21 09:30	
500-197359-6	AES-MW5-040621	Water	04/06/21 18:00	04/09/21 09:30	
500-197359-7	AES-FB-040621	Water	04/06/21 18:05	04/09/21 09:30	

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Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-040621

Lab Sample ID: 500-197359-1

Matrix: Water

Date Collected: 04/06/21 10:10

Date Received: 04/09/21 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0305	U	0.0746	0.0747	1.00	0.137	pCi/L	04/19/21 13:32	05/12/21 22:24	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	79.1		40 - 110					04/19/21 13:32	05/12/21 22:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.323	U	0.263	0.264	1.00	0.415	pCi/L	04/19/21 14:01	05/05/21 12:22	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	79.1		40 - 110					04/19/21 14:01	05/05/21 12:22	1
Y Carrier	85.6		40 - 110					04/19/21 14:01	05/05/21 12:22	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.353	U	0.273	0.274	5.00	0.415	pCi/L	05/13/21 11:32		1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW2-040621

Lab Sample ID: 500-197359-2

Date Collected: 04/06/21 11:32

Matrix: Water

Date Received: 04/09/21 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0113	U	0.0711	0.0711	1.00	0.148	pCi/L	04/19/21 13:32	05/12/21 22:25	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		40 - 110					04/19/21 13:32	05/12/21 22:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.0288	U	0.254	0.254	1.00	0.462	pCi/L	04/19/21 14:01	05/05/21 12:22	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	79.7		40 - 110					04/19/21 14:01	05/05/21 12:22	1
Y Carrier	83.4		40 - 110					04/19/21 14:01	05/05/21 12:22	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.0401	U	0.264	0.264	5.00	0.462	pCi/L	05/13/21 11:32		1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW3-040621

Lab Sample ID: 500-197359-3

Matrix: Water

Date Collected: 04/06/21 14:34

Date Received: 04/09/21 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.100	U	0.0784	0.0790	1.00	0.109	pCi/L	04/19/21 13:32	05/11/21 10:37	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	77.9		40 - 110					04/19/21 13:32	05/11/21 10:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.215	U	0.244	0.244	1.00	0.400	pCi/L	04/19/21 14:01	05/05/21 12:23	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	77.9		40 - 110					04/19/21 14:01	05/05/21 12:23	1
Y Carrier	90.8		40 - 110					04/19/21 14:01	05/05/21 12:23	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.315	U	0.256	0.256	5.00	0.400	pCi/L	05/13/21 11:32		1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-040621

Lab Sample ID: 500-197359-4

Matrix: Water

Date Collected: 04/06/21 16:26

Date Received: 04/09/21 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0325	U	0.0759	0.0760	1.00	0.142	pCi/L	04/19/21 13:32	05/11/21 10:37	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	84.8		40 - 110					04/19/21 13:32	05/11/21 10:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.290	U	0.246	0.247	1.00	0.504	pCi/L	04/19/21 14:01	05/05/21 12:23	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	84.8		40 - 110					04/19/21 14:01	05/05/21 12:23	1
Y Carrier	90.8		40 - 110					04/19/21 14:01	05/05/21 12:23	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.258	U	0.257	0.258	5.00	0.504	pCi/L	05/13/21 11:32		1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-040621

Lab Sample ID: 500-197359-5

Matrix: Water

Date Collected: 04/06/21 17:02

Date Received: 04/09/21 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.133	U	0.0986	0.0993	1.00	0.135	pCi/L	04/19/21 13:32	05/11/21 10:37	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	90.0		40 - 110					04/19/21 13:32	05/11/21 10:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0887	U	0.260	0.260	1.00	0.455	pCi/L	04/19/21 14:01	05/05/21 12:23	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	90.0		40 - 110					04/19/21 14:01	05/05/21 12:23	1
Y Carrier	88.6		40 - 110					04/19/21 14:01	05/05/21 12:23	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.222	U	0.278	0.278	5.00	0.455	pCi/L	05/13/21 11:32		1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW5-040621

Lab Sample ID: 500-197359-6

Matrix: Water

Date Collected: 04/06/21 18:00

Date Received: 04/09/21 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0418	U	0.0736	0.0737	1.00	0.130	pCi/L	04/19/21 13:32	05/11/21 10:38	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	76.7		40 - 110					04/19/21 13:32	05/11/21 10:38	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0127	U	0.226	0.226	1.00	0.408	pCi/L	04/19/21 14:01	05/05/21 12:23	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	76.7		40 - 110					04/19/21 14:01	05/05/21 12:23	1
Y Carrier	88.2		40 - 110					04/19/21 14:01	05/05/21 12:23	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0546	U	0.238	0.238	5.00	0.408	pCi/L		05/13/21 11:32	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-FB-040621

Lab Sample ID: 500-197359-7

Matrix: Water

Date Collected: 04/06/21 18:05

Date Received: 04/09/21 09:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0985	U	0.107	0.107	1.00	0.172	pCi/L	04/19/21 13:32	05/11/21 10:38	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	71.2		40 - 110					04/19/21 13:32	05/11/21 10:38	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.246	U	0.273	0.274	1.00	0.447	pCi/L	04/19/21 14:01	05/05/21 12:23	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					Prepared	Analyzed	Dil Fac
Ba Carrier	71.2		40 - 110					04/19/21 14:01	05/05/21 12:23	1
Y Carrier	90.1		40 - 110					04/19/21 14:01	05/05/21 12:23	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.344	U	0.293	0.294	5.00	0.447	pCi/L	05/13/21 11:32		1

Eurofins TestAmerica, Chicago

Definitions/Glossary

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Qualifiers

Rad

Qualifier

Qualifier Description

U Result is less than the sample detection limit.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Rad

Prep Batch: 506127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	PrecSep-21	
500-197359-2	AES-MW2-040621	Total/NA	Water	PrecSep-21	
500-197359-3	AES-MW3-040621	Total/NA	Water	PrecSep-21	
500-197359-4	AES-MW4-040621	Total/NA	Water	PrecSep-21	
500-197359-5	AES-MW4-DUP-040621	Total/NA	Water	PrecSep-21	
500-197359-6	AES-MW5-040621	Total/NA	Water	PrecSep-21	
500-197359-7	AES-FB-040621	Total/NA	Water	PrecSep-21	
MB 160-506127/25-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-506127/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-197359-2 MS	AES-MW2-040621	Total/NA	Water	PrecSep-21	
500-197359-2 MSD	AES-MW2-040621	Total/NA	Water	PrecSep-21	

Prep Batch: 506128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-197359-1	AES-MW1-040621	Total/NA	Water	PrecSep_0	
500-197359-2	AES-MW2-040621	Total/NA	Water	PrecSep_0	
500-197359-3	AES-MW3-040621	Total/NA	Water	PrecSep_0	
500-197359-4	AES-MW4-040621	Total/NA	Water	PrecSep_0	
500-197359-5	AES-MW4-DUP-040621	Total/NA	Water	PrecSep_0	
500-197359-6	AES-MW5-040621	Total/NA	Water	PrecSep_0	
500-197359-7	AES-FB-040621	Total/NA	Water	PrecSep_0	
MB 160-506128/25-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-506128/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-197359-2 MS	AES-MW2-040621	Total/NA	Water	PrecSep_0	
500-197359-2 MSD	AES-MW2-040621	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-506127/25-A

Matrix: Water

Analysis Batch: 509250

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 506127

Analyte	MB		Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
	Result	MB										
Radium-226	0.008272	U		0.0542	0.0543	1.00	0.112	pCi/L	04/19/21 13:32	05/11/21 10:39	1	
Carrier												
Ba Carrier	77.6			40 - 110					Prepared	Analyzed	Dil Fac	
Lab Sample ID: LCS 160-506127/1-A												
Matrix: Water												
Analysis Batch: 509250												
Analyte	MB		Qualifier	Limits		Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)		%Rec. Limits	
	%Yield	MB							RL	MDC	Unit	
Radium-226	77.6			40 - 110		11.3	11.01		1.18	1.00	0.110	pCi/L
Carrier												
Ba Carrier	77.6			40 - 110								
Lab Sample ID: 500-197359-2 MS												
Matrix: Water												
Analysis Batch: 509250												
Analyte	Sample		Spike Added	MS		MS Result	MS Qual	Total Uncert. (2σ+/-)		%Rec.	Limits	
	Result	Sample		Result	MS			RL	MDC	Unit		
Radium-226	-0.0113	U	11.3	11.12	MS	11.01		1.19	1.00	0.124	pCi/L	
Carrier												
Ba Carrier	83.0			40 - 110								
Lab Sample ID: 500-197359-2 MSD												
Matrix: Water												
Analysis Batch: 509250												
Analyte	Sample		Spike Added	MSD		MSD Result	MSD Qual	Total Uncert. (2σ+/-)		%Rec.	RER Limits	
	Result	Sample		Result	MSD			RL	MDC	Unit		
Radium-226	-0.0113	U	11.3	11.33	MSD	11.33		1.21	1.00	0.122	pCi/L	
Carrier												
Ba Carrier	79.4			40 - 110								
Method: 9320 - Radium-228 (GFPC)												
Lab Sample ID: MB 160-506128/25-A												
Matrix: Water												
Analysis Batch: 508446												
Analyte	MB		Qualifier	Count Uncert. (2σ+/-)		Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB		Result	MB							
Radium-228	0.3693	U		0.276	MB	0.278	1.00	0.432	pCi/L	04/19/21 14:01	05/05/21 12:28	1
												Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB	MB	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier		77.6			40 - 110	04/19/21 14:01	05/05/21 12:28	1
Y Carrier		88.2			40 - 110	04/19/21 14:01	05/05/21 12:28	1

Lab Sample ID: LCS 160-506128/1-A

Matrix: Water

Analysis Batch: 508483

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 506128

Analyte			Spike Added	LCS Result	LCS Qual	Total		Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec.
	LCS	LCS				Uncert.	(2σ+/-)						
Radium-228			7.23	7.407		0.942		1.00		0.360	pCi/L	102	75 - 125

Carrier %Yield Qualifier Limits

Carrier	%Yield	Qualifier	Limits
Ba Carrier	77.6		40 - 110
Y Carrier	85.2		40 - 110

Lab Sample ID: 500-197359-2 MS

Matrix: Water

Analysis Batch: 508483

Client Sample ID: AES-MW2-040621

Prep Type: Total/NA

Prep Batch: 506128

Analyte	Sample Result		Spike Added	MS Result		MS Qual		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec.
	Sample	Result		Sample	Qual	MS	MS						
Radium-228	-0.0288	U	7.23	7.241		0.916		1.00		0.416	pCi/L	100	45 - 150

Carrier %Yield Qualifier Limits
Ba Carrier 83.0 40 - 110
Y Carrier 87.5 40 - 110

Lab Sample ID: 500-197359-2 MSD

Matrix: Water

Analysis Batch: 508483

Client Sample ID: AES-MW2-040621

Prep Type: Total/NA

Prep Batch: 506128

Analyte	Sample Result		Spike Added	MSD Result		MSD Qual		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec.
	Sample	Result		Sample	Qual	MSD	MSD						
Radium-228	-0.0288	U	7.23	7.378		0.935		1.00		0.407	pCi/L	102	45 - 150

Carrier %Yield Qualifier Limits
Ba Carrier 79.4 40 - 110
Y Carrier 88.6 40 - 110

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Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-040621

Lab Sample ID: 500-197359-1

Matrix: Water

Date Collected: 04/06/21 10:10

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			506127	04/19/21 13:32	RBR	TAL SL
Total/NA	Analysis	9315		1	509333	05/12/21 22:24	FLC	TAL SL
Total/NA	Prep	PrecSep_0			506128	04/19/21 14:01	RBR	TAL SL
Total/NA	Analysis	9320		1	508483	05/05/21 12:22	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	509476	05/13/21 11:32	SCB	TAL SL

Client Sample ID: AES-MW2-040621

Lab Sample ID: 500-197359-2

Matrix: Water

Date Collected: 04/06/21 11:32

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			506127	04/19/21 13:32	RBR	TAL SL
Total/NA	Analysis	9315		1	509333	05/12/21 22:25	FLC	TAL SL
Total/NA	Prep	PrecSep_0			506128	04/19/21 14:01	RBR	TAL SL
Total/NA	Analysis	9320		1	508483	05/05/21 12:22	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	509476	05/13/21 11:32	SCB	TAL SL

Client Sample ID: AES-MW3-040621

Lab Sample ID: 500-197359-3

Matrix: Water

Date Collected: 04/06/21 14:34

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			506127	04/19/21 13:32	RBR	TAL SL
Total/NA	Analysis	9315		1	509250	05/11/21 10:37	ANW	TAL SL
Total/NA	Prep	PrecSep_0			506128	04/19/21 14:01	RBR	TAL SL
Total/NA	Analysis	9320		1	508483	05/05/21 12:23	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	509476	05/13/21 11:32	SCB	TAL SL

Client Sample ID: AES-MW4-040621

Lab Sample ID: 500-197359-4

Matrix: Water

Date Collected: 04/06/21 16:26

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			506127	04/19/21 13:32	RBR	TAL SL
Total/NA	Analysis	9315		1	509250	05/11/21 10:37	ANW	TAL SL
Total/NA	Prep	PrecSep_0			506128	04/19/21 14:01	RBR	TAL SL
Total/NA	Analysis	9320		1	508483	05/05/21 12:23	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	509476	05/13/21 11:32	SCB	TAL SL

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Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-040621

Lab Sample ID: 500-197359-5

Matrix: Water

Date Collected: 04/06/21 17:02

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			506127	04/19/21 13:32	RBR	TAL SL
Total/NA	Analysis	9315		1	509250	05/11/21 10:37	ANW	TAL SL
Total/NA	Prep	PrecSep_0			506128	04/19/21 14:01	RBR	TAL SL
Total/NA	Analysis	9320		1	508483	05/05/21 12:23	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	509476	05/13/21 11:32	SCB	TAL SL

Client Sample ID: AES-MW5-040621

Lab Sample ID: 500-197359-6

Matrix: Water

Date Collected: 04/06/21 18:00

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			506127	04/19/21 13:32	RBR	TAL SL
Total/NA	Analysis	9315		1	509250	05/11/21 10:38	ANW	TAL SL
Total/NA	Prep	PrecSep_0			506128	04/19/21 14:01	RBR	TAL SL
Total/NA	Analysis	9320		1	508483	05/05/21 12:23	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	509476	05/13/21 11:32	SCB	TAL SL

Client Sample ID: AES-FB-040621

Lab Sample ID: 500-197359-7

Matrix: Water

Date Collected: 04/06/21 18:05

Date Received: 04/09/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			506127	04/19/21 13:32	RBR	TAL SL
Total/NA	Analysis	9315		1	509250	05/11/21 10:38	ANW	TAL SL
Total/NA	Prep	PrecSep_0			506128	04/19/21 14:01	RBR	TAL SL
Total/NA	Analysis	9320		1	508483	05/05/21 12:23	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	509476	05/13/21 11:32	SCB	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Eurofins TestAmerica, Chicago

Accreditation/Certification Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-197359-2

Laboratory: Eurofins TestAmerica, St. Louis

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87689	06-30-21

1

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Eurofins TestAmerica, Chicago

Chain of Custody Record


eurofins
Environment Testing
America

12

Client Information				Analysis Requested	
Client Contact:	Vicente Perez	Lab P.M.:	W.Mright, Richard	Carrier Tracking No(s):	COC No:
Company:	Alberto Melendez	E-Mail:	Richard.Wright@Eurofinset.com	State of Origin:	500-90242-40352.2
Address:	33 Calle Juan C Borbon Ste 67-227	Due Date Requested:	TAT Requested (days):	Page: 1 of 1	
City:	Guaynabo		Regular TAT	Job # 500-197359	
State / Zip:	PR, 00969-5375		Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Preservation Codes:	
Phone:	787-209-6386	PMSID:	PO#:	A - HCl M - Hexane	
Email:	alberto.melendez@dmaenv.com		WO#:	B - NaOH N - None	
Project Name:	CCR Groundwater Monitoring			C - Zn Acetate O - AslaCO2	
Site:	AES Puerto Rico LP, Guayama, Puerto Rico			D - Na2CO3 P - Na2CO3S	
				E - NaHSO4 O - Na2SO3	
				F - MeOH R - Na2SO3	
				G - Ammonia S - H2SO4	
				H - Acetic Acid T - TSP Dodecylhydrate	
				I - Ics U - Acetone	
				J - DI Water V - MCABA	
				K - EDTA W - pH 4-5	
				Z - other (specify)	
				Other:	
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix
				(C=comp, G=grab) Ex-Tissue, A=air)	(W=water, S=solid) Ex-Tissue, A=air)
				Preservation Code:	Field Filtered Sample (Yes or No)
				D	Perform MS/MSD (Yes or No)
				9315	Ra226, 9320_Ra228, Radium-226 & Radium-228
					Total Number of containers
					Special Instructions/Note:
					pH = 6.58
					pH = 7.08
					11
					12
					13
					14
					15
Possible Hazard Identification		Note: pH = Field pH Measurement			
<input type="checkbox"/> Non-Hazard					
<input type="checkbox"/> Harmable					
<input type="checkbox"/> Skin Irritant					
<input type="checkbox"/> Poison B					
<input type="checkbox"/> Unknown					
<input type="checkbox"/> Radioactive					
		Method of Shipment:			
		Date:	Time:	Return To Client	Disposal By Lab
		Date/Time:	Date/Time:	Archive For:	Months
Empty					
Relinquished by:					
Relinquished by:					
Custody Seals Intact:		Custody Seal No.:			
△ Yes △ No					
		Cooler Temperature(s) °C and Other Remarks: Uncharted			

Do Not Lift Using This Tag

J



500-197359 Wayb

ORIGIN ID:NRRG (787) 209-6386
ALBERTO HELENDEZ
DNA ENVIRONMENT, LLC
35 CALLE JUAN C. BORBON
STE 67-227
GUANABO, PR 00969
UNITED STATES US

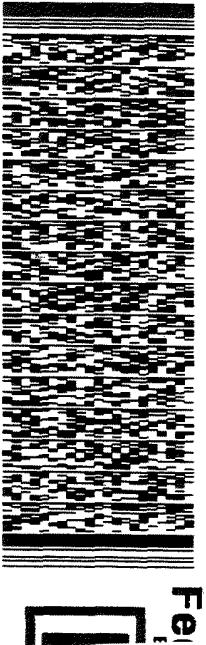
SHIP DATE: 07APR21
ACT AMT: 39.00 LB
CAD: 6998634/SSFE2201
DIMS: 23x13x13 IN

To RICHARD WRIGHT
EUROFINS TEST AMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 60484

(TODAY) 634-6200
REF: DEPT:

(US)



REL:

2 0 3
MPS# 7856 8985 4961
THU - 08 APR 10:30A
PRIORITY OVERN
0441
Mstr# 7856 8985 4950
0430

XH JOTA

60
US - 1L

1L-US ORD
60484
Page 2 of 2
NSF
NCR



REL:

UNIVERSITY PARK IL 60484
(US)
REL:
10 RICHARD WRIGHT
EUROFINS TEST AMERICA CHICAGO
2417 BOND STREET
SHIP DATE: 07APR21
ORIGIN ID:NRRG (787) 209-6386
SCHMTG: 47.00 LB
DAD: 6998634/SSFE2201
DIMS: 23x13x13 IN
UNITED STATES US
35 CALLE JUAN C. BORBON
STE 67-227
GUANABO, PR 00969
UNITED STATES US

Part # 16529-H245-HB5WEXP 10247
Part # 16529-H245-HB5WEXP 10247

Part # 16529-H245-HB5WEXP 10247

7/6/2021

XH JOTA

MASTER ##
TRK# 7856 8985 4950
0430

1 of 3

XH JOTA

MASTER ##
TRK# 7856 8985 4950
0430

1 of 3

XH JOTA

UNIVERSITY PARK IL 60484
(US)
REL:
10 RICHARD WRIGHT
EUROFINS TEST AMERICA CHICAGO
2417 BOND STREET

SHIP DATE: 07APR21
ORIGIN ID:NRRG (787) 209-6386
SCHMTG: 14.00 LB
DAD: 6998634/SSFE2201
DIMS: 23x13x13 IN
UNITED STATES US

35 CALLE JUAN C. BORBON
STE 67-227
GUANABO, PR 00969
UNITED STATES US

Part # 16529-H245-HB5WEXP 10247
Part # 16529-H245-HB5WEXP 10247

Part # 16529-H245-HB5WEXP 10247
Part # 16529-H245-HB5WEXP 10247

13 12 11 10 9 8 7 6 5 4 3 2 1

Eurofins TestAmerica, Chicago

2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Environment Testing
America



Chain of Custody Record

Client Information (Sub Contract Lab)

Client Contact: Shipping/Receiving	Sampler: Phone:	Lab P.M. Wright, Richard	Carrier Tracking No(s): State of Origin: Puerto Rico	COC No: 500-147215.1
Company: TestAmerica Laboratories, Inc.	E-Mail: Richard.Wright@EurofinsTest.com	Page: 1 of 1		
Address: 13715 Rider Trail North, Earth City MO, 63045	PO #:	Job #: 500-197359-1		
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	WO #:	Preservation Codes:		
Email: Project Name: CCR GW Monitoring	Project #: 500117042	A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MEOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		
Accreditations Required (See note): NELAP - Florida				
Analysis Requested				
Total Number of Containers				
Special Instructions/Note:				
Perform MS/MSD (Yes or No)				
Old Filtered Sample (Yes or No)				
Sample Identification - Client ID (Lab ID)				
AES-MW1-040621 (500-197359-1)	Sample Date: 4/6/21	Sample Time: 10:10	Sample Type (C=comp, G=grab): Water	Matrix (W/water, Solid, Concentration, Analysis): X X X
AES-MW2-040621 (500-197359-2)	4/6/21	11:32	Water	X X X
AES-MW2-040621 (500-197359-2MS)	4/6/21	11:32	MS	X X X
AES-MW2-040621 (500-197359-2MSD)	4/6/21	11:32	MSD	Water X X
AES-MW3-040621 (500-197359-3)	4/6/21	12:13	Water	X X X
AES-MW4-040621 (500-197359-4)	4/6/21	14:34	Water	X X X
AES-MW4-DUP-040621 (500-197359-5)	4/6/21	16:26	Water	X X X
AES-MW5-040621 (500-197359-6)	4/6/21	17:02	Water	X X X
AES-FB-040621 (500-197359-7)	4/6/21	18:05	Water	X X X
Primary Deliverable Rank: 2				
Method of Shipment:				
Relinquished by: 	Date/Time: 4/11/21	Date: 16:30	Received by: FED EX	Date/Time: 4/11/21 0845
Special Instructions/QC Requirements:				
Cooler Temperature(s) °C and Other Remarks:				
Custody Seals Intact: △ Yes △ No	Comments:			

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analytic & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification

Unconfirmed

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

Empty Kit Relinquished by:

Relinquished by:

Custody Seal No.:
△ Yes △ No

7/6/2021

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Vet. 11/01/2020

Login Sample Receipt Checklist

Client: DNA-Environment, LLC

Job Number: 500-197359-2

Login Number: 197359

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: James, Jeff A

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

Login Sample Receipt Checklist

Client: DNA-Environment, LLC

Job Number: 500-197359-2

Login Number: 197359

List Source: Eurofins TestAmerica, St. Louis

List Number: 2

List Creation: 04/10/21 10:24 AM

Creator: O'Gara, Mallory L

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

Tracer/Carrier Summary

Client: DNA-Environment, LLC

Job ID: 500-197359-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (40-110)	
500-197359-1	AES-MW1-040621	79.1	
500-197359-2	AES-MW2-040621	79.7	
500-197359-2 MS	AES-MW2-040621	83.0	
500-197359-2 MSD	AES-MW2-040621	79.4	
500-197359-3	AES-MW3-040621	77.9	
500-197359-4	AES-MW4-040621	84.8	
500-197359-5	AES-MW4-DUP-040621	90.0	
500-197359-6	AES-MW5-040621	76.7	
500-197359-7	AES-FB-040621	71.2	
500-197405-E-3-B DU	Duplicate	67.9	
LCS 160-506127/1-A	Lab Control Sample	77.6	
MB 160-506127/25-A	Method Blank	77.6	

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (40-110)	Y (40-110)
500-197359-1	AES-MW1-040621	79.1	85.6
500-197359-2	AES-MW2-040621	79.7	83.4
500-197359-2 MS	AES-MW2-040621	83.0	87.5
500-197359-2 MSD	AES-MW2-040621	79.4	88.6
500-197359-3	AES-MW3-040621	77.9	90.8
500-197359-4	AES-MW4-040621	84.8	90.8
500-197359-5	AES-MW4-DUP-040621	90.0	88.6
500-197359-6	AES-MW5-040621	76.7	88.2
500-197359-7	AES-FB-040621	71.2	90.1
500-197405-E-3-C DU	Duplicate	67.9	89.3
LCS 160-506128/1-A	Lab Control Sample	77.6	85.2
MB 160-506128/25-A	Method Blank	77.6	88.2

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Eurofins TestAmerica, Chicago

LABORATORY ANALYTICAL REPORT: OCTOBER 2021 SAMPLING EVENT



Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-206288-1

Client Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

For:

DNA-Environment, LLC
35 Calle Juan C Borbon
Ste 67-227
Guaynabo, Puerto Rico 00969-5375

Attn: Alberto Melendez

Authorized for release by:
11/4/2021 12:38:02 PM

Richard Wright, Senior Project Manager
(708)746-0045
Richard.Wright@Eurofinset.com

LINKS

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

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

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Case Narrative

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

**Job Narrative
500-206288-1**

Comments

No additional comments.

Receipt

The samples were received on 10/6/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.8° C.

Metals

Method 6020B: The following samples were diluted to bring the concentration of target analytes within the calibration range: AES-MW3-100421 (500-206288-3), AES-MW4-100421 (500-206288-4), AES-MW4-DUP-100421 (500-206288-5) and AES-MW5-100421 (500-206288-6). Elevated reporting limits (RLs) are provided.

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

General Chemistry

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

Detection Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-100421

Lab Sample ID: 500-206288-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00073	J	0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Barium	0.042		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	0.26		0.050	0.013	mg/L	1		6020B	Total Recoverable
Calcium	140		0.20	0.044	mg/L	1		6020B	Total Recoverable
Cobalt	0.00099	J	0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lithium	0.00070	J	0.0020	0.00050	mg/L	1		6020B	Total Recoverable
Selenium	0.0062		0.0025	0.00098	mg/L	1		6020B	Total Recoverable
Sulfate	290		20	9.5	mg/L	100		9056A	Total/NA
Total Dissolved Solids	1300		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	280		20	10	mg/L	10		SM 4500 Cl- E	Total/NA
Fluoride	0.64		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	6.99				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-MW2-100421

Lab Sample ID: 500-206288-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00059	J	0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Barium	0.13		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	0.16		0.050	0.013	mg/L	1		6020B	Total Recoverable
Calcium	94		0.20	0.044	mg/L	1		6020B	Total Recoverable
Cobalt	0.00093	J	0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lithium	0.00052	J	0.0020	0.00050	mg/L	1		6020B	Total Recoverable
Selenium	0.0045		0.0025	0.00098	mg/L	1		6020B	Total Recoverable
Sulfate	26		1.0	0.48	mg/L	5		9056A	Total/NA
Total Dissolved Solids	560		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	99		20	10	mg/L	10		SM 4500 Cl- E	Total/NA
Fluoride	0.55		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	6.72				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-MW3-100421

Lab Sample ID: 500-206288-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0026		0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Barium	0.11		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	0.97		0.050	0.013	mg/L	1		6020B	Total Recoverable
Cadmium	0.00019	J	0.00050	0.00017	mg/L	1		6020B	Total Recoverable
Calcium	320		1.0	0.22	mg/L	5		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW3-100421 (Continued)

Lab Sample ID: 500-206288-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0022		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lithium	0.0036		0.0020	0.00050	mg/L	1		6020B	Total Recoverable
Molybdenum	0.21		0.0050	0.0025	mg/L	1		6020B	Total Recoverable
Selenium	0.23		0.0025	0.00098	mg/L	1		6020B	Total Recoverable
Sulfate	2400		200	95	mg/L	1000		9056A	Total/NA
Total Dissolved Solids	11000		100	43	mg/L	1		SM 2540C	Total/NA
Chloride	3800		200	100	mg/L	100		SM 4500 Cl- E	Total/NA
Fluoride	1.7		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	6.79				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-MW4-100421

Lab Sample ID: 500-206288-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0033		0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Barium	0.042		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	2.3		0.050	0.013	mg/L	1		6020B	Total Recoverable
Calcium	550		1.0	0.22	mg/L	5		6020B	Total Recoverable
Cobalt	0.0010		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lithium	0.81		0.0020	0.00050	mg/L	1		6020B	Total Recoverable
Molybdenum	0.54		0.0050	0.0025	mg/L	1		6020B	Total Recoverable
Selenium	0.011		0.0025	0.00098	mg/L	1		6020B	Total Recoverable
Sulfate	14000		400	190	mg/L	2000		9056A	Total/NA
Total Dissolved Solids	39000		500	220	mg/L	1		SM 2540C	Total/NA
Chloride	9900		400	200	mg/L	200		SM 4500 Cl- E	Total/NA
Fluoride	0.58		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	7.07				SU	1		Field Sampling	Total/NA

Client Sample ID: AES-MW4-DUP-100421

Lab Sample ID: 500-206288-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0034		0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Barium	0.044		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	2.4		0.050	0.013	mg/L	1		6020B	Total Recoverable
Calcium	580		1.0	0.22	mg/L	5		6020B	Total Recoverable
Cobalt	0.0011		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lithium	0.79		0.0020	0.00050	mg/L	1		6020B	Total Recoverable
Molybdenum	0.55		0.0050	0.0025	mg/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-100421 (Continued)

Lab Sample ID: 500-206288-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.012		0.0025	0.00098	mg/L	1		6020B	Total Recoverable
Sulfate	14000		400	190	mg/L	2000		9056A	Total/NA
Total Dissolved Solids	40000		500	220	mg/L	1		SM 2540C	Total/NA
Chloride	9900		600	300	mg/L	300		SM 4500 Cl- E	Total/NA
Fluoride	0.58		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AES-MW5-100421

Lab Sample ID: 500-206288-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.022		0.0060	0.0014	mg/L	6		6020B	Total Recoverable
Barium	0.033		0.0025	0.00073	mg/L	1		6020B	Total Recoverable
Boron	0.36		0.050	0.013	mg/L	1		6020B	Total Recoverable
Calcium	790		1.2	0.27	mg/L	6		6020B	Total Recoverable
Cobalt	0.0027		0.0010	0.00040	mg/L	1		6020B	Total Recoverable
Lithium	0.0046		0.0020	0.00050	mg/L	1		6020B	Total Recoverable
Selenium	0.0023	J	0.0025	0.00098	mg/L	1		6020B	Total Recoverable
Sulfate	2500		200	95	mg/L	1000		9056A	Total/NA
Total Dissolved Solids	11000		100	43	mg/L	1		SM 2540C	Total/NA
Chloride	4000		200	100	mg/L	100		SM 4500 Cl- E	Total/NA
Fluoride	0.41		0.10	0.056	mg/L	1		SM 4500 F C	Total/NA
Field pH	6.49			SU		1		Field Sampling	Total/NA

Client Sample ID: AES-FB-100421

Lab Sample ID: 500-206288-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00024	J	0.0010	0.00023	mg/L	1		6020B	Total Recoverable
Calcium	0.45		0.20	0.044	mg/L	1		6020B	Total Recoverable
Lithium	0.00077	J	0.0020	0.00050	mg/L	1		6020B	Total Recoverable
Sulfate	0.42		0.20	0.095	mg/L	1		9056A	Total/NA
Total Dissolved Solids	12		10	4.3	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
9056A	Anions, Ion Chromatography	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
Field Sampling	Field Sampling	EPA	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
7470A	Preparation, Mercury	SW846	TAL CHI

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-206288-1	AES-MW1-100421	Water	10/04/21 10:35	10/06/21 10:30
500-206288-2	AES-MW2-100421	Water	10/04/21 12:18	10/06/21 10:30
500-206288-3	AES-MW3-100421	Water	10/04/21 13:05	10/06/21 10:30
500-206288-4	AES-MW4-100421	Water	10/04/21 15:40	10/06/21 10:30
500-206288-5	AES-MW4-DUP-100421	Water	10/04/21 16:17	10/06/21 10:30
500-206288-6	AES-MW5-100421	Water	10/04/21 17:08	10/06/21 10:30
500-206288-7	AES-FB-100421	Water	10/04/21 17:12	10/06/21 10:30

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-100421

Lab Sample ID: 500-206288-1

Matrix: Water

Date Collected: 10/04/21 10:35

Date Received: 10/06/21 10:30

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		10/15/21 09:21	10/19/21 21:44	1
Arsenic	0.00073	J	0.0010	0.00023	mg/L		10/15/21 09:21	10/20/21 13:02	1
Barium	0.042		0.0025	0.00073	mg/L		10/15/21 09:21	10/19/21 21:44	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		10/15/21 09:21	10/19/21 21:44	1
Boron	0.26		0.050	0.013	mg/L		10/15/21 09:21	10/19/21 21:44	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		10/15/21 09:21	10/19/21 21:44	1
Calcium	140		0.20	0.044	mg/L		10/15/21 09:21	10/19/21 21:44	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		10/15/21 09:21	10/19/21 21:44	1
Cobalt	0.00099	J	0.0010	0.00040	mg/L		10/15/21 09:21	10/19/21 21:44	1
Lead	0.00019	U	0.00050	0.00019	mg/L		10/15/21 09:21	10/19/21 21:44	1
Lithium	0.00070	J	0.0020	0.00050	mg/L		10/15/21 09:21	10/25/21 12:24	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		10/15/21 09:21	10/19/21 21:44	1
Selenium	0.0062		0.0025	0.00098	mg/L		10/15/21 09:21	10/19/21 21:44	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		10/15/21 09:21	10/19/21 21:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		10/11/21 12:05	10/12/21 08:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	290		20	9.5	mg/L			10/12/21 23:37	100
Total Dissolved Solids	1300		10	4.3	mg/L			10/08/21 11:10	1
Chloride	280		20	10	mg/L			10/19/21 12:30	10
Fluoride	0.64		0.10	0.056	mg/L			10/12/21 10:34	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.99				SU			10/04/21 10:35	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW2-100421

Lab Sample ID: 500-206288-2

Matrix: Water

Date Collected: 10/04/21 12:18

Date Received: 10/06/21 10:30

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		10/15/21 09:21	10/19/21 21:48	1
Arsenic	0.00059	J	0.0010	0.00023	mg/L		10/15/21 09:21	10/20/21 13:05	1
Barium	0.13		0.0025	0.00073	mg/L		10/15/21 09:21	10/19/21 21:48	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		10/15/21 09:21	10/19/21 21:48	1
Boron	0.16		0.050	0.013	mg/L		10/15/21 09:21	10/19/21 21:48	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		10/15/21 09:21	10/19/21 21:48	1
Calcium	94		0.20	0.044	mg/L		10/15/21 09:21	10/19/21 21:48	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		10/15/21 09:21	10/19/21 21:48	1
Cobalt	0.00093	J	0.0010	0.00040	mg/L		10/15/21 09:21	10/19/21 21:48	1
Lead	0.00019	U	0.00050	0.00019	mg/L		10/15/21 09:21	10/19/21 21:48	1
Lithium	0.00052	J	0.0020	0.00050	mg/L		10/15/21 09:21	10/25/21 12:27	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		10/15/21 09:21	10/19/21 21:48	1
Selenium	0.0045		0.0025	0.00098	mg/L		10/15/21 09:21	10/19/21 21:48	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		10/15/21 09:21	10/19/21 21:48	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		10/11/21 12:05	10/12/21 08:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	26		1.0	0.48	mg/L			10/12/21 23:50	5
Total Dissolved Solids	560		10	4.3	mg/L			10/08/21 11:15	1
Chloride	99		20	10	mg/L			10/19/21 12:30	10
Fluoride	0.55		0.10	0.056	mg/L			10/12/21 10:37	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.72				SU			10/04/21 12:18	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW3-100421

Lab Sample ID: 500-206288-3

Matrix: Water

Date Collected: 10/04/21 13:05

Date Received: 10/06/21 10:30

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		10/15/21 09:21	10/19/21 22:05	1
Arsenic	0.0026		0.0010	0.00023	mg/L		10/15/21 09:21	10/20/21 13:53	1
Barium	0.11		0.0025	0.00073	mg/L		10/15/21 09:21	10/19/21 22:05	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		10/15/21 09:21	10/19/21 22:05	1
Boron	0.97		0.050	0.013	mg/L		10/15/21 09:21	10/19/21 22:05	1
Cadmium	0.00019	J	0.00050	0.00017	mg/L		10/15/21 09:21	10/19/21 22:05	1
Calcium	320		1.0	0.22	mg/L		10/15/21 09:21	10/20/21 13:29	5
Chromium	0.0011	U	0.0050	0.0011	mg/L		10/15/21 09:21	10/19/21 22:05	1
Cobalt	0.0022		0.0010	0.00040	mg/L		10/15/21 09:21	10/19/21 22:05	1
Lead	0.00019	U	0.00050	0.00019	mg/L		10/15/21 09:21	10/19/21 22:05	1
Lithium	0.0036		0.0020	0.00050	mg/L		10/15/21 09:21	10/25/21 12:51	1
Molybdenum	0.21		0.0050	0.0025	mg/L		10/15/21 09:21	10/19/21 22:05	1
Selenium	0.23		0.0025	0.00098	mg/L		10/15/21 09:21	10/19/21 22:05	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		10/15/21 09:21	10/19/21 22:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		10/11/21 12:05	10/12/21 08:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2400		200	95	mg/L			10/13/21 00:28	1000
Total Dissolved Solids	11000		100	43	mg/L			10/08/21 11:23	1
Chloride	3800		200	100	mg/L			10/19/21 12:53	100
Fluoride	1.7		0.10	0.056	mg/L			10/12/21 10:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.79				SU			10/04/21 13:05	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-100421

Lab Sample ID: 500-206288-4

Matrix: Water

Date Collected: 10/04/21 15:40

Date Received: 10/06/21 10:30

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		10/15/21 09:21	10/19/21 22:09	1
Arsenic	0.0033		0.0010	0.00023	mg/L		10/15/21 09:21	10/20/21 13:57	1
Barium	0.042		0.0025	0.00073	mg/L		10/15/21 09:21	10/19/21 22:09	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		10/15/21 09:21	10/19/21 22:09	1
Boron	2.3		0.050	0.013	mg/L		10/15/21 09:21	10/19/21 22:09	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		10/15/21 09:21	10/19/21 22:09	1
Calcium	550		1.0	0.22	mg/L		10/15/21 09:21	10/20/21 13:33	5
Chromium	0.0011	U	0.0050	0.0011	mg/L		10/15/21 09:21	10/19/21 22:09	1
Cobalt	0.0010		0.0010	0.00040	mg/L		10/15/21 09:21	10/19/21 22:09	1
Lead	0.00019	U	0.00050	0.00019	mg/L		10/15/21 09:21	10/19/21 22:09	1
Lithium	0.81		0.0020	0.00050	mg/L		10/15/21 09:21	10/25/21 12:54	1
Molybdenum	0.54		0.0050	0.0025	mg/L		10/15/21 09:21	10/19/21 22:09	1
Selenium	0.011		0.0025	0.00098	mg/L		10/15/21 09:21	10/19/21 22:09	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		10/15/21 09:21	10/19/21 22:09	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		10/11/21 12:05	10/12/21 08:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14000		400	190	mg/L			10/15/21 18:30	2000
Total Dissolved Solids	39000		500	220	mg/L			10/08/21 11:25	1
Chloride	9900		400	200	mg/L			10/19/21 12:53	200
Fluoride	0.58		0.10	0.056	mg/L			10/12/21 10:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.07				SU			10/04/21 15:40	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-100421

Lab Sample ID: 500-206288-5

Matrix: Water

Date Collected: 10/04/21 16:17

Date Received: 10/06/21 10:30

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		10/15/21 09:21	10/19/21 22:19	1
Arsenic	0.0034		0.0010	0.00023	mg/L		10/15/21 09:21	10/20/21 14:00	1
Barium	0.044		0.0025	0.00073	mg/L		10/15/21 09:21	10/19/21 22:19	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		10/15/21 09:21	10/19/21 22:19	1
Boron	2.4		0.050	0.013	mg/L		10/15/21 09:21	10/19/21 22:19	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		10/15/21 09:21	10/19/21 22:19	1
Calcium	580		1.0	0.22	mg/L		10/15/21 09:21	10/20/21 13:36	5
Chromium	0.0011	U	0.0050	0.0011	mg/L		10/15/21 09:21	10/19/21 22:19	1
Cobalt	0.0011		0.0010	0.00040	mg/L		10/15/21 09:21	10/19/21 22:19	1
Lead	0.00019	U	0.00050	0.00019	mg/L		10/15/21 09:21	10/19/21 22:19	1
Lithium	0.79		0.0020	0.00050	mg/L		10/15/21 09:21	10/25/21 12:58	1
Molybdenum	0.55		0.0050	0.0025	mg/L		10/15/21 09:21	10/19/21 22:19	1
Selenium	0.012		0.0025	0.00098	mg/L		10/15/21 09:21	10/19/21 22:19	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		10/15/21 09:21	10/19/21 22:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		10/11/21 12:05	10/12/21 08:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14000		400	190	mg/L			10/14/21 15:26	2000
Total Dissolved Solids	40000		500	220	mg/L			10/08/21 11:28	1
Chloride	9900		600	300	mg/L			10/19/21 13:34	300
Fluoride	0.58		0.10	0.056	mg/L			10/12/21 10:51	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW5-100421

Lab Sample ID: 500-206288-6

Matrix: Water

Date Collected: 10/04/21 17:08

Date Received: 10/06/21 10:30

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		10/15/21 09:21	10/19/21 22:22	1
Arsenic	0.22		0.0060	0.0014	mg/L		10/15/21 09:21	10/20/21 13:39	6
Barium	0.033		0.0025	0.00073	mg/L		10/15/21 09:21	10/19/21 22:22	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		10/15/21 09:21	10/19/21 22:22	1
Boron	0.36		0.050	0.013	mg/L		10/15/21 09:21	10/19/21 22:22	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		10/15/21 09:21	10/19/21 22:22	1
Calcium	790		1.2	0.27	mg/L		10/15/21 09:21	10/20/21 13:39	6
Chromium	0.0011	U	0.0050	0.0011	mg/L		10/15/21 09:21	10/19/21 22:22	1
Cobalt	0.0027		0.0010	0.00040	mg/L		10/15/21 09:21	10/19/21 22:22	1
Lead	0.00019	U	0.00050	0.00019	mg/L		10/15/21 09:21	10/19/21 22:22	1
Lithium	0.0046		0.0020	0.00050	mg/L		10/15/21 09:21	10/25/21 13:01	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		10/15/21 09:21	10/19/21 22:22	1
Selenium	0.0023	J	0.0025	0.00098	mg/L		10/15/21 09:21	10/19/21 22:22	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		10/15/21 09:21	10/19/21 22:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		10/11/21 12:05	10/12/21 08:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2500		200	95	mg/L			10/13/21 01:31	1000
Total Dissolved Solids	11000		100	43	mg/L			10/08/21 11:31	1
Chloride	4000		200	100	mg/L			10/19/21 12:54	100
Fluoride	0.41		0.10	0.056	mg/L			10/12/21 10:54	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.49				SU			10/04/21 17:08	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-FB-100421

Lab Sample ID: 500-206288-7

Matrix: Water

Date Collected: 10/04/21 17:12

Date Received: 10/06/21 10:30

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		10/15/21 09:21	10/19/21 22:26	1
Arsenic	0.00024	J	0.0010	0.00023	mg/L		10/15/21 09:21	10/20/21 13:43	1
Barium	0.00073	U	0.0025	0.00073	mg/L		10/15/21 09:21	10/19/21 22:26	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		10/15/21 09:21	10/19/21 22:26	1
Boron	0.013	U	0.050	0.013	mg/L		10/15/21 09:21	10/19/21 22:26	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		10/15/21 09:21	10/19/21 22:26	1
Calcium	0.45		0.20	0.044	mg/L		10/15/21 09:21	10/19/21 22:26	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		10/15/21 09:21	10/19/21 22:26	1
Cobalt	0.00040	U	0.0010	0.00040	mg/L		10/15/21 09:21	10/19/21 22:26	1
Lead	0.00019	U	0.00050	0.00019	mg/L		10/15/21 09:21	10/19/21 22:26	1
Lithium	0.00077	J	0.0020	0.00050	mg/L		10/15/21 09:21	10/25/21 13:05	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		10/15/21 09:21	10/19/21 22:26	1
Selenium	0.00098	U	0.0025	0.00098	mg/L		10/15/21 09:21	10/19/21 22:26	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		10/15/21 09:21	10/19/21 22:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.00020	0.000098	mg/L		10/11/21 12:05	10/12/21 08:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.42		0.20	0.095	mg/L			10/13/21 01:44	1
Total Dissolved Solids	12		10	4.3	mg/L			10/11/21 23:25	1
Chloride	1.0	U	2.0	1.0	mg/L			10/19/21 12:32	1
Fluoride	0.056	U	0.10	0.056	mg/L			10/12/21 10:59	1

Definitions/Glossary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifiers

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Metals

Prep Batch: 622877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	7470A	
500-206288-2	AES-MW2-100421	Total/NA	Water	7470A	
500-206288-3	AES-MW3-100421	Total/NA	Water	7470A	
500-206288-4	AES-MW4-100421	Total/NA	Water	7470A	
500-206288-5	AES-MW4-DUP-100421	Total/NA	Water	7470A	
500-206288-6	AES-MW5-100421	Total/NA	Water	7470A	
500-206288-7	AES-FB-100421	Total/NA	Water	7470A	
MB 500-622877/12-A	Method Blank	Total/NA	Water	7470A	
LCS 500-622877/13-A	Lab Control Sample	Total/NA	Water	7470A	
500-206288-2 MS	AES-MW2-100421	Total/NA	Water	7470A	
500-206288-2 MSD	AES-MW2-100421	Total/NA	Water	7470A	
500-206288-2 DU	AES-MW2-100421	Total/NA	Water	7470A	

Analysis Batch: 623081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	7470A	622877
500-206288-2	AES-MW2-100421	Total/NA	Water	7470A	622877
500-206288-3	AES-MW3-100421	Total/NA	Water	7470A	622877
500-206288-4	AES-MW4-100421	Total/NA	Water	7470A	622877
500-206288-5	AES-MW4-DUP-100421	Total/NA	Water	7470A	622877
500-206288-6	AES-MW5-100421	Total/NA	Water	7470A	622877
500-206288-7	AES-FB-100421	Total/NA	Water	7470A	622877
MB 500-622877/12-A	Method Blank	Total/NA	Water	7470A	622877
LCS 500-622877/13-A	Lab Control Sample	Total/NA	Water	7470A	622877
500-206288-2 MS	AES-MW2-100421	Total/NA	Water	7470A	622877
500-206288-2 MSD	AES-MW2-100421	Total/NA	Water	7470A	622877
500-206288-2 DU	AES-MW2-100421	Total/NA	Water	7470A	622877

Prep Batch: 623682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total Recoverable	Water	3005A	
500-206288-2	AES-MW2-100421	Total Recoverable	Water	3005A	
500-206288-3	AES-MW3-100421	Total Recoverable	Water	3005A	
500-206288-4	AES-MW4-100421	Total Recoverable	Water	3005A	
500-206288-5	AES-MW4-DUP-100421	Total Recoverable	Water	3005A	
500-206288-6	AES-MW5-100421	Total Recoverable	Water	3005A	
500-206288-7	AES-FB-100421	Total Recoverable	Water	3005A	
MB 500-623682/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-623682/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-206288-2 MS	AES-MW2-100421	Total Recoverable	Water	3005A	
500-206288-2 MSD	AES-MW2-100421	Total Recoverable	Water	3005A	
500-206288-2 DU	AES-MW2-100421	Total Recoverable	Water	3005A	

Analysis Batch: 624495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total Recoverable	Water	6020B	623682
500-206288-2	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-3	AES-MW3-100421	Total Recoverable	Water	6020B	623682
500-206288-4	AES-MW4-100421	Total Recoverable	Water	6020B	623682
500-206288-5	AES-MW4-DUP-100421	Total Recoverable	Water	6020B	623682
500-206288-6	AES-MW5-100421	Total Recoverable	Water	6020B	623682

Eurofins TestAmerica, Chicago

QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Metals (Continued)

Analysis Batch: 624495 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-7	AES-FB-100421	Total Recoverable	Water	6020B	623682
MB 500-623682/1-A	Method Blank	Total Recoverable	Water	6020B	623682
LCS 500-623682/2-A	Lab Control Sample	Total Recoverable	Water	6020B	623682
500-206288-2 MS	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-2 MSD	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-2 DU	AES-MW2-100421	Total Recoverable	Water	6020B	623682

Analysis Batch: 624551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total Recoverable	Water	6020B	623682
500-206288-2	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-3	AES-MW3-100421	Total Recoverable	Water	6020B	623682
500-206288-3	AES-MW3-100421	Total Recoverable	Water	6020B	623682
500-206288-4	AES-MW4-100421	Total Recoverable	Water	6020B	623682
500-206288-4	AES-MW4-100421	Total Recoverable	Water	6020B	623682
500-206288-5	AES-MW4-DUP-100421	Total Recoverable	Water	6020B	623682
500-206288-5	AES-MW4-DUP-100421	Total Recoverable	Water	6020B	623682
500-206288-6	AES-MW5-100421	Total Recoverable	Water	6020B	623682
500-206288-7	AES-FB-100421	Total Recoverable	Water	6020B	623682
MB 500-623682/1-A	Method Blank	Total Recoverable	Water	6020B	623682
LCS 500-623682/2-A	Lab Control Sample	Total Recoverable	Water	6020B	623682
500-206288-2 MS	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-2 MSD	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-2 DU	AES-MW2-100421	Total Recoverable	Water	6020B	623682

Analysis Batch: 625269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total Recoverable	Water	6020B	623682
500-206288-2	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-3	AES-MW3-100421	Total Recoverable	Water	6020B	623682
500-206288-4	AES-MW4-100421	Total Recoverable	Water	6020B	623682
500-206288-5	AES-MW4-DUP-100421	Total Recoverable	Water	6020B	623682
500-206288-6	AES-MW5-100421	Total Recoverable	Water	6020B	623682
500-206288-7	AES-FB-100421	Total Recoverable	Water	6020B	623682
MB 500-623682/1-A	Method Blank	Total Recoverable	Water	6020B	623682
LCS 500-623682/2-A	Lab Control Sample	Total Recoverable	Water	6020B	623682
500-206288-2 MS	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-2 MSD	AES-MW2-100421	Total Recoverable	Water	6020B	623682
500-206288-2 DU	AES-MW2-100421	Total Recoverable	Water	6020B	623682

General Chemistry

Analysis Batch: 622546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	SM 2540C	
500-206288-2	AES-MW2-100421	Total/NA	Water	SM 2540C	
500-206288-3	AES-MW3-100421	Total/NA	Water	SM 2540C	
500-206288-4	AES-MW4-100421	Total/NA	Water	SM 2540C	
500-206288-5	AES-MW4-DUP-100421	Total/NA	Water	SM 2540C	
500-206288-6	AES-MW5-100421	Total/NA	Water	SM 2540C	
MB 500-622546/1	Method Blank	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-1

General Chemistry (Continued)

Analysis Batch: 622546 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-622546/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-206288-2 MS	AES-MW2-100421	Total/NA	Water	SM 2540C	
500-206288-2 MSD	AES-MW2-100421	Total/NA	Water	SM 2540C	
500-206288-1 DU	AES-MW1-100421	Total/NA	Water	SM 2540C	

Analysis Batch: 622961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-7	AES-FB-100421	Total/NA	Water	SM 2540C	
MB 500-622961/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-622961/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-206288-7 MS	AES-FB-100421	Total/NA	Water	SM 2540C	
500-206288-7 DU	AES-FB-100421	Total/NA	Water	SM 2540C	

Analysis Batch: 623086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	SM 4500 F C	
500-206288-2	AES-MW2-100421	Total/NA	Water	SM 4500 F C	
500-206288-3	AES-MW3-100421	Total/NA	Water	SM 4500 F C	
500-206288-4	AES-MW4-100421	Total/NA	Water	SM 4500 F C	
500-206288-5	AES-MW4-DUP-100421	Total/NA	Water	SM 4500 F C	
500-206288-6	AES-MW5-100421	Total/NA	Water	SM 4500 F C	
500-206288-7	AES-FB-100421	Total/NA	Water	SM 4500 F C	
MB 500-623086/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 500-623086/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
500-206288-2 MS	AES-MW2-100421	Total/NA	Water	SM 4500 F C	
500-206288-2 MSD	AES-MW2-100421	Total/NA	Water	SM 4500 F C	

Analysis Batch: 623115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	9056A	
500-206288-2	AES-MW2-100421	Total/NA	Water	9056A	
500-206288-3	AES-MW3-100421	Total/NA	Water	9056A	
500-206288-6	AES-MW5-100421	Total/NA	Water	9056A	
500-206288-7	AES-FB-100421	Total/NA	Water	9056A	
MB 500-623115/3	Method Blank	Total/NA	Water	9056A	
LCS 500-623115/4	Lab Control Sample	Total/NA	Water	9056A	
500-206288-2 MS	AES-MW2-100421	Total/NA	Water	9056A	
500-206288-2 MSD	AES-MW2-100421	Total/NA	Water	9056A	

Analysis Batch: 623499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-5	AES-MW4-DUP-100421	Total/NA	Water	9056A	
MB 500-623499/3	Method Blank	Total/NA	Water	9056A	
LCS 500-623499/4	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 623763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-4	AES-MW4-100421	Total/NA	Water	9056A	
MB 500-623763/3	Method Blank	Total/NA	Water	9056A	
LCS 500-623763/4	Lab Control Sample	Total/NA	Water	9056A	

Eurofins TestAmerica, Chicago

QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

General Chemistry

Analysis Batch: 624306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	SM 4500 Cl- E	
500-206288-2	AES-MW2-100421	Total/NA	Water	SM 4500 Cl- E	
500-206288-3	AES-MW3-100421	Total/NA	Water	SM 4500 Cl- E	
500-206288-4	AES-MW4-100421	Total/NA	Water	SM 4500 Cl- E	
500-206288-5	AES-MW4-DUP-100421	Total/NA	Water	SM 4500 Cl- E	
500-206288-6	AES-MW5-100421	Total/NA	Water	SM 4500 Cl- E	
500-206288-7	AES-FB-100421	Total/NA	Water	SM 4500 Cl- E	
MB 500-624306/130	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-624306/131	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-206288-2 MS	AES-MW2-100421	Total/NA	Water	SM 4500 Cl- E	
500-206288-2 MSD	AES-MW2-100421	Total/NA	Water	SM 4500 Cl- E	

Field Service / Mobile Lab

Analysis Batch: 622345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	Field Sampling	
500-206288-2	AES-MW2-100421	Total/NA	Water	Field Sampling	
500-206288-3	AES-MW3-100421	Total/NA	Water	Field Sampling	
500-206288-4	AES-MW4-100421	Total/NA	Water	Field Sampling	
500-206288-6	AES-MW5-100421	Total/NA	Water	Field Sampling	

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 500-623682/1-A

Matrix: Water

Analysis Batch: 624495

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0013	U	0.0030	0.0013	mg/L		10/15/21 09:21	10/19/21 21:37	1
Barium	0.00073	U	0.0025	0.00073	mg/L		10/15/21 09:21	10/19/21 21:37	1
Beryllium	0.00053	U	0.0010	0.00053	mg/L		10/15/21 09:21	10/19/21 21:37	1
Boron	0.013	U	0.050	0.013	mg/L		10/15/21 09:21	10/19/21 21:37	1
Cadmium	0.00017	U	0.00050	0.00017	mg/L		10/15/21 09:21	10/19/21 21:37	1
Calcium	0.044	U	0.20	0.044	mg/L		10/15/21 09:21	10/19/21 21:37	1
Chromium	0.0011	U	0.0050	0.0011	mg/L		10/15/21 09:21	10/19/21 21:37	1
Cobalt	0.00040	U	0.0010	0.00040	mg/L		10/15/21 09:21	10/19/21 21:37	1
Lead	0.00019	U	0.00050	0.00019	mg/L		10/15/21 09:21	10/19/21 21:37	1
Molybdenum	0.0025	U	0.0050	0.0025	mg/L		10/15/21 09:21	10/19/21 21:37	1
Selenium	0.00098	U	0.0025	0.00098	mg/L		10/15/21 09:21	10/19/21 21:37	1
Thallium	0.00057	U	0.0010	0.00057	mg/L		10/15/21 09:21	10/19/21 21:37	1

Lab Sample ID: MB 500-623682/1-A

Matrix: Water

Analysis Batch: 624551

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00023	U	0.0010	0.00023	mg/L		10/15/21 09:21	10/20/21 12:51	1

Lab Sample ID: MB 500-623682/1-A

Matrix: Water

Analysis Batch: 625269

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.00050	U	0.0020	0.00050	mg/L		10/15/21 09:21	10/25/21 12:17	1

Lab Sample ID: LCS 500-623682/2-A

Matrix: Water

Analysis Batch: 624495

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Spike Added	LCS			D	%Rec	Limits
		Result	Qualifier	Unit			
Antimony	0.500	0.509		mg/L	102	80 - 120	
Barium	0.500	0.509		mg/L	102	80 - 120	
Beryllium	0.0500	0.0506		mg/L	101	80 - 120	
Boron	1.00	1.04		mg/L	104	80 - 120	
Cadmium	0.0500	0.0500		mg/L	100	80 - 120	
Calcium	10.0	10.2		mg/L	102	80 - 120	
Chromium	0.200	0.210		mg/L	105	80 - 120	
Cobalt	0.500	0.515		mg/L	103	80 - 120	
Lead	0.100	0.107		mg/L	107	80 - 120	
Molybdenum	1.00	0.984		mg/L	98	80 - 120	
Selenium	0.100	0.0980		mg/L	98	80 - 120	
Thallium	0.100	0.106		mg/L	106	80 - 120	

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-623682/2-A

Matrix: Water

Analysis Batch: 624551

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limit
Arsenic	0.100	0.102		mg/L	102	80 - 120	

Lab Sample ID: LCS 500-623682/2-A

Matrix: Water

Analysis Batch: 625269

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limit
Lithium	0.100	0.108		mg/L	108	80 - 120	

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 624495

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limit
Antimony	0.0013	U	0.500	0.518		mg/L	104	75 - 125	
Barium	0.13		0.500	0.627		mg/L	99	75 - 125	
Beryllium	0.00053	U	0.0500	0.0491		mg/L	98	75 - 125	
Boron	0.16		1.00	1.17		mg/L	101	75 - 125	
Cadmium	0.00017	U	0.0500	0.0498		mg/L	100	75 - 125	
Calcium	94		10.0	100	4	mg/L	63	75 - 125	
Chromium	0.0011	U	0.200	0.199		mg/L	100	75 - 125	
Cobalt	0.00093	J	0.500	0.482		mg/L	96	75 - 125	
Lead	0.00019	U	0.100	0.105		mg/L	105	75 - 125	
Molybdenum	0.0025	U	1.00	0.961		mg/L	96	75 - 125	
Selenium	0.0045		0.100	0.104		mg/L	100	75 - 125	
Thallium	0.00057	U	0.100	0.105		mg/L	105	75 - 125	

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 624551

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limit
Arsenic	0.00059	J	0.100	0.103		mg/L	102	75 - 125	

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 625269

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limit
Lithium	0.00052	J	0.100	0.108		mg/L	108	75 - 125	

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 624495

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	Limit
Antimony	0.0013	U	0.500	0.522		mg/L	104	75 - 125	1	20
Barium	0.13		0.500	0.628		mg/L	100	75 - 125	0	20
Beryllium	0.00053	U	0.0500	0.0484		mg/L	97	75 - 125	2	20
Boron	0.16		1.00	1.19		mg/L	102	75 - 125	1	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 624495

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Cadmium	0.00017	U	0.0500	0.0501	mg/L	100	75 - 125	1	20	
Calcium	94		10.0	99.0	4	49	75 - 125	1	20	
Chromium	0.0011	U	0.200	0.202	mg/L	101	75 - 125	1	20	
Cobalt	0.00093	J	0.500	0.488	mg/L	97	75 - 125	1	20	
Lead	0.00019	U	0.100	0.106	mg/L	106	75 - 125	1	20	
Molybdenum	0.0025	U	1.00	0.970	mg/L	97	75 - 125	1	20	
Selenium	0.0045		0.100	0.106	mg/L	101	75 - 125	2	20	
Thallium	0.00057	U	0.100	0.105	mg/L	105	75 - 125	0	20	

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 624551

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Arsenic	0.00059	J	0.100	0.101	mg/L	100	75 - 125	2	20	

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 625269

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Lithium	0.00052	J	0.100	0.109	mg/L	109	75 - 125	1	20	

Lab Sample ID: 500-206288-2 DU

Matrix: Water

Analysis Batch: 624495

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.0013	U	0.0013	U	mg/L		NC	20
Barium	0.13		0.128		mg/L		0.8	20
Beryllium	0.00053	U	0.00053	U	mg/L		NC	20
Boron	0.16		0.167		mg/L		1	20
Cadmium	0.00017	U	0.00017	U	mg/L		NC	20
Calcium	94		93.9		mg/L		0.3	20
Chromium	0.0011	U	0.0011	U	mg/L		NC	20
Cobalt	0.00093	J	0.000926	J	mg/L		0.6	20
Lead	0.00019	U	0.00019	U	mg/L		NC	20
Molybdenum	0.0025	U	0.0025	U	mg/L		NC	20
Selenium	0.0045		0.00446		mg/L		1	20
Thallium	0.00057	U	0.00057	U	mg/L		NC	20

Lab Sample ID: 500-206288-2 DU

Matrix: Water

Analysis Batch: 624551

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.00059	J	0.000563	J	mg/L		5	20

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 500-206288-2 DU

Matrix: Water

Analysis Batch: 625269

Client Sample ID: AES-MW2-100421

Prep Type: Total Recoverable

Prep Batch: 623682

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lithium	0.00052	J	0.00050	U	mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-622877/12-A

Matrix: Water

Analysis Batch: 623081

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 622877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	U	0.000020	0.000098	mg/L		10/11/21 12:05	10/12/21 08:01	1

Lab Sample ID: LCS 500-622877/13-A

Matrix: Water

Analysis Batch: 623081

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 622877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limts
Mercury	0.00200	0.00222		mg/L	111	80 - 120	

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 623081

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Prep Batch: 622877

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limts
Mercury	0.000098	U	0.00100	0.00101		mg/L	101	75 - 125	

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 623081

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Prep Batch: 622877

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Mercury	0.000098	U	0.00100	0.000992		mg/L	99	75 - 125	2	20

Lab Sample ID: 500-206288-2 DU

Matrix: Water

Analysis Batch: 623081

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Prep Batch: 622877

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.000098	U	0.000098	U	mg/L		NC	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 500-623115/3

Matrix: Water

Analysis Batch: 623115

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.095	U	0.20	0.095	mg/L		10/12/21 20:26		1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 500-623115/4

Matrix: Water

Analysis Batch: 623115

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	RPD
Sulfate	5.00	5.18		mg/L	104	80 - 120	

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 623115

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	RPD
Sulfate	26		12.5	39.0		mg/L	101	80 - 120	

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 623115

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD
Sulfate	26		12.5	38.8		mg/L	100	80 - 120	

Lab Sample ID: MB 500-623499/3

Matrix: Water

Analysis Batch: 623499

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.095	U	0.20	0.095	mg/L			10/14/21 08:23	1

Lab Sample ID: LCS 500-623499/4

Matrix: Water

Analysis Batch: 623499

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.
Sulfate	5.00	4.87		mg/L	97	80 - 120

Lab Sample ID: MB 500-623763/3

Matrix: Water

Analysis Batch: 623763

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.095	U	0.20	0.095	mg/L			10/15/21 18:02	1

Lab Sample ID: LCS 500-623763/4

Matrix: Water

Analysis Batch: 623763

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.
Sulfate	5.00	5.50		mg/L	110	80 - 120

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-622546/1

Matrix: Water

Analysis Batch: 622546

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	4.3	U	10	4.3	mg/L			10/08/21 10:52	1

Lab Sample ID: LCS 500-622546/2

Matrix: Water

Analysis Batch: 622546

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	250	268		mg/L		107	80 - 120

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 622546

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	560		250	842		mg/L		114	75 - 125

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 622546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Total Dissolved Solids	560		250	824		mg/L		106	75 - 125	2	20

Lab Sample ID: 500-206288-1 DU

Matrix: Water

Analysis Batch: 622546

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	1300		1390		mg/L		5	5

Lab Sample ID: MB 500-622961/1

Matrix: Water

Analysis Batch: 622961

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	4.3	U	10	4.3	mg/L			10/11/21 23:19	1

Lab Sample ID: LCS 500-622961/2

Matrix: Water

Analysis Batch: 622961

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	250	238		mg/L		95	80 - 120

Lab Sample ID: 500-206288-7 MS

Matrix: Water

Analysis Batch: 622961

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	12		250	272		mg/L		104	75 - 125

Job ID: 500-206288-1

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

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

Client Sample ID: AES-MW2-100421
Prep Type: Total/NA

Client Sample ID: AES-MW2-100421
Prep Type: Total/NA

Client Sample ID: AES-MW1-100421
Prep Type: Total/NA

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

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

Client Sample ID: AES-FB-100421
Prep Type: Total/NA

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: 500-206288-7 DU

Client Sample ID: AES-FB-100421

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 622961

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	12		14.0	F5	mg/L		15	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-624306/130

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 624306

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	2.0	1.0	mg/L			10/19/21 12:29	1

Lab Sample ID: LCS 500-624306/131

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 624306

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Chloride	20.0	20.8		mg/L		104	85 - 115

Lab Sample ID: 500-206288-2 MS

Client Sample ID: AES-MW2-100421

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 624306

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Chloride	99		20.0	122	4	mg/L		115	75 - 125

Lab Sample ID: 500-206288-2 MSD

Client Sample ID: AES-MW2-100421

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 624306

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Chloride	99		20.0	116	4	mg/L		85	75 - 125	5	20

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 500-623086/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 623086

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.056	U	0.10	0.056	mg/L			10/12/21 09:51	1

Lab Sample ID: LCS 500-623086/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 623086

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Fluoride	10.0	10.5		mg/L		105	90 - 119

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 623086

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits		
Fluoride	0.55		5.00	5.73		mg/L	104		75 - 125		

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 623086

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Fluoride	0.55		5.00	5.64		mg/L	102		75 - 125	2	20

Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-100421

Lab Sample ID: 500-206288-1

Matrix: Water

Date Collected: 10/04/21 10:35

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624495	10/19/21 21:44	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624551	10/20/21 13:02	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	625269	10/25/21 12:24	FXG	TAL CHI
Total/NA	Prep	7470A			622877	10/11/21 12:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	623081	10/12/21 08:18	MJG	TAL CHI
Total/NA	Analysis	9056A		100	623115	10/12/21 23:37	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	622546	10/08/21 11:10	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		10	624306	10/19/21 12:30	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	623086	10/12/21 10:34	EAT	TAL CHI
Total/NA	Analysis	Field Sampling		1	622345	10/04/21 10:35	JMH	TAL CHI

Client Sample ID: AES-MW2-100421

Lab Sample ID: 500-206288-2

Matrix: Water

Date Collected: 10/04/21 12:18

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624495	10/19/21 21:48	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624551	10/20/21 13:05	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	625269	10/25/21 12:27	FXG	TAL CHI
Total/NA	Prep	7470A			622877	10/11/21 12:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	623081	10/12/21 08:24	MJG	TAL CHI
Total/NA	Analysis	9056A		5	623115	10/12/21 23:50	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	622546	10/08/21 11:15	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		10	624306	10/19/21 12:30	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	623086	10/12/21 10:37	EAT	TAL CHI
Total/NA	Analysis	Field Sampling		1	622345	10/04/21 12:18	JMH	TAL CHI

Client Sample ID: AES-MW3-100421

Lab Sample ID: 500-206288-3

Matrix: Water

Date Collected: 10/04/21 13:05

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624495	10/19/21 22:05	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		5	624551	10/20/21 13:29	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624551	10/20/21 13:53	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW3-100421

Lab Sample ID: 500-206288-3

Matrix: Water

Date Collected: 10/04/21 13:05

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	625269	10/25/21 12:51	FXG	TAL CHI
Total/NA	Prep	7470A			622877	10/11/21 12:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	623081	10/12/21 08:33	MJG	TAL CHI
Total/NA	Analysis	9056A		1000	623115	10/13/21 00:28	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	622546	10/08/21 11:23	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		100	624306	10/19/21 12:53	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	623086	10/12/21 10:45	EAT	TAL CHI
Total/NA	Analysis	Field Sampling		1	622345	10/04/21 13:05	JMH	TAL CHI

Client Sample ID: AES-MW4-100421

Lab Sample ID: 500-206288-4

Matrix: Water

Date Collected: 10/04/21 15:40

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624495	10/19/21 22:09	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		5	624551	10/20/21 13:33	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624551	10/20/21 13:57	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	625269	10/25/21 12:54	FXG	TAL CHI
Total/NA	Prep	7470A			622877	10/11/21 12:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	623081	10/12/21 08:35	MJG	TAL CHI
Total/NA	Analysis	9056A		2000	623763	10/15/21 18:30	EAT	TAL CHI
Total/NA	Analysis	SM 2540C		1	622546	10/08/21 11:25	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		200	624306	10/19/21 12:53	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	623086	10/12/21 10:48	EAT	TAL CHI
Total/NA	Analysis	Field Sampling		1	622345	10/04/21 15:40	JMH	TAL CHI

Client Sample ID: AES-MW4-DUP-100421

Lab Sample ID: 500-206288-5

Matrix: Water

Date Collected: 10/04/21 16:17

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624495	10/19/21 22:19	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		5	624551	10/20/21 13:36	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624551	10/20/21 14:00	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	625269	10/25/21 12:58	FXG	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-100421

Lab Sample ID: 500-206288-5

Matrix: Water

Date Collected: 10/04/21 16:17

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			622877	10/11/21 12:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	623081	10/12/21 08:37	MJG	TAL CHI
Total/NA	Analysis	9056A		2000	623499	10/14/21 15:26	EAT	TAL CHI
Total/NA	Analysis	SM 2540C		1	622546	10/08/21 11:28	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		300	624306	10/19/21 13:34	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	623086	10/12/21 10:51	EAT	TAL CHI

Client Sample ID: AES-MW5-100421

Lab Sample ID: 500-206288-6

Matrix: Water

Date Collected: 10/04/21 17:08

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624495	10/19/21 22:22	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		6	624551	10/20/21 13:39	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	625269	10/25/21 13:01	FXG	TAL CHI
Total/NA	Prep	7470A			622877	10/11/21 12:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	623081	10/12/21 08:39	MJG	TAL CHI
Total/NA	Analysis	9056A		1000	623115	10/13/21 01:31	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	622546	10/08/21 11:31	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		100	624306	10/19/21 12:54	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	623086	10/12/21 10:54	EAT	TAL CHI
Total/NA	Analysis	Field Sampling		1	622345	10/04/21 17:08	JMH	TAL CHI

Client Sample ID: AES-FB-100421

Lab Sample ID: 500-206288-7

Matrix: Water

Date Collected: 10/04/21 17:12

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624495	10/19/21 22:26	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	624551	10/20/21 13:43	FXG	TAL CHI
Total Recoverable	Prep	3005A			623682	10/15/21 09:21	BDE	TAL CHI
Total Recoverable	Analysis	6020B		1	625269	10/25/21 13:05	FXG	TAL CHI
Total/NA	Prep	7470A			622877	10/11/21 12:05	MJG	TAL CHI
Total/NA	Analysis	7470A		1	623081	10/12/21 08:41	MJG	TAL CHI
Total/NA	Analysis	9056A		1	623115	10/13/21 01:44	PSP	TAL CHI
Total/NA	Analysis	SM 2540C		1	622961	10/11/21 23:25	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	624306	10/19/21 12:32	RES	TAL CHI
Total/NA	Analysis	SM 4500 F C		1	623086	10/12/21 10:59	EAT	TAL CHI

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-1

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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Accreditation/Certification Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-1

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
California	State	2903	04-29-22
Georgia	State	N/A	04-29-22
Georgia (DW)	State	939	04-30-21 *
Hawaii	State	NA	04-29-22
Illinois	NELAP	IL00035	04-29-22
Indiana	State	C-IL-02	04-29-22
Iowa	State	082	05-01-22
Kansas	NELAP	E-10161	10-31-21
Kentucky (UST)	State	AI # 108083	04-29-22
Kentucky (WW)	State	KY90023	12-31-21
Louisiana	NELAP	02046	06-30-22
Mississippi	State	NA	04-30-22
North Carolina (WW/SW)	State	291	12-31-21
North Dakota	State	R-194	04-29-22
Oklahoma	State	8908	08-31-22
South Carolina	State	77001003	04-29-22
USDA	US Federal Programs	P330-18-00018	02-11-24
Wisconsin	State	999580010	08-31-22
Wyoming	State	8TMS-Q	04-30-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Chicago

Chain of Custody Record**Client Information**

Client Contact:

Alberto Melendez

Company:

DNA-Environment, LLC

Address:

35 Calle Juan C Borbon Site 67-227

City:

Guaynabo

State, Zip:

PR 00969-5375

Phone:

787-209-6386

Email:

alberto.melendez@dnaeenv.com

Project Name:

CCR Groundwater Monitoring

Site:

AES Puerto Rico LP, Guayanilla, Puerto Rico

Sampler: Vicente Perez / RAFAEL DIAZ
Phone: (787) 209-6386
E-Mail: Richard.Wright@Eurofinset.com
PWSID:Lab P.M.: Wright, Richard
State of Origin:
Job #: 500-206288COC NO.
Page: 1 of 1

Note: pH = Field pH Measurement

Anal



Total Number of containers

At Lift Using This Tag

ORIGIN ID:NRAA (7887) 209-6386
ALBERTO MELENDEZ

DNA ENVIRONMENT LLC
35 CALLE JUAN C BOCABON SITE 67-227
GUAYABO, PR 00969
UNITED STATES US

SHIP DATE: 05OCT21
TOTAL WT: 152.00 LB
CAB: 6998634/SFEE2220

DIMS: 24x18x13 IN
BILL CREDIT CARD
No DE MSA

To SAMPLE RECEIPT

EUROFINS TEST AMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 60484

(708) 634-6200

REF#

REF#1

(US)

POL

REF#1

REF#2

REF#3

REF#4

REF#5

REF#6

REF#7

REF#8

REF#9

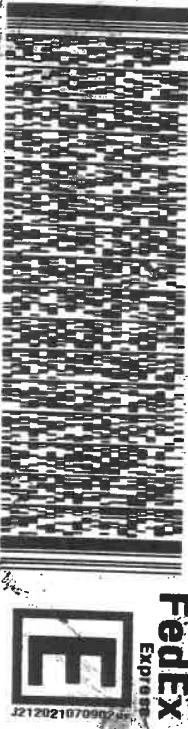
REF#10

REF#11

REF#12

REF#13

REF#14



1 of 3

WED - 06 OCT 10:30A

TMK# 2845 5368 8033
0030

INTL PRIORITY

NSR

60484

IL-US ORD



Login Sample Receipt Checklist

Client: DNA-Environment, LLC

Job Number: 500-206288-1

Login Number: 206288

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Hernandez, Stephanie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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Environment Testing
America



ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-206288-2

Client Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

For:

DNA-Environment, LLC
35 Calle Juan C Borbon
Ste 67-227
Guaynabo, Puerto Rico 00969-5375

Attn: Alberto Melendez

Authorized for release by:
11/15/2021 3:39:33 PM

Richard Wright, Senior Project Manager
(708)746-0045
Richard.Wright@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Case Narrative

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-2

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-206288-2

Receipt

The samples were received on 10/6/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition.

RAD

Methods 903.0, 9315: Radium 226 batch 530550

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date for the following samples:

AES-MW1-100421 (500-206288-1), AES-MW2-100421 (500-206288-2), AES-MW2-100421 (500-206288-2[MS]), AES-MW2-100421 (500-206288-2[MSD]), AES-MW3-100421 (500-206288-3), AES-MW4-100421 (500-206288-4), AES-MW4-DUP-100421 (500-206288-5), AES-MW5-100421 (500-206288-6), AES-FB-100421 (500-206288-7), (LCS 160-530550/1-A), (MB 160-530550/24-A), (500-206165-C-1-A) and (500-206165-D-1-A DU)

Methods 904.0, 9320: Ra-228 batch 160-530555

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date for the following samples:

AES-MW1-100421 (500-206288-1), AES-MW2-100421 (500-206288-2), AES-MW2-100421 (500-206288-2[MS]), AES-MW2-100421 (500-206288-2[MSD]), AES-MW3-100421 (500-206288-3), AES-MW4-100421 (500-206288-4), AES-MW4-DUP-100421 (500-206288-5), AES-MW5-100421 (500-206288-6), AES-FB-100421 (500-206288-7), (LCS 160-530555/1-A), (MB 160-530555/24-A), (500-206165-C-1-B) and (500-206165-D-1-B DU)

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

Detection Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-100421

Lab Sample ID: 500-206288-1

No Detections.

Client Sample ID: AES-MW2-100421

Lab Sample ID: 500-206288-2

No Detections.

Client Sample ID: AES-MW3-100421

Lab Sample ID: 500-206288-3

No Detections.

Client Sample ID: AES-MW4-100421

Lab Sample ID: 500-206288-4

No Detections.

Client Sample ID: AES-MW4-DUP-100421

Lab Sample ID: 500-206288-5

No Detections.

Client Sample ID: AES-MW5-100421

Lab Sample ID: 500-206288-6

No Detections.

Client Sample ID: AES-FB-100421

Lab Sample ID: 500-206288-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

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

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
500-206288-1	AES-MW1-100421	Water	10/04/21 10:35	10/06/21 10:30	1
500-206288-2	AES-MW2-100421	Water	10/04/21 12:18	10/06/21 10:30	2
500-206288-3	AES-MW3-100421	Water	10/04/21 13:05	10/06/21 10:30	3
500-206288-4	AES-MW4-100421	Water	10/04/21 15:40	10/06/21 10:30	4
500-206288-5	AES-MW4-DUP-100421	Water	10/04/21 16:17	10/06/21 10:30	5
500-206288-6	AES-MW5-100421	Water	10/04/21 17:08	10/06/21 10:30	6
500-206288-7	AES-FB-100421	Water	10/04/21 17:12	10/06/21 10:30	7
					8
					9
					10
					11
					12
					13
					14
					15

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-100421

Lab Sample ID: 500-206288-1

Matrix: Water

Date Collected: 10/04/21 10:35

Date Received: 10/06/21 10:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.103	U	0.178	0.178	1.00	0.309	pCi/L	10/08/21 10:44	11/08/21 10:49	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	69.9		40 - 110					10/08/21 10:44	11/08/21 10:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.199	U	0.437	0.438	1.00	0.748	pCi/L	10/08/21 11:26	11/04/21 16:59	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	69.9		40 - 110					10/08/21 11:26	11/04/21 16:59	1
Y Carrier	83.7		40 - 110					10/08/21 11:26	11/04/21 16:59	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.302	U	0.472	0.473	5.00	0.748	pCi/L		11/12/21 00:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW2-100421

Lab Sample ID: 500-206288-2

Matrix: Water

Date Collected: 10/04/21 12:18

Date Received: 10/06/21 10:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0591	U	0.0966	0.0968	1.00	0.220	pCi/L	10/08/21 10:44	11/08/21 10:49	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	97.2		40 - 110					10/08/21 10:44	11/08/21 10:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0211	U	0.262	0.262	1.00	0.466	pCi/L	10/08/21 11:26	11/04/21 16:59	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	97.2		40 - 110					10/08/21 11:26	11/04/21 16:59	1
Y Carrier	87.5		40 - 110					10/08/21 11:26	11/04/21 16:59	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.0380	U	0.279	0.279	5.00	0.466	pCi/L		11/12/21 00:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW3-100421

Lab Sample ID: 500-206288-3

Matrix: Water

Date Collected: 10/04/21 13:05

Date Received: 10/06/21 10:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.121	U	0.127	0.128	1.00	0.203	pCi/L	10/08/21 10:44	11/08/21 10:50	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	100		40 - 110					10/08/21 10:44	11/08/21 10:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0238	U	0.286	0.286	1.00	0.507	pCi/L	10/08/21 11:26	11/04/21 17:00	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	100		40 - 110					10/08/21 11:26	11/04/21 17:00	1
Y Carrier	85.2		40 - 110					10/08/21 11:26	11/04/21 17:00	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.145	U	0.313	0.313	5.00	0.507	pCi/L		11/12/21 00:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-100421

Lab Sample ID: 500-206288-4

Matrix: Water

Date Collected: 10/04/21 15:40

Date Received: 10/06/21 10:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.154	U	0.142	0.143	1.00	0.221	pCi/L	10/08/21 10:44	11/08/21 10:50	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	95.9		40 - 110					10/08/21 10:44	11/08/21 10:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0279	U	0.281	0.281	1.00	0.499	pCi/L	10/08/21 11:26	11/04/21 17:00	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	95.9		40 - 110					10/08/21 11:26	11/04/21 17:00	1
Y Carrier	84.9		40 - 110					10/08/21 11:26	11/04/21 17:00	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.182	U	0.315	0.315	5.00	0.499	pCi/L		11/12/21 00:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-100421

Lab Sample ID: 500-206288-5

Matrix: Water

Date Collected: 10/04/21 16:17

Date Received: 10/06/21 10:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.00892	U	0.149	0.149	1.00	0.287	pCi/L	10/08/21 10:44	11/08/21 10:50	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	90.9		40 - 110					10/08/21 10:44	11/08/21 10:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.131	U	0.266	0.267	1.00	0.505	pCi/L	10/08/21 11:26	11/04/21 17:01	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	90.9		40 - 110					10/08/21 11:26	11/04/21 17:01	1
Y Carrier	85.2		40 - 110					10/08/21 11:26	11/04/21 17:01	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.122	U	0.305	0.306	5.00	0.505	pCi/L		11/12/21 00:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW5-100421

Lab Sample ID: 500-206288-6

Matrix: Water

Date Collected: 10/04/21 17:08

Date Received: 10/06/21 10:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.109	U	0.149	0.149	1.00	0.250	pCi/L	10/08/21 10:44	11/08/21 10:46	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	96.9		40 - 110					10/08/21 10:44	11/08/21 10:46	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.0560	U	0.300	0.300	1.00	0.544	pCi/L	10/08/21 11:26	11/04/21 17:01	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	96.9		40 - 110					10/08/21 11:26	11/04/21 17:01	1
Y Carrier	84.9		40 - 110					10/08/21 11:26	11/04/21 17:01	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0533	U	0.335	0.335	5.00	0.544	pCi/L		11/12/21 00:56	1

Eurofins TestAmerica, Chicago

Client Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-FB-100421

Lab Sample ID: 500-206288-7

Matrix: Water

Date Collected: 10/04/21 17:12

Date Received: 10/06/21 10:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	(2σ+/-)						
Radium-226	-0.0141	U	0.121	0.121	1.00	0.242	pCi/L	10/08/21 10:44	11/08/21 10:46	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	95.1		40 - 110					10/08/21 10:44	11/08/21 10:46	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	(2σ+/-)						
Radium-228	0.00565	U	0.271	0.271	1.00	0.488	pCi/L	10/08/21 11:26	11/04/21 17:01	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	95.1		40 - 110					10/08/21 11:26	11/04/21 17:01	1
Y Carrier	85.6		40 - 110					10/08/21 11:26	11/04/21 17:01	1

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	(2σ+/-)						
Combined Radium 226 + 228	-0.00850	U	0.297	0.297	5.00	0.488	pCi/L		11/12/21 00:56	1

Eurofins TestAmerica, Chicago

Definitions/Glossary

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Qualifiers

Rad

Qualifier

Qualifier Description

U Result is less than the sample detection limit.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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QC Association Summary

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Rad

Prep Batch: 530550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	PrecSep-21	
500-206288-2	AES-MW2-100421	Total/NA	Water	PrecSep-21	
500-206288-3	AES-MW3-100421	Total/NA	Water	PrecSep-21	
500-206288-4	AES-MW4-100421	Total/NA	Water	PrecSep-21	
500-206288-5	AES-MW4-DUP-100421	Total/NA	Water	PrecSep-21	
500-206288-6	AES-MW5-100421	Total/NA	Water	PrecSep-21	
500-206288-7	AES-FB-100421	Total/NA	Water	PrecSep-21	
MB 160-530550/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-530550/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-206288-2 MS	AES-MW2-100421	Total/NA	Water	PrecSep-21	
500-206288-2 MSD	AES-MW2-100421	Total/NA	Water	PrecSep-21	

Prep Batch: 530555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-206288-1	AES-MW1-100421	Total/NA	Water	PrecSep_0	
500-206288-2	AES-MW2-100421	Total/NA	Water	PrecSep_0	
500-206288-3	AES-MW3-100421	Total/NA	Water	PrecSep_0	
500-206288-4	AES-MW4-100421	Total/NA	Water	PrecSep_0	
500-206288-5	AES-MW4-DUP-100421	Total/NA	Water	PrecSep_0	
500-206288-6	AES-MW5-100421	Total/NA	Water	PrecSep_0	
500-206288-7	AES-FB-100421	Total/NA	Water	PrecSep_0	
MB 160-530555/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-530555/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-206288-2 MS	AES-MW2-100421	Total/NA	Water	PrecSep_0	
500-206288-2 MSD	AES-MW2-100421	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-530550/24-A

Matrix: Water

Analysis Batch: 535397

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 530550

Analyte	MB		MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Uncert.									
Radium-226	0.02880	U		0.0975	0.0976	1.00	0.185	pCi/L	10/08/21 10:44	11/08/21 11:13	1
Carrier											
Ba Carrier	103			40 - 110					10/08/21 10:44	11/08/21 11:13	1

Lab Sample ID: LCS 160-530550/1-A

Matrix: Water

Analysis Batch: 535397

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 530550

Analyte	MB		MB Qualifier	Limits	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
	Result	Uncert.											
Radium-226	15.1			13.70		13.70		1.49	1.00	0.237	pCi/L	91	75 - 125
Carrier													
Ba Carrier	101			40 - 110									

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 535397

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Prep Batch: 530550

Analyte	Sample		Spike Added	MS		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
	Result	Qual		Result	Qual						
Radium-226	-0.0591	U	15.1	13.43		1.50	1.00	0.265	pCi/L	89	75 - 138
Carrier											
Ba Carrier	95.6			40 - 110							

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 535397

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Prep Batch: 530550

Analyte	Sample		Spike Added	MSD		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
	Result	Qual		Result	Qual								
Radium-226	-0.0591	U	15.1	14.17		1.55	1.00	0.238	pCi/L	94	75 - 138	0.24	1
Carrier													
Ba Carrier	99.0			40 - 110									

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-530555/24-A

Matrix: Water

Analysis Batch: 535180

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 530555

Analyte	MB		MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Uncert.									
Radium-228	0.2477	U		0.259	0.260	1.00	0.422	pCi/L	10/08/21 11:26	11/04/21 17:04	1

Eurofins TestAmerica, Chicago

QC Sample Results

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110	10/08/21 11:26	11/04/21 17:04	1
Y Carrier	87.1		40 - 110	10/08/21 11:26	11/04/21 17:04	1

Lab Sample ID: LCS 160-530555/1-A

Matrix: Water

Analysis Batch: 535031

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 530555

Analyte	Spike Added	LCS		Uncert. (2σ+/-)	Total RL	MDC	Unit	%Rec.	Limits
		Result	Qual						
Radium-228	12.2	12.42		1.44	1.00	0.489	pCi/L	102	75 - 125

LCS LCS

Carrier	%Yield	Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	85.2		40 - 110

Lab Sample ID: 500-206288-2 MS

Matrix: Water

Analysis Batch: 535030

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Prep Batch: 530555

Analyte	Sample Result	Sample Qual	Spike Added	MS		Uncert. (2σ+/-)	Total RL	MDC	Unit	%Rec.	Limits
				Result	Qual						
Radium-228	0.0211	U	12.2	12.02		1.40	1.00	0.488	pCi/L	98	45 - 150

MS MS

Carrier	%Yield	Qualifier	Limits
Ba Carrier	95.6		40 - 110
Y Carrier	85.6		40 - 110

Lab Sample ID: 500-206288-2 MSD

Matrix: Water

Analysis Batch: 535030

Client Sample ID: AES-MW2-100421

Prep Type: Total/NA

Prep Batch: 530555

Analyte	Sample Result	Sample Qual	Spike Added	MSD		Uncert. (2σ+/-)	Total RL	MDC	Unit	%Rec.	RER	Limit	
				Result	Qual								
Radium-228	0.0211	U	12.2	10.71		1.27	1.00	0.488	pCi/L	87	45 - 150	0.49	1

MSD MSD

Carrier	%Yield	Qualifier	Limits
Ba Carrier	99.0		40 - 110
Y Carrier	86.7		40 - 110

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW1-100421

Lab Sample ID: 500-206288-1

Matrix: Water

Date Collected: 10/04/21 10:35

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1	535393	11/08/21 10:49	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 16:59	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	536226	11/12/21 00:56	EMH	TAL SL

Client Sample ID: AES-MW2-100421

Lab Sample ID: 500-206288-2

Matrix: Water

Date Collected: 10/04/21 12:18

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1	535393	11/08/21 10:49	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 16:59	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	536226	11/12/21 00:56	EMH	TAL SL

Client Sample ID: AES-MW3-100421

Lab Sample ID: 500-206288-3

Matrix: Water

Date Collected: 10/04/21 13:05

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1	535393	11/08/21 10:50	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 17:00	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	536226	11/12/21 00:56	EMH	TAL SL

Client Sample ID: AES-MW4-100421

Lab Sample ID: 500-206288-4

Matrix: Water

Date Collected: 10/04/21 15:40

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1	535393	11/08/21 10:50	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 17:00	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	536226	11/12/21 00:56	EMH	TAL SL

Eurofins TestAmerica, Chicago

Lab Chronicle

Client: DNA-Environment, LLC

Job ID: 500-206288-2

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Client Sample ID: AES-MW4-DUP-100421

Lab Sample ID: 500-206288-5

Matrix: Water

Date Collected: 10/04/21 16:17

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1	535393	11/08/21 10:50	FLC	TAL SL
Total/NA	Prep	PrecSep_0			530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 17:01	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	536226	11/12/21 00:56	EMH	TAL SL

Client Sample ID: AES-MW5-100421

Lab Sample ID: 500-206288-6

Matrix: Water

Date Collected: 10/04/21 17:08

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1	535390	11/08/21 10:46	JLP	TAL SL
Total/NA	Prep	PrecSep_0			530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 17:01	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	536226	11/12/21 00:56	EMH	TAL SL

Client Sample ID: AES-FB-100421

Lab Sample ID: 500-206288-7

Matrix: Water

Date Collected: 10/04/21 17:12

Date Received: 10/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1	535390	11/08/21 10:46	JLP	TAL SL
Total/NA	Prep	PrecSep_0			530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1	535030	11/04/21 17:01	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	536226	11/12/21 00:56	EMH	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Eurofins TestAmerica, Chicago

Accreditation/Certification Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-2

Laboratory: Eurofins TestAmerica, St. Louis

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E87689	06-30-22

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Chain of Custody Record



Client Information			
Client Contact:	Vicente Perez	Carrier Tracking No(s):	COC No:
Company:	35 Calle Juan C Borbon Ste 67-227	Lab PM:	Wright, Richard
Address:	Guaynabo	E-Mail:	State of Origin:
City:	PR, 00969-5375	PO #:	Page
State, Zip:	787-209-6386	WO #:	Page 1 of 1
Phone:		Project #:	
Email:	alberto.melendez@odnaenv.com	Site:	
Project Name:	CCR Groundwater Monitoring	SSOW#:	
Site:	AES Puerto Rico LP, Guayanilla, Puerto Rico		
Analysis Requested			
<p>Due Date Requested:</p> <p>TAT Requested (days): 10 Days (Regular TAT)</p> <p>Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>PO #:</p> <p>Project #:</p> <p>SSOW#:</p>			
<p>Field Filtered Sample (Yes or No)</p> <p>Perform MS/MSD (Yes or No)</p> <p>9315_Ra226, 9320_Ra228, Radium-226 & Radium-228</p>			
<p>Preservation Codes:</p> <p>A - HCl M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - NaOH R - Na2SO3 G - Ammonium S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCRAA K - EDTA W - pH 4.5 L - EDA Z - other (specify)</p> <p>Other:</p>			
<p>Sample Identification</p>			
	Sample Date	Sample Time	Matrix (W=Water, S=Solid, O=Osmotic, B=Blood, A=Air)
		Preservation Code: <input checked="" type="checkbox"/> D	
1	AES-MW1-100421	10/4/2021 /035	G Water N X 3 pH = 6.99
2	AES-MW2-100421	10/4/2021 /218	G Water N X 3 pH = 6.72
3	AES-MW2-100421	10/4/2021 /254	G Water N Y X 3 ---
4	AES-MW2-100421	10/4/2021 /329	G Water N Y X 3 ---
5	AES-MW3-100421	10/4/2021 /305	G Water N X 3 pH = 6.79
6	AES-MW4-100421	10/4/2021 /540	G Water N X 3 pH = 7.07
7	AES-MW4-DUP-100421	10/4/2021 /617	G Water N X 3 ---
8	AES-MW5-100421	10/4/2021 /708	G Water N X 3 pH = 6.49
9	AES-FB-100421	10/4/2021 /712	G Water N X 3 ---
Total Number of containers			
Special Instructions/Note:			
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Method of Shipment:</p> <p>Note: pH = Field pH Measurement</p>			
<p>Possible Hazard Identification</p> <p><input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological</p> <p>Deliverable Requested: I, II, III, IV Other (specify): Level IV</p>			
<p>Empty Kit Relinquished by: </p> <p>Date/Time: 10-4-21 / 1730 Company: DNA Received by: Date/Time: 10-4-21 / 1730 Company: DNA</p> <p>Relinquished by: </p> <p>Date/Time: 10-5-21 / 1515 Company: DNA Received by: Date/Time: 10/10/21 1030 Company: DNA</p> <p>Custody Seals intact: <input checked="" type="checkbox"/> Custody Seal No.: △ Yes △ No</p>			

Chain of Custody Record

eurofins

Environment Testing
 America

Client Information		Analysis Requested										Preservation Codes:				
Address: 35 Calle Juan C Boron Ste 67-227	Sample: Vicente Perez /RAFAEL DIAZ	Lab PM: Wright, Richard	Carrier Tracking No(s):	COC No:												
City: Guaynabo	Phone: (787) 209-6386	E-Mail: Richard.Wright@Eurofinsel.com	State of Origin:	Page:												
State/ ZIP: PR, 00969-5375	Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	PO #:	Job #:													
Phone: 787-209-6386	MO #:		500-206208													
Email: alberto.melendez@dnainv.com	Project #:															
Project Name: CCR Groundwater Monitoring	SSDW#:															
Site: AES Puerto Rico LP, Guaynabo, Puerto Rico																
Field Filtered Sample (Yes or No)																
Perform MS/MSD (Yes or No)																
9315_Ra226, 9320_Ra228, Radium-226 & Radium-228																
Total Number of containers																
Special Instructions/Note:																
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Field Filtered Sample (Yes or No)								Preservation Codes:			
			(C-type G-grab)	(Water, Solid, Ornament, Br-Tissue, A-Air)	Perform MS/MSD (Yes or No)								A - HCl	M - Hexane		
			Preservation Code:	D	9315_Ra226, 9320_Ra228, Radium-226 & Radium-228								B - NaOH	N - None		
1	AES-MW1-100421	10/4/2021	1035	G	Water	N	X						C - Zn Acetate	O - AsNaO2		
2	AES-MW2-100421	10/4/2021	1218	G	Water	N	X						D - Nitric Acid	P - Na2O4S		
	AES-MW2-100421	MS											E - NaHSO4	Q - Na2SO3		
3	AES-MW3-100421	10/4/2021	1254	G	Water	N	Y	X					F - MeOH	R - Na2SO3		
4	AES-MW4-100421	10/4/2021	1329	G	Water	N	Y	X					G - Ammonia	S - H2SO4		
5	AES-MW4-DUP-100421	10/4/2021	1305	G	Water	N	X						H - Acetic Acid	T - TSP Dodecahydrate		
6	AES-MW5-100421	10/4/2021	1540	G	Water	N	X						I - Ice	U - Acetone		
7	AES-FB-100421	10/4/2021	1617	G	Water	N	X						J - DI Water	V - MCMA		
													K - EDTA	W - pH 4-5		
													L - EDA	Z - other (specify)		
													Other:			
Note: pH = Field pH Measurement																
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological																
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months																
Deliverable Requested: I, II, III, IV, Other (specify): Level IV																
Empty Kit Relinquished by: 		Date:	Time:	Method of Shipment:												
Relinquished by: 		Date/Time: 10-4-21 / 1730	Company: DNA	Received by: Stephanie Hernandez	Date/Time: 10-4-21 / 1730	Company: DNA										
Relinquished by: 		Date/Time: 10-5-21 / 1515	Company: DNA	Received by: Stephanie Hernandez	Date/Time: 10/6/21 1030	Company: DNA										
Custody Seals Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Cooler Temperature(s) °C and Other Remarks: WICHIC WICD														

Do Not Lift Using This Tag



1



2



3

Do Not Lift Using This Tag



4

ORIGIN ID: NRRA (787) 209-6386
ALBERTO MELANDEZ

DNA ENVIRONMENT LLC
35 CALLE JUAN C. BORBON STE 67-227
GUAYNABO, PR 00989
UNITED STATES US

ORIGIN ID: NRRA (787) 209-6386
ALBERTO MELANDEZ

DNA ENVIRONMENT LLC
35 CALLE JUAN C. BORBON STE 67-227
GUAYNABO, PR 00989
UNITED STATES US



5

To SAMPLE RECEIPT

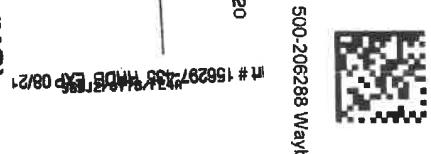
EUROFINS TEST AMERICA CHICAGO

2417 BOND STREET

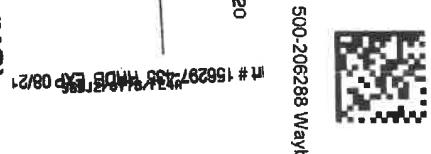
To SAMPLE RECEIPT

EUROFINS TEST AMERICA CHICAGO

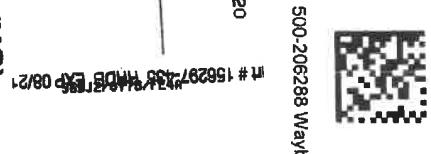
2417 BOND STREET



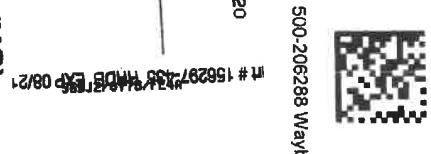
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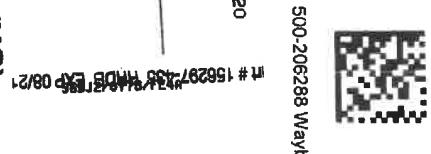
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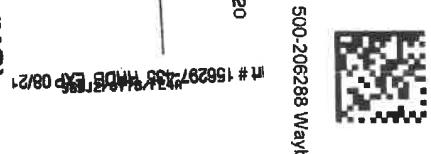
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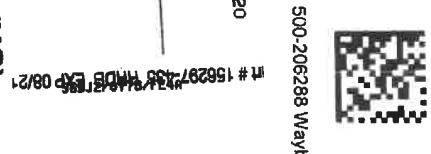
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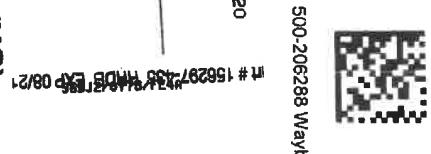
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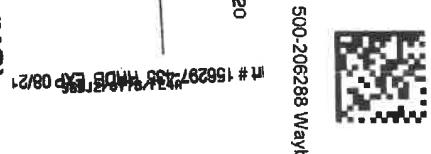
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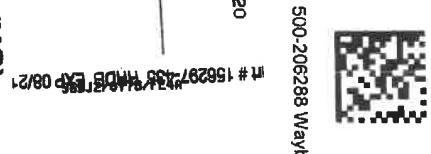
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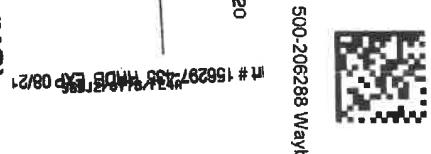
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15



1

UNIVERSITY PARK IL 60484
(708) 534-5200
REF: DEP11
PO1

(US)

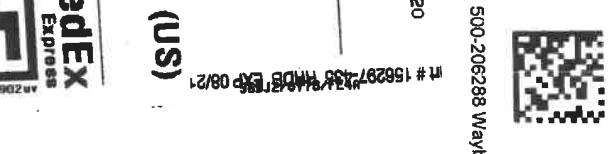
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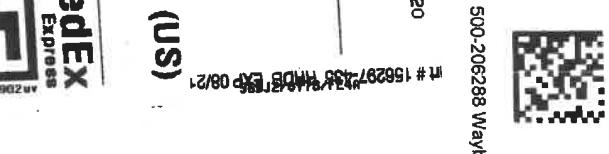
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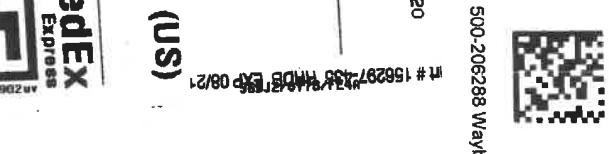
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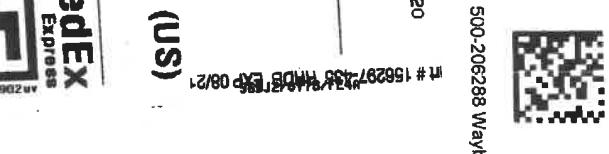
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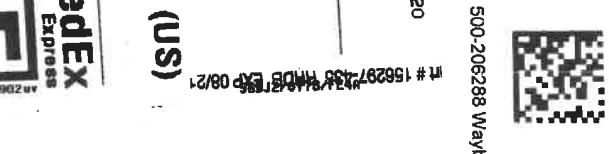
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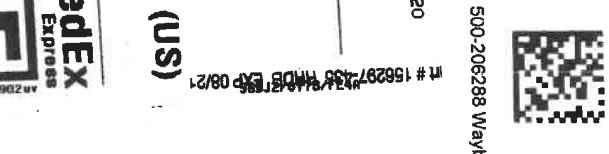
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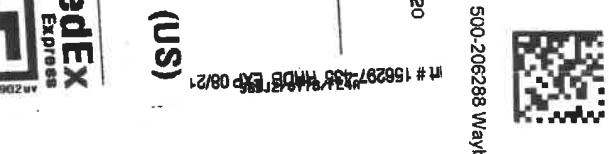
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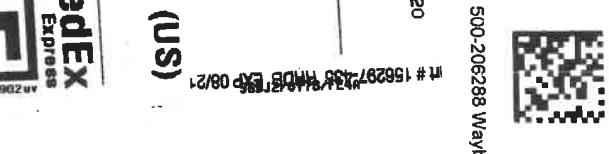
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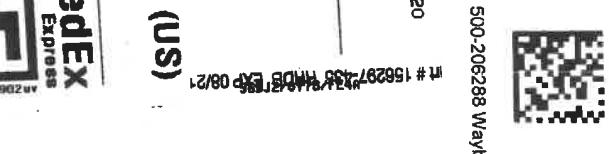
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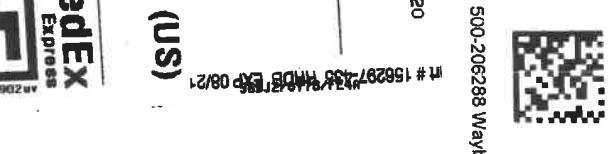
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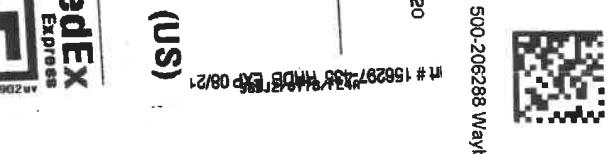
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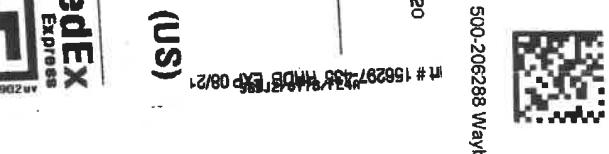
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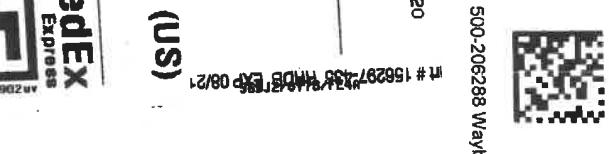
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(708) 534-5200
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Part # 156297436 MDLBB EXP 08/21



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ACTWTG: 65.00 LB
CPO: 65986347SSFE2220
DIMS: 24x13x13 IN
BILL CREDIT CARD



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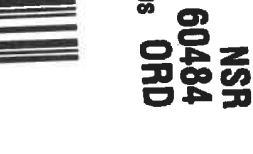
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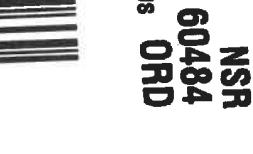
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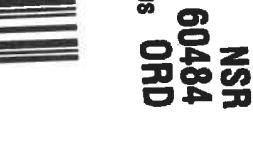
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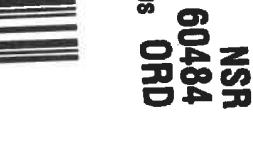
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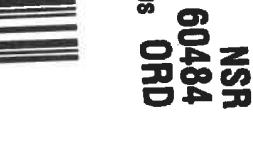
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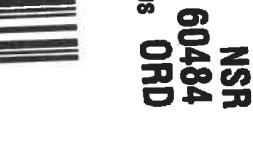
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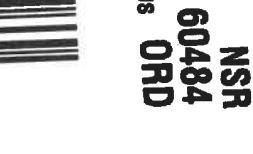
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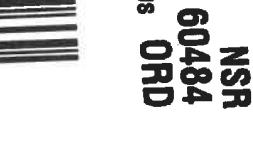
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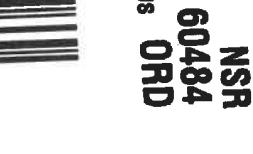
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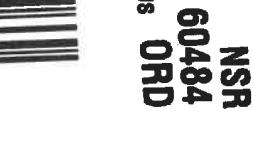
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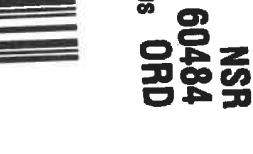
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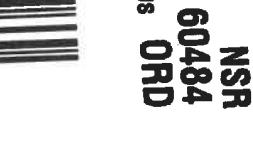
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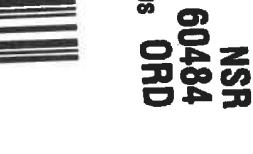
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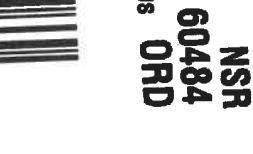
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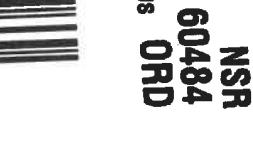
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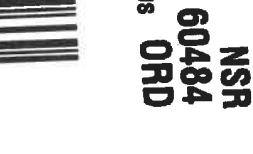
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XH JOTA



1 of 1



11/15/2021

Eurofins TestAmerica, Chicago

2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Environment Testing
America



Chain of Custody Record

Client Information (Sub Contract Lab)

Client Contact:	Sampler:	Lab P.M. Wright, Richard	Carrier Tracking No(s):	COC No: 500-153129.1
Shipping/Receiving	Phone:	E-Mail: Richard.Wright@EurofinsTest.com	State of Origin:	Puerto Rico
Company:	Accreditations Required (See note):	Page 1 of 1		
TestAmerica Laboratories, Inc.	NELAP - Florida	Job #: 500-206288-2		
Address:	Due Date Requested:	Preservation Codes:		
13715 Rider Trail North, City: Earth City	11/3/2021	A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ce J - Di Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - NaO4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:		
State / Zip: MO, 63045	TAT Requested (days):			
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR GW Monitoring	Project #: 50017042			
Site: SSOW#:				

Sample Identification - Client ID (Lab ID)

Sample ID	Client ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Soil, Oil, Tissue, etc.)	Preservation Code:	Special Instructions/Note:		
							Total Number of Containers	Perfom MS/MSD (yes or No)	Field Filtered Sample (yes or No)
AES-MW1-100421 (500-206288-1)		10/4/21	10:35	Water	Water	X X X			
AES-MW2-100421 (500-206288-2)		10/4/21	12:18	Water	Water	X X X			
AES-MW2-100421 (500-206288-2MS)		10/4/21	12:54	MS	Water	X X X			
AES-MW2-100421 (500-206288-2MSD)		10/4/21	13:29	MSD	Water	X X X			
AES-MW3-100421 (500-206288-3)		10/4/21	13:05		Water	X X X			
AES-MW4-100421 (500-206288-4)		10/4/21	15:40	Water	Water	X X X			
AES-MW4-DUP-100421 (500-206288-5)		10/4/21	16:17		Water	X X X			
AES-MW5-100421 (500-206288-6)		10/4/21	17:08		Water	X X X			
AES-FB-100421 (500-206288-7)		10/4/21	17:12	Water	Water	X X X			

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analysis & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification

Unconfirmed

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

Primary Deliverable Rank: 2

Date: Received by:

Method of Shipment: FED EX Disposal By Lab

Date/Time: Company Return To Client Archive For Months

Relinquished by: Relinquished Date/Time: Company Relinquished Date/Time: Company Relinquished Date/Time: Company

Custody Seals Intact: Custody Seal No.:
△ Yes △ No

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Ver. 06/08/2021

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Login Sample Receipt Checklist

Client: DNA-Environment, LLC

Job Number: 500-206288-2

Login Number: 206288

List Source: Eurofins TestAmerica, Chicago

List Number: 3

Creator: James, Jeff A

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

Login Sample Receipt Checklist

Client: DNA-Environment, LLC

Job Number: 500-206288-2

Login Number: 206288

List Source: Eurofins TestAmerica, St. Louis

List Number: 2

List Creation: 10/07/21 06:47 PM

Creator: Mazariegos, Leonel A

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		1
The cooler's custody seal, if present, is intact.	True		2
Sample custody seals, if present, are intact.	True		3
The cooler or samples do not appear to have been compromised or tampered with.	True		4
Samples were received on ice.	N/A		5
Cooler Temperature is acceptable.	True		6
Cooler Temperature is recorded.	True		7
COC is present.	True		8
COC is filled out in ink and legible.	True		9
COC is filled out with all pertinent information.	True		10
Is the Field Sampler's name present on COC?	True		11
There are no discrepancies between the containers received and the COC.	True		12
Samples are received within Holding Time (excluding tests with immediate HTs)	True		13
Sample containers have legible labels.	True		14
Containers are not broken or leaking.	True		15
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	True		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

Tracer/Carrier Summary

Client: DNA-Environment, LLC

Project/Site: CCR GW Monitoring, AES Puerto Rico, LP

Job ID: 500-206288-2

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (40-110)	
500-206165-D-1-A DU	Duplicate	94.8	
500-206288-1	AES-MW1-100421	69.9	
500-206288-2	AES-MW2-100421	97.2	
500-206288-2 MS	AES-MW2-100421	95.6	
500-206288-2 MSD	AES-MW2-100421	99.0	
500-206288-3	AES-MW3-100421	100	
500-206288-4	AES-MW4-100421	95.9	
500-206288-5	AES-MW4-DUP-100421	90.9	
500-206288-6	AES-MW5-100421	96.9	
500-206288-7	AES-FB-100421	95.1	
LCS 160-530550/1-A	Lab Control Sample	101	
MB 160-530550/24-A	Method Blank	103	

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba (40-110)	Y (40-110)
500-206165-D-1-B DU	Duplicate	94.8	86.7
500-206288-1	AES-MW1-100421	69.9	83.7
500-206288-2	AES-MW2-100421	97.2	87.5
500-206288-2 MS	AES-MW2-100421	95.6	85.6
500-206288-2 MSD	AES-MW2-100421	99.0	86.7
500-206288-3	AES-MW3-100421	100	85.2
500-206288-4	AES-MW4-100421	95.9	84.9
500-206288-5	AES-MW4-DUP-100421	90.9	85.2
500-206288-6	AES-MW5-100421	96.9	84.9
500-206288-7	AES-FB-100421	95.1	85.6
LCS 160-530555/1-A	Lab Control Sample	101	85.2
MB 160-530555/24-A	Method Blank	103	87.1

Tracer/Carrier Legend

Ba = Ba Carrier

$\Sigma = \Sigma_{\text{Carrier}}$

APPENDIX C

STATISTICAL ANALYSIS REPORT



STATISTICAL ANALYSIS REPORT

AES PUERTO RICO LP, GUAYAMA, PUERTO RICO

This Statistical Analysis Report describes the procedures and findings of a statistical evaluation performed on groundwater data collected through April 2021 from the groundwater monitoring well network at AES Puerto Rico, LP (AES-PR) in Guayama, Puerto Rico. Statistical findings for groundwater data collected in 2020 are also provided in this report given that the statistical evaluation of 2020 data was completed in 2021. The 2020 sampling events were held in May and October 2020.

Groundwater monitoring and statistical analysis were performed in compliance with the groundwater monitoring and corrective action requirements of the United States Environmental Protection Agency's (USEPA's) Coal Combustion Residuals Rule (CCR Rule). Statistical evaluation was performed following the procedures described in the PE-certified Statistical Analysis Plan included in the document entitled *Groundwater Monitoring System & Sampling and Analysis Program, AES Puerto Rico LP, Guayama, Puerto Rico* (DNA, August 2017). The statistical methods employed are in accordance with the CCR Rule and USEPA's guidance document entitled *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance* (USEPA 2009). The Unified Guidance describes the methodologies for statistical analysis of groundwater data that are recommended by the USEPA, which meet the statistical testing requirements in the CCR Rule.

The CCR monitoring well network at AES-PR consists of five groundwater monitoring wells that have been installed pursuant to 40 CFR Part 257.91 to monitor the groundwater quality of the CCR Unit at AES-PR. This monitoring well network consists of the following:

- **Upgradient Wells:** MW-1 and MW-2; and
- **Downgradient Wells:** MW-3, MW-4, and MW-5.

Wells MW-1 and MW-2 are located hydraulically upgradient from the CCR Unit. Therefore, analytical data from groundwater samples collected from these upgradient wells are statistically evaluated to calculate site background levels for the CCR constituents (see below). Wells MW-3, MW-4, and MW-5 are located hydraulically downgradient of the CCR Unit. Therefore, analytical data from groundwater samples collected from these downgradient wells are statistically analyzed to evaluate compliance with the groundwater quality requirements in the CCR Rule.

The CCR constituents that are included in the groundwater monitoring program at AES-PR are those listed in Appendix III and Appendix IV to 40 CFR Part 257. These are as follows:

- **Appendix III Constituents** (Detection Monitoring): boron, calcium, chloride, fluoride, pH, sulfate, and Total Dissolved Solids (TDS); and

- **Appendix IV Constituents** (Assessment Monitoring): antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228 combined.

On July 16, 2018, AES-PR established an assessment monitoring program pursuant to 40 CFR 257.94(e) and 257.95. Therefore, statistical evaluation of the constituents listed in Appendix IV to 40 CFR Part 257 was performed as required under assessment monitoring, and evaluation of statistically significant increase over background levels for one or more constituents listed in Appendix III was not warranted.

Statistical analyses were performed using Sanitas™ Statistical Software. Sanitas™ is a software package that offers comprehensive RCRA statistics for Subtitle C and D facilities and incorporates the statistical tests and methods recommended in the USEPA Unified Guidance.

Below is a description of the statistical methods, followed by the statistical evaluation results corresponding to the May 2020, October 2020, and April 2021 semiannual groundwater sampling events.

Statistical Methods

Data Screening

Handling of Datasets with Non-Detect Results

Note that statistical analyses are not required on wells and constituents containing 100% non-detects (See USEPA Unified Guidance 2009, Chapter 6).

Groundwater analytical data with non-detect results were handled as follows:

- Datasets containing less than 15% non-detects were replaced with one-half the reporting limit (RL), whereas datasets containing more than 15% non-detects were replaced with the RL. The reporting limit used for non-detects was the practical quantitation limit (PQL) as reported by the analytical laboratory (identified as “RL” in the laboratory analytical reports).
- Datasets containing between 15-50% non-detects were submitted to the Kaplan-Meier adjustments. This method adjusts the mean and standard deviation of the dataset to account for concentrations below the reporting limit.
- Nonparametric statistics were used on datasets containing greater than 50% non-detects.

Upgradient Wells (Background Data)

The background data from upgradient wells MW-1 and MW-2 were screened and tested using various graphical displays and statistical tests to prepare the data for evaluating site background levels. The Unified Guidance recommends that a minimum of four new observations (*i.e.*, sample results) be available before the site background levels could be updated. The background levels at AES-PR are generally updated annually after obtaining four new observations by pooling the

most recent semiannual data from the upgradient wells MW-1 and MW-2. Nonetheless, after receiving the groundwater results from each sampling event, all background data are screened for potential outliers and temporal trends.

The background data screening procedure was as follows:

- Prepared time series plots to visually screen for suspected outliers and trends in the concentrations of CCR constituents.
- Prepared box plots to screen for variation within individual wells and between wells.
- Tested the data distribution using the Shapiro-Wilk test for normality.
- Whenever possible, non-normally distributed data were transformed to normally distributed data using the Ladder of Powers method. In this method, the data is submitted to the following transformation sequence: x , $x^{1/2}$, x^2 , $x^{1/3}$, x^3 , $\ln(x)$, x^4 , x^5 , x^6 , until a suitable transformation is applied to normalize the data.
- Formally tested the pooled background data from MW-1 and MW-2 for outliers using the Tukey's statistical test. Confirmed outliers were flagged and deselected before computing background levels.
- Formally tested for temporal trends for the proposed background data using the Sen's Slope/Mann Kendall trend test to identify statistical increasing or decreasing trends, which may indicate natural variability in groundwater at upgradient wells.

Downgradient Wells

The groundwater data collected from the sampling of downgradient wells MW-3, MW-4, and MW-5 were visually evaluated by plotting time series and box plots. Data distribution in individual downgradient wells was tested using the Shapiro-Wilk test for normality. Whenever possible, non-normal data were transformed to normally distributed data using the Ladder of Powers method. Each downgradient well dataset was subsequently used to construct confidence intervals for each detected Appendix IV constituent and compared to the associated Groundwater Protection Standard (GWPS) as described below.

Updating Background Levels

Background levels were established following the initial eight rounds of upgradient-well sampling completed in 2017. The Unified Guidance recommends that a minimum of four new groundwater results be available before background levels could be updated. Therefore, background levels at AES-PR are evaluated at the end of each calendar year when four new upgradient-well results are available. Site background levels were updated following the October 2020 sampling event results (see below).

The Upper Tolerance Limit (UTL) was used to calculate the site background limit for each Appendix IV constituent, using the pooled upgradient-well data (*i.e.*, MW-1 and MW-2). The parametric UTL, with 95% confidence and 95% coverage, was calculated for normal or transformed-normal distributions. Nonparametric Upper Tolerance Limits were calculated when

the distribution of the background data was not normal or transformed-normal or when the dataset contained more than 50 percent of non-detects. The achieved confidence and coverage rates for nonparametric UTIs were based on the number of available observations in the dataset. Background levels were subsequently used when establishing groundwater protection standards under 40 CFR §257.95(h).

Establishing Groundwater Protection Standards

During assessment monitoring, downgradient well concentrations of detected Appendix IV constituents are statistically compared to the corresponding GWPS. The GWPS for all detected Appendix IV constituents were calculated in accordance with 40 CFR §257.95(h).

Per 40 CFR §257.95(h), and the USEPA amendments to §257.95 of July 30, 2018¹, which promulgated CCR-Rule numeric criteria for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L), the GWPS will be:

- The maximum contaminant level (MCL) established under §§141.62 and 141.66 of this title;
- The CCR-Rule numeric criteria for constituents for which an MCL has not been established (i.e., cobalt, lead, lithium, and molybdenum); or
- The corresponding background concentration when the background level is higher than the MCL or CCR-Rule numeric criteria.

Determination of Statistically Significant Level

The groundwater data were statistically evaluated by comparing the confidence intervals for detected constituents in downgradient wells to the associated GWPS. The lower confidence limit (LCL) of the mean (or median for non-parametric analysis) was computed for each constituent of concern to determine if a statistically significant level (SSL) exists above the corresponding GWPS. An SSL was detected if the LCL exceeded the associated GWPS.

Parametric confidence intervals were calculated when the data followed a normal or transformed-normal distribution. Nonparametric confidence intervals were computed when the data could not be transformed to normality or when the dataset contained greater than 50% non-detects. Parametric and nonparametric confidence intervals were constructed with a 95% confidence level.

¹ See Federal Register/Vol. 83, No. 146/Monday, July 30, 2018/Rules and Regulations.

Statistical Evaluation Results

May 2020 Event

Descriptive Statistics

Attachment 1 provides the Sanitas™ output for all available data through May 2020, showing a summary of descriptive statistics (*e.g.*, mean, standard deviation, median, %ND) from box plot analysis for all background and downgradient wells. Additional statistics (*e.g.*, sample distribution, significance level) are provided under the pertinent statistical test output file.

Outlier and Trend Evaluation

The outlier analyses performed on all available pooled upgradient well data through May 2020 identified one selenium data point from well MW-1 as an outlier. **Attachment 2** provides the Sanitas™ output files showing a summary of the outlier analysis results. The identified outlier data point was flagged and deselected from the background dataset so as not be included when updating the background level for this constituent during subsequent background data evaluations.

A statistically significant increasing trend was identified for fluoride in well MW-2. Well MW-1 also showed an increasing trend, although not statistically significant. **Attachment 3** provides a summary of the trend test results. Handling of these data is discussed below under the October 2020 evaluation of background levels.

Background Levels

Background levels were not updated following the May 2020 sampling event as four new groundwater results are the minimum required per the Unified Guidance before background levels could be updated. Given that two new background groundwater results were obtained from the May 2020 event, background levels remained as established at the end of 2019 (**Attachment 4**).

Groundwater Protection Standards

Attachment 4 provides a summary of the GWPS determined for all available data through May 2020.

Confidence Intervals

Attachment 5 provides a comparison of the Lower Confidence Limit (LCL) for each downgradient-well/constituent pair to the associated GWPS (*i.e.*, “Compliance” limit). Based on this statistical comparison, the following SSL were identified:

- Lithium: MW-4
- Molybdenum: MW-3 and MW-4
- Selenium: MW-3

October 2020 Event

Descriptive Statistics

Attachment 6 provides the Sanitas™ output for all available data through October 2020, showing a summary of descriptive statistics (e.g., mean, standard deviation, median, %ND) from box plot analysis for all background and downgradient wells. Additional statistics (e.g., sample distribution, significance level) are provided under the pertinent statistical test output file.

Outlier and Trend Evaluation

The outlier analyses performed on all available pooled background data through the October 2020 sampling event did not identify additional data outliers to those identified and excluded in the dataset from previous sampling events (**Attachment 7**).

A statistically significant increasing trend was identified for fluoride in well MW-2. Well MW-1 also showed an increasing trend, although not statistically significant. For the updating of the site background levels, all fluoride results were used given the similarities in temporal concentration patterns of fluoride in both background wells, which may be indicative of natural variation in groundwater quality (updating of background levels is discussed below). A statistically decreasing trend was observed for cobalt in MW-2. However, all cobalt concentrations were below the practical quantitation limit (i.e., estimated trace concentrations or non-detects). Therefore, all data were considered in updating the site background level for cobalt. **Attachment 8** provides a summary of the trend test results.

Updating Background Levels

As described in the statistical methods section above, background levels were computed as the Upper Tolerance Limit from the pooled background well dataset, less previously identified outliers. A summary of the Upper Tolerance Limits for all Appendix IV constituents is presented in **Attachment 9**.

Groundwater Protection Standards

Attachment 10 provides a summary of the background levels and GWPS determined for all available data through October 2020.

Confidence Intervals

Attachment 11 provides a comparison of the Lower Confidence Limit (LCL) for each downgradient-well/constituent pair to the associated GWPS (i.e., “Compliance” limit). Based on this statistical comparison, the following SSL were identified:

- Lithium: MW-4
- Molybdenum: MW-3 and MW-4
- Selenium: MW-3

April 2021 Event

Descriptive Statistics

Attachment 12 provides the Sanitas™ output for all available data through April 2021, showing a summary of descriptive statistics (*e.g.*, mean, standard deviation, median, %ND) from box plot analysis for all background and downgradient wells. Additional statistics (*e.g.*, sample distribution, significance level) are provided under the pertinent statistical test output file.

Outlier and Trend Evaluation

The outlier analyses performed on all available background data through the April 2021 sampling event did not identify additional data outliers to those identified and excluded in the dataset from previous sampling events (**Attachment 13**).

A statistically significant increasing trend was identified for fluoride in wells MW-1 and MW-2. A statistically decreasing trend was observed for cobalt in MW-2. However, all cobalt concentrations were below the practical quantitation limit (*i.e.*, estimated trace concentrations or non-detects). **Attachment 14** provides a summary of the trend test results. The observed trends and potential impacts to the background dataset will be reevaluated during the next scheduled update of site background levels.

Background Levels

Background levels were not updated following the April 2021 sampling event as four new groundwater results are the minimum required per the Unified Guidance before background levels could be updated. Given that two new background groundwater results were obtained from the April 2021 sampling event, background levels remained as established at the end of 2020 (**Attachment 15**).

Groundwater Protection Standards

Attachment 15 provides a summary of the GWPS determined for all available data through April 2021.

Confidence Intervals

Attachment 16 provides a comparison of the Lower Confidence Limit (LCL) for each downgradient-well/constituent pair to the associated GWPS (*i.e.*, “Compliance” limit). Based on this statistical comparison, the following SSL were identified:

- Lithium: MW-4
- Molybdenum: MW-3 and MW-4
- Selenium: MW-3

REFERENCES

DNA-Environment, LLC. August 2017. *Groundwater Monitoring System & Sampling and Analysis Program, AES Puerto Rico LP, Guayama, Puerto Rico.*

USEPA (United States Environmental Protection Agency). 2009. *Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance*. Washington, DC: EPA. EPA 530/R-09-007.

ATTACHMENT 1

BOX PLOT SUMMARY: ALL CCR WELLS (MAY 2020)

Box & Whiskers Plot

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 8/24/2020, 10:01 AM

<u>Constituent</u>	<u>Well</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Std. Err.</u>	<u>Median</u>	<u>Min.</u>	<u>Max.</u>	<u>%NDs</u>
Antimony (mg/L)	MW-1 (bg)	12	0.002375	0.000433	0.000125	0.0025	0.001	0.0025	100
Antimony (mg/L)	MW-2 (bg)	12	0.002375	0.000433	0.000125	0.0025	0.001	0.0025	100
Antimony (mg/L)	MW-3	12	0.002133	0.0005726	0.0001653	0.0025	0.001	0.0025	75
Antimony (mg/L)	MW-4	12	0.002175	0.0005362	0.0001548	0.0025	0.001	0.0025	66.67
Antimony (mg/L)	MW-5	12	0.002575	0.0008497	0.0002453	0.0025	0.001	0.0049	91.67
Arsenic (mg/L)	MW-1 (bg)	13	0.000...	0.000391	0.0001084	0.00087	0.00043	0.0013	46.15
Arsenic (mg/L)	MW-2 (bg)	13	0.001011	0.0004215	0.0001169	0.0013	0.00031	0.0014	53.85
Arsenic (mg/L)	MW-3	13	0.002731	0.0007364	0.0002042	0.0029	0.0016	0.0038	0
Arsenic (mg/L)	MW-4	13	0.003538	0.001117	0.0003098	0.0035	0.0021	0.0059	0
Arsenic (mg/L)	MW-5	13	0.005931	0.003575	0.0009915	0.006	0.0018	0.015	0
Barium (mg/L)	MW-1 (bg)	13	0.04823	0.01316	0.00365	0.055	0.019	0.063	0
Barium (mg/L)	MW-2 (bg)	13	0.1148	0.01834	0.005085	0.11	0.089	0.15	0
Barium (mg/L)	MW-3	13	0.27	0.1323	0.03669	0.23	0.16	0.66	0
Barium (mg/L)	MW-4	13	0.05169	0.00844	0.002341	0.056	0.035	0.061	0
Barium (mg/L)	MW-5	13	0.03554	0.003799	0.001054	0.034	0.03	0.043	0
Beryllium (mg/L)	MW-1 (bg)	11	0.002364	0.0004523	0.0001364	0.0025	0.001	0.0025	100
Beryllium (mg/L)	MW-2 (bg)	11	0.002364	0.0004523	0.0001364	0.0025	0.001	0.0025	100
Beryllium (mg/L)	MW-3	11	0.002364	0.0004523	0.0001364	0.0025	0.001	0.0025	100
Beryllium (mg/L)	MW-4	11	0.002364	0.0004523	0.0001364	0.0025	0.001	0.0025	100
Beryllium (mg/L)	MW-5	11	0.002364	0.0004523	0.0001364	0.0025	0.001	0.0025	100
Cadmium (mg/L)	MW-1 (bg)	12	0.002375	0.000433	0.000125	0.0025	0.001	0.0025	100
Cadmium (mg/L)	MW-2 (bg)	12	0.002375	0.000433	0.000125	0.0025	0.001	0.0025	100
Cadmium (mg/L)	MW-3	12	0.001882	0.0009214	0.000266	0.0025	0.00042	0.0025	75
Cadmium (mg/L)	MW-4	12	0.001607	0.001106	0.0003193	0.0025	0.00018	0.0025	58.33
Cadmium (mg/L)	MW-5	12	0.002299	0.0006954	0.0002007	0.0025	0.000091	0.0025	91.67
Chromium (mg/L)	MW-1 (bg)	11	0.002345	0.0004503	0.0001358	0.0025	0.001	0.0025	90.91
Chromium (mg/L)	MW-2 (bg)	11	0.002491	0.0006488	0.0001956	0.0025	0.001	0.0039	90.91
Chromium (mg/L)	MW-3	11	0.004945	0.008653	0.002609	0.0025	0.001	0.031	81.82
Chromium (mg/L)	MW-4	11	0.002336	0.0006816	0.0002055	0.0025	0.001	0.0035	81.82
Chromium (mg/L)	MW-5	11	0.002364	0.0004523	0.0001364	0.0025	0.001	0.0025	100
Cobalt (mg/L)	MW-1 (bg)	13	0.000...	0.0006982	0.0001936	0.00069	0.00046	0.0025	15.38
Cobalt (mg/L)	MW-2 (bg)	13	0.001896	0.0009456	0.0002622	0.0025	0.00033	0.0025	69.23
Cobalt (mg/L)	MW-3	13	0.002465	0.000792	0.0002197	0.0023	0.00085	0.004	0
Cobalt (mg/L)	MW-4	13	0.00153	0.0003532	0.0000...	0.0017	0.00083	0.0018	0
Cobalt (mg/L)	MW-5	13	0.003123	0.0002862	0.0000...	0.003	0.0027	0.0036	0
Combined Radium 226 + 228 (pCi/L)	MW-1 (bg)	13	0.3014	0.2151	0.05967	0.333	-0.168	0.62	0
Combined Radium 226 + 228 (pCi/L)	MW-2 (bg)	13	0.266	0.2463	0.0683	0.23	-0.0965	0.675	0
Combined Radium 226 + 228 (pCi/L)	MW-3	13	0.368	0.2795	0.07752	0.374	-0.0595	1.07	0
Combined Radium 226 + 228 (pCi/L)	MW-4	13	0.3013	0.2629	0.07293	0.341	-0.0815	0.723	0
Combined Radium 226 + 228 (pCi/L)	MW-5	13	0.3702	0.2256	0.06256	0.391	-0.0397	0.723	0
Fluoride (mg/L)	MW-1 (bg)	13	0.5738	0.09631	0.02671	0.58	0.4	0.75	0
Fluoride (mg/L)	MW-2 (bg)	13	0.4838	0.1323	0.03668	0.42	0.35	0.71	0
Fluoride (mg/L)	MW-3	13	1.798	0.36	0.09983	1.8	0.87	2.3	0
Fluoride (mg/L)	MW-4	13	0.6669	0.1844	0.05115	0.65	0.23	1	0
Fluoride (mg/L)	MW-5	13	0.4208	0.1254	0.03478	0.46	0.05	0.52	7.692
Lead (mg/L)	MW-1 (bg)	11	0.001225	0.0001756	0.0000...	0.0013	0.00077	0.0013	90.91
Lead (mg/L)	MW-2 (bg)	11	0.001273	0.0000...	0.0000...	0.0013	0.001	0.0013	100
Lead (mg/L)	MW-3	11	0.001273	0.0000...	0.0000...	0.0013	0.001	0.0013	100
Lead (mg/L)	MW-4	11	0.001112	0.0003568	0.0001076	0.0013	0.00036	0.0013	81.82
Lead (mg/L)	MW-5	11	0.001273	0.0000...	0.0000...	0.0013	0.001	0.0013	100

Box & Whiskers Plot

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 8/24/2020, 10:01 AM

<u>Constituent</u>	<u>Well</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Std. Err.</u>	<u>Median</u>	<u>Min.</u>	<u>Max.</u>	<u>%NDs</u>
Lithium (mg/L)	MW-1 (bg)	13	0.003526	0.001961	0.000544	0.005	0.00054	0.005	69.23
Lithium (mg/L)	MW-2 (bg)	13	0.0036	0.001861	0.000516	0.005	0.001	0.005	69.23
Lithium (mg/L)	MW-3	13	0.009954	0.008642	0.002397	0.0075	0.0014	0.034	0
Lithium (mg/L)	MW-4	13	0.7277	0.2494	0.06917	0.75	0.28	1.1	0
Lithium (mg/L)	MW-5	13	0.004292	0.001302	0.0003612	0.0043	0.0014	0.0067	7.692
Mercury (mg/L)	MW-1 (bg)	11	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-2 (bg)	11	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-3	11	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-4	11	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-5	11	0.0002	0	0	0.0002	0.0002	0.0002	100
Molybdenum (mg/L)	MW-1 (bg)	13	0.008043	0.006721	0.001864	0.0028	0.00076	0.015	46.15
Molybdenum (mg/L)	MW-2 (bg)	13	0.008757	0.007028	0.001949	0.015	0.00094	0.015	53.85
Molybdenum (mg/L)	MW-3	13	0.2369	0.1297	0.03598	0.22	0.064	0.53	0
Molybdenum (mg/L)	MW-4	13	0.4746	0.1155	0.03204	0.44	0.35	0.74	0
Molybdenum (mg/L)	MW-5	13	0.005054	0.002091	0.0005801	0.0053	0.0022	0.0086	0
Selenium (mg/L)	MW-1 (bg)	13	0.007538	0.00616	0.001708	0.0059	0.0014	0.025	0
Selenium (mg/L)	MW-2 (bg)	13	0.000...	0.0008062	0.0002236	0.00065	0.00035	0.0034	38.46
Selenium (mg/L)	MW-3	13	0.1982	0.151	0.04187	0.14	0.026	0.57	0
Selenium (mg/L)	MW-4	13	0.006715	0.00353	0.0009791	0.006	0.0012	0.013	0
Selenium (mg/L)	MW-5	13	0.005343	0.004804	0.001333	0.0038	0.00046	0.014	15.38
Thallium (mg/L)	MW-1 (bg)	11	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	MW-2 (bg)	11	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	MW-3	11	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	MW-4	11	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	MW-5	11	0.0005	0	0	0.0005	0.0005	0.0005	100

ATTACHMENT 2

OUTLIER ANALYSIS SUMMARY: BACKGROUND WELLS (MAY 2020)

Outlier Analysis - Significant Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 8/24/2020, 10:01 AM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Selenium (mg/L)	MW-1,MW-2	Yes	0.025	n/a w/combined bg	NP	NaN	26	0.004314	0.005416	normal	ShapiroWilk

Outlier Analysis - All Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 8/24/2020, 10:01 AM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Antimony (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	24	0.002375	0.0004235	unknown	ShapiroWilk
Arsenic (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	26	0.0009608	0.0004016	normal	ShapiroWilk
Barium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	26	0.0815	0.03736	normal	ShapiroWilk
Beryllium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	22	0.002364	0.0004414	unknown	ShapiroWilk
Cadmium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	24	0.002375	0.0004235	unknown	ShapiroWilk
Chromium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	22	0.002418	0.00055	unknown	ShapiroWilk
Cobalt (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	26	0.001439	0.0009382	normal	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	26	0.2837	0.2273	normal	ShapiroWilk
Fluoride (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	26	0.5288	0.1223	normal	ShapiroWilk
Lead (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	22	0.001249	0.0001385	unknown	ShapiroWilk
Lithium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	26	0.003563	0.001873	normal	ShapiroWilk
Mercury (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	22	0.0002	0	unknown	ShapiroWilk
Molybdenum (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	26	0.0084	0.006747	normal	ShapiroWilk
Selenium (mg/L)	MW-1,MW-2	Yes	0.025	n/a w/combined bg	NP	NaN	26	0.004314	0.005416	normal	ShapiroWilk
Thallium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	22	0.0005	0	unknown	ShapiroWilk

ATTACHMENT 3

TREND TEST SUMMARY: BACKGROUND WELLS (MAY 2020)

Trend Test - Significant Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 8/24/2020, 10:01 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Fluoride (mg/L)	MW-2 (bg)	0.1478	48	43	Yes	13	0	n/a	n/a	0.01	NP

Trend Test - All Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 8/24/2020, 10:01 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	MW-1 (bg)	0	-11	-38	No	12	100	n/a	n/a	0.01	NP
Antimony (mg/L)	MW-2 (bg)	0	-11	-38	No	12	100	n/a	n/a	0.01	NP
Arsenic (mg/L)	MW-1 (bg)	0	-9	-43	No	13	46.15	n/a	n/a	0.01	NP
Arsenic (mg/L)	MW-2 (bg)	0	-12	-43	No	13	53.85	n/a	n/a	0.01	NP
Barium (mg/L)	MW-1 (bg)	-0.009818	-23	-43	No	13	0	n/a	n/a	0.01	NP
Barium (mg/L)	MW-2 (bg)	0.01107	24	43	No	13	0	n/a	n/a	0.01	NP
Beryllium (mg/L)	MW-1 (bg)	0	-10	-34	No	11	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	MW-2 (bg)	0	-10	-34	No	11	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	MW-1 (bg)	0	-11	-38	No	12	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	MW-2 (bg)	0	-11	-38	No	12	100	n/a	n/a	0.01	NP
Chromium (mg/L)	MW-1 (bg)	0	-13	-34	No	11	90.91	n/a	n/a	0.01	NP
Chromium (mg/L)	MW-2 (bg)	0	-5	-34	No	11	90.91	n/a	n/a	0.01	NP
Cobalt (mg/L)	MW-1 (bg)	0.00103	17	43	No	13	15.38	n/a	n/a	0.01	NP
Cobalt (mg/L)	MW-2 (bg)	-0.00004513	-38	-43	No	13	69.23	n/a	n/a	0.01	NP
Combined Radium 226 + 228 (pCi/L)	MW-1 (bg)	-0.04139	-12	-43	No	13	0	n/a	n/a	0.01	NP
Combined Radium 226 + 228 (pCi/L)	MW-2 (bg)	0.03922	10	43	No	13	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	0.09368	32	43	No	13	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-2 (bg)	0.1478	48	43	Yes	13	0	n/a	n/a	0.01	NP
Lead (mg/L)	MW-1 (bg)	0	-15	-34	No	11	90.91	n/a	n/a	0.01	NP
Lead (mg/L)	MW-2 (bg)	0	-10	-34	No	11	100	n/a	n/a	0.01	NP
Lithium (mg/L)	MW-1 (bg)	0	-14	-43	No	13	69.23	n/a	n/a	0.01	NP
Lithium (mg/L)	MW-2 (bg)	0	0	43	No	13	69.23	n/a	n/a	0.01	NP
Mercury (mg/L)	MW-1 (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Mercury (mg/L)	MW-2 (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-1 (bg)	0	9	43	No	13	46.15	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-2 (bg)	0	10	43	No	13	53.85	n/a	n/a	0.01	NP
Selenium (mg/L)	MW-1 (bg)	-0.001801	-23	-38	No	12	0	n/a	n/a	0.01	NP
Selenium (mg/L)	MW-2 (bg)	0.0002035	22	43	No	13	38.46	n/a	n/a	0.01	NP
Thallium (mg/L)	MW-1 (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Thallium (mg/L)	MW-2 (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP

ATTACHMENT 4

BACKGROUND LEVELS AND GROUNDWATER PROTECTION STANDARDS (MAY 2020)

Background Levels and Groundwater Protection Standards Corresponding to the May 2020 Sampling Event
 AES Puerto Rico LP, Guayama, Puerto Rico

Constituent	Units	MCL	CCR-Rule Specified Criteria ¹	Background Level ²	GWPS
Antimony	mg/L	0.006		0.0025	0.006
Arsenic	mg/L	0.010		0.0014	0.010
Barium	mg/L	2		0.1678	2
Beryllium	mg/L	0.004		0.0025	0.004
Cadmium	mg/L	0.005		0.0025	0.005
Chromium	mg/L	0.1		0.0039	0.1
Cobalt	mg/L		0.006	0.0025	0.006
Fluoride	mg/L	4.0		0.8187	4.0
Lead	mg/L		0.015	0.0013	0.015
Lithium	mg/L	0.040		0.005	0.040
Mercury	mg/L	0.002		0.0002	0.002
Molybdenum	mg/L		0.100	0.015	0.100
Selenium	mg/L	0.05		0.02144	0.05
Thallium	mg/L	0.002		0.0005	0.002
Radium 266 and 228 combined	pCi/L	5		0.8099	5

Notes:

mg/L = milligram per Liter

MCL = Maximum Contaminant Level

GWPS = Groundwater Protection Standard

¹See Federal Register/Vol. 83, No. 146/Monday, July 30, 2018/Rules and Regulations.

²Background levels correspond to the 2019 update.

ATTACHMENT 5

*CONFIDENCE INTERVAL SUMMARY (MAY 2020):
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVEL*

Confidence Interval - Significant Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 8/24/2020, 10:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	MW-4	0.851	0.6044	0.04	Yes 13	0.7277	0.2494	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-3	0.3011	0.1728	0.1	Yes 13	0.2369	0.1297	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-4	0.5242	0.4164	0.1	Yes 13	0.4746	0.1155	0	None	sqrt(x)	0.05	Param.
Selenium (mg/L)	MW-3	0.2728	0.1235	0.05	Yes 13	0.1982	0.151	0	None	No	0.05	Param.

Confidence Interval - All Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 8/24/2020, 10:58 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MW-3	0.0025	0.0017	0.006	No 12	0.002133	0.0005726	75	None	No	0.05	NP (NDs)
Antimony (mg/L)	MW-4	0.0025	0.0019	0.006	No 12	0.002175	0.0005362	66.67	None	No	0.05	NP (NDs)
Antimony (mg/L)	MW-5	0.0049	0.001	0.006	No 12	0.002575	0.0008497	91.67	None	No	0.05	NP (NDs)
Arsenic (mg/L)	MW-3	0.003095	0.002367	0.01	No 13	0.002731	0.0007364	0	None	No	0.05	Param.
Arsenic (mg/L)	MW-4	0.004091	0.002986	0.01	No 13	0.003538	0.001117	0	None	No	0.05	Param.
Arsenic (mg/L)	MW-5	0.007698	0.004164	0.01	No 13	0.005931	0.003575	0	None	No	0.05	Param.
Barium (mg/L)	MW-3	0.3015	0.2067	2	No 13	0.27	0.1323	0	None	In(x)	0.05	Param.
Barium (mg/L)	MW-4	0.05586	0.04752	2	No 13	0.05169	0.00844	0	None	No	0.05	Param.
Barium (mg/L)	MW-5	0.03742	0.03366	2	No 13	0.03554	0.003799	0	None	No	0.05	Param.
Beryllium (mg/L)	MW-3	0.0025	0.0025	0.004	No 11	0.002364	0.0004523	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	MW-4	0.0025	0.0025	0.004	No 11	0.002364	0.0004523	100	None	No	0.006	NP (NDs)
Beryllium (mg/L)	MW-5	0.0025	0.0025	0.004	No 11	0.002364	0.0004523	100	None	No	0.006	NP (NDs)
Cadmium (mg/L)	MW-3	0.0025	0.00063	0.005	No 12	0.001882	0.0009214	75	None	No	0.05	NP (NDs)
Cadmium (mg/L)	MW-4	0.0025	0.00034	0.005	No 12	0.001607	0.001106	58.33	None	No	0.05	NP (NDs)
Cadmium (mg/L)	MW-5	0.0025	0.000091	0.005	No 12	0.002299	0.0006954	91.67	None	No	0.05	NP (NDs)
Chromium (mg/L)	MW-3	0.0025	0.0024	0.1	No 11	0.004945	0.008653	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	MW-4	0.0025	0.0012	0.1	No 11	0.002336	0.0006816	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	MW-5	0.0025	0.0025	0.1	No 11	0.002364	0.0004523	100	None	No	0.006	NP (NDs)
Cobalt (mg/L)	MW-3	0.002857	0.002074	0.006	No 13	0.002465	0.000792	0	None	No	0.05	Param.
Cobalt (mg/L)	MW-4	0.0018	0.0011	0.006	No 13	0.00153	0.0003532	0	None	No	0.05	NP (normality)
Cobalt (mg/L)	MW-5	0.003265	0.002982	0.006	No 13	0.003123	0.0002862	0	None	No	0.05	Param.
Combined Radium 226 + 228 (pCi/L)	MW-3	0.5061	0.2298	5	No 13	0.368	0.2795	0	None	No	0.05	Param.
Combined Radium 226 + 228 (pCi/L)	MW-4	0.4313	0.1713	5	No 13	0.3013	0.2629	0	None	No	0.05	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.4817	0.2587	5	No 13	0.3702	0.2256	0	None	No	0.05	Param.
Fluoride (mg/L)	MW-3	1.976	1.62	4	No 13	1.798	0.36	0	None	No	0.05	Param.
Fluoride (mg/L)	MW-4	0.68	0.63	4	No 13	0.6669	0.1844	0	None	No	0.05	NP (normality)
Fluoride (mg/L)	MW-5	0.4771	0.4107	4	No 13	0.4208	0.1254	7.692	None	x^3	0.05	Param.
Lead (mg/L)	MW-3	0.0013	0.0013	0.015	No 11	0.001273	0.00009045	100	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-4	0.0013	0.00047	0.015	No 11	0.001112	0.0003568	81.82	None	No	0.006	NP (NDs)
Lead (mg/L)	MW-5	0.0013	0.0013	0.015	No 11	0.001273	0.00009045	100	None	No	0.006	NP (NDs)
Lithium (mg/L)	MW-3	0.01244	0.005574	0.04	No 13	0.009954	0.008642	0	None	sqrt(x)	0.05	Param.
Lithium (mg/L)	MW-4	0.851	0.6044	0.04	Yes 13	0.7277	0.2494	0	None	No	0.05	Param.
Lithium (mg/L)	MW-5	0.004778	0.003422	0.04	No 13	0.0041	0.001372	7.692	None	No	0.05	Param.
Mercury (mg/L)	MW-3	0.0002	0.0002	0.002	No 11	0.0002	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	MW-4	0.0002	0.0002	0.002	No 11	0.0002	0	100	None	No	0.006	NP (NDs)
Mercury (mg/L)	MW-5	0.0002	0.0002	0.002	No 11	0.0002	0	100	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	MW-3	0.3011	0.1728	0.1	Yes 13	0.2369	0.1297	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-4	0.5242	0.4164	0.1	Yes 13	0.4746	0.1155	0	None	sqrt(x)	0.05	Param.
Molybdenum (mg/L)	MW-5	0.006088	0.00402	0.1	No 13	0.005054	0.002091	0	None	No	0.05	Param.
Selenium (mg/L)	MW-3	0.2728	0.1235	0.05	Yes 13	0.1982	0.151	0	None	No	0.05	Param.
Selenium (mg/L)	MW-4	0.00846	0.00497	0.05	No 13	0.006715	0.00353	0	None	No	0.05	Param.
Selenium (mg/L)	MW-5	0.007611	0.003017	0.05	No 13	0.005343	0.004804	15.38	Kaplan-Meier	No	0.05	Param.
Thallium (mg/L)	MW-3	0.0005	0.0005	0.002	No 11	0.0005	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	MW-4	0.0005	0.0005	0.002	No 11	0.0005	0	100	None	No	0.006	NP (NDs)
Thallium (mg/L)	MW-5	0.0005	0.0005	0.002	No 11	0.0005	0	100	None	No	0.006	NP (NDs)

ATTACHMENT 6

BOX PLOT SUMMARY: ALL CCR WELLS (OCTOBER 2020)

Box & Whiskers Plot

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 2/25/2021, 8:17 AM

<u>Constituent</u>	<u>Well</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Std. Err.</u>	<u>Median</u>	<u>Min.</u>	<u>Max.</u>	<u>%NDs</u>
Antimony (mg/L)	MW-1 (bg)	13	0.002269	0.0005633	0.0001562	0.0025	0.001	0.0025	100
Antimony (mg/L)	MW-2 (bg)	13	0.002269	0.0005633	0.0001562	0.0025	0.001	0.0025	100
Antimony (mg/L)	MW-3	13	0.002046	0.0006319	0.0001753	0.0025	0.001	0.0025	76.92
Antimony (mg/L)	MW-4	13	0.002085	0.0006081	0.0001686	0.0025	0.001	0.0025	69.23
Antimony (mg/L)	MW-5	13	0.01007	0.02703	0.007498	0.0025	0.001	0.1	92.31
Arsenic (mg/L)	MW-1 (bg)	14	0.0009743	0.0004445	0.0001188	0.001085	0.00043	0.0018	42.86
Arsenic (mg/L)	MW-2 (bg)	14	0.0009979	0.0004079	0.000109	0.0013	0.00031	0.0014	50
Arsenic (mg/L)	MW-3	14	0.002643	0.0007803	0.0002085	0.00265	0.0015	0.0038	0
Arsenic (mg/L)	MW-4	14	0.003436	0.00114	0.0003047	0.0034	0.0021	0.0059	0
Arsenic (mg/L)	MW-5	14	0.007079	0.005499	0.00147	0.006	0.0018	0.022	0
Barium (mg/L)	MW-1 (bg)	14	0.04807	0.01266	0.003383	0.0525	0.019	0.063	0
Barium (mg/L)	MW-2 (bg)	14	0.1135	0.01825	0.004876	0.11	0.089	0.15	0
Barium (mg/L)	MW-3	14	0.27	0.1271	0.03397	0.235	0.16	0.66	0
Barium (mg/L)	MW-4	14	0.05129	0.00825	0.002205	0.0555	0.035	0.061	0
Barium (mg/L)	MW-5	14	0.03657	0.005316	0.001421	0.035	0.03	0.05	7.143
Beryllium (mg/L)	MW-1 (bg)	12	0.00225	0.0005839	0.0001685	0.0025	0.001	0.0025	100
Beryllium (mg/L)	MW-2 (bg)	12	0.00225	0.0005839	0.0001685	0.0025	0.001	0.0025	100
Beryllium (mg/L)	MW-3	12	0.002191	0.0007378	0.000213	0.0025	0.00029	0.0025	91.67
Beryllium (mg/L)	MW-4	12	0.002308	0.0004719	0.0001362	0.0025	0.001	0.0025	91.67
Beryllium (mg/L)	MW-5	12	0.0105	0.02819	0.008137	0.0025	0.001	0.1	100
Cadmium (mg/L)	MW-1 (bg)	13	0.002269	0.0005633	0.0001562	0.0025	0.001	0.0025	100
Cadmium (mg/L)	MW-2 (bg)	13	0.002269	0.0005633	0.0001562	0.0025	0.001	0.0025	100
Cadmium (mg/L)	MW-3	13	0.001758	0.0009891	0.0002743	0.0025	0.00027	0.0025	69.23
Cadmium (mg/L)	MW-4	13	0.001531	0.001095	0.0003036	0.0025	0.00018	0.0025	53.85
Cadmium (mg/L)	MW-5	13	0.009815	0.02711	0.007518	0.0025	0.000091	0.1	92.31
Chromium (mg/L)	MW-1 (bg)	12	0.002208	0.0006403	0.0001848	0.0025	0.0007	0.0025	83.33
Chromium (mg/L)	MW-2 (bg)	12	0.002367	0.0007536	0.0002175	0.0025	0.001	0.0039	91.67
Chromium (mg/L)	MW-3	12	0.004617	0.008328	0.002404	0.0025	0.001	0.031	83.33
Chromium (mg/L)	MW-4	12	0.002225	0.0007557	0.0002182	0.0025	0.001	0.0035	83.33
Chromium (mg/L)	MW-5	12	0.0105	0.02819	0.008137	0.0025	0.001	0.1	100
Cobalt (mg/L)	MW-1 (bg)	14	0.0009736	0.0006716	0.0001795	0.00072	0.00046	0.0025	14.29
Cobalt (mg/L)	MW-2 (bg)	14	0.001781	0.001006	0.0002688	0.0025	0.00028	0.0025	64.29
Cobalt (mg/L)	MW-3	14	0.002411	0.0007879	0.0002106	0.0023	0.00085	0.004	0
Cobalt (mg/L)	MW-4	14	0.001499	0.0003583	0.00009575	0.0017	0.00083	0.0018	0
Cobalt (mg/L)	MW-5	14	0.01004	0.02589	0.00692	0.0031	0.0027	0.1	7.143
Combined Radium 226 + 228 (pCi/L)	MW-1 (bg)	14	0.3111	0.2099	0.05609	0.341	-0.168	0.62	0
Combined Radium 226 + 228 (pCi/L)	MW-2 (bg)	14	0.307	0.2818	0.07532	0.2715	-0.0965	0.839	0
Combined Radium 226 + 228 (pCi/L)	MW-3	14	0.4481	0.4025	0.1076	0.3955	-0.0595	1.49	0
Combined Radium 226 + 228 (pCi/L)	MW-4	14	0.3598	0.3342	0.08932	0.351	-0.0815	1.12	0
Combined Radium 226 + 228 (pCi/L)	MW-5	14	0.3567	0.2225	0.05946	0.3585	-0.0397	0.723	0
Fluoride (mg/L)	MW-1 (bg)	14	0.5979	0.129	0.03447	0.58	0.4	0.91	0
Fluoride (mg/L)	MW-2 (bg)	14	0.5013	0.1428	0.03818	0.425	0.35	0.728	0
Fluoride (mg/L)	MW-3	14	1.76	0.3735	0.09982	1.8	0.87	2.3	0
Fluoride (mg/L)	MW-4	14	1.334	2.501	0.6683	0.655	0.23	10	7.143
Fluoride (mg/L)	MW-5	14	0.5336	0.4389	0.1173	0.465	0.05	2	14.29
Lead (mg/L)	MW-1 (bg)	12	0.001206	0.0001795	0.00005182	0.0013	0.00077	0.0013	91.67
Lead (mg/L)	MW-2 (bg)	12	0.00125	0.0001168	0.00003371	0.0013	0.001	0.0013	100
Lead (mg/L)	MW-3	12	0.00125	0.0001168	0.00003371	0.0013	0.001	0.0013	100
Lead (mg/L)	MW-4	12	0.001103	0.0003417	0.00009864	0.0013	0.00036	0.0013	83.33
Lead (mg/L)	MW-5	12	0.0095	0.0285	0.008227	0.0013	0.001	0.1	100

Box & Whiskers Plot

Page 2

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 2/25/2021, 8:17 AM

<u>Constituent</u>	<u>Well</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Std. Err.</u>	<u>Median</u>	<u>Min.</u>	<u>Max.</u>	<u>%NDs</u>
Lithium (mg/L)	MW-1 (bg)	14	0.003321	0.002035	0.0005439	0.005	0.00054	0.005	64.29
Lithium (mg/L)	MW-2 (bg)	14	0.003414	0.001918	0.0005126	0.005	0.001	0.005	71.43
Lithium (mg/L)	MW-3	14	0.009464	0.008503	0.002272	0.0074	0.0014	0.034	0
Lithium (mg/L)	MW-4	14	0.7543	0.2595	0.06934	0.76	0.28	1.1	0
Lithium (mg/L)	MW-5	14	0.01113	0.02561	0.006844	0.00435	0.0014	0.1	14.29
Mercury (mg/L)	MW-1 (bg)	12	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-2 (bg)	12	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-3	12	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-4	12	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-5	12	0.0002	0	0	0.0002	0.0002	0.0002	100
Molybdenum (mg/L)	MW-1 (bg)	14	0.007683	0.006597	0.001763	0.0029	0.00076	0.015	50
Molybdenum (mg/L)	MW-2 (bg)	14	0.008192	0.007075	0.001891	0.00865	0.00085	0.015	50
Molybdenum (mg/L)	MW-3	14	0.2286	0.1285	0.03435	0.21	0.064	0.53	0
Molybdenum (mg/L)	MW-4	14	0.4743	0.111	0.02966	0.44	0.35	0.74	0
Molybdenum (mg/L)	MW-5	14	0.02612	0.07885	0.02107	0.0053	0.0022	0.3	7.143
Selenium (mg/L)	MW-1 (bg)	13	0.006108	0.003229	0.0008955	0.0059	0.0014	0.015	0
Selenium (mg/L)	MW-2 (bg)	14	0.0009686	0.0008912	0.0002382	0.00065	0.00035	0.0034	35.71
Selenium (mg/L)	MW-3	14	0.1886	0.1494	0.03992	0.135	0.026	0.57	0
Selenium (mg/L)	MW-4	14	0.006671	0.003396	0.0009075	0.00605	0.0012	0.013	0
Selenium (mg/L)	MW-5	14	0.008533	0.0128	0.00342	0.00435	0.00046	0.05	21.43
Thallium (mg/L)	MW-1 (bg)	12	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	MW-2 (bg)	12	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	MW-3	12	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	MW-4	12	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	MW-5	12	0.004625	0.01429	0.004125	0.0005	0.0005	0.05	100

ATTACHMENT 7

OUTLIER ANALYSIS SUMMARY: BACKGROUND WELLS (OCTOBER 2020)

Outlier Analysis - All Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 2/25/2021, 8:42 AM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality...</u>
Antimony (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	26	0.002269	0.0005519	unknown	ShapiroWilk
Arsenic (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	28	0.0009861	0.0004188	normal	ShapiroWilk
Barium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	28	0.08079	0.03671	normal	ShapiroWilk
Beryllium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	24	0.00225	0.000571	unknown	ShapiroWilk
Cadmium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	26	0.002269	0.0005519	unknown	ShapiroWilk
Chromium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	24	0.002287	0.0006886	unknown	ShapiroWilk
Cobalt (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	28	0.001377	0.0009345	normal	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	28	0.309	0.2438	normal	ShapiroWilk
Fluoride (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	28	0.5496	0.1423	normal	ShapiroWilk
Lead (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	24	0.001228	0.0001498	unknown	ShapiroWilk
Lithium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	28	0.003367	0.001941	normal	ShapiroWilk
Mercury (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	24	0.0002	0	unknown	ShapiroWilk
Molybdenum (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	28	0.007937	0.006717	normal	ShapiroWilk
Selenium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	27	0.003558	0.003383	normal	ShapiroWilk
Thallium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	24	0.0005	0	unknown	ShapiroWilk

ATTACHMENT 8

TREND TEST SUMMARY: BACKGROUND WELLS (OCTOBER 2020)

Trend Test - Significant Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 2/25/2021, 8:47 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MW-2 (bg)	-0.0002646	-51	-48	Yes	14	64.29	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-2 (bg)	0.1244	61	48	Yes	14	0	n/a	n/a	0.01	NP

Trend Test - All Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 2/25/2021, 8:51 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	MW-1 (bg)	0	-22	-43	No	13	100	n/a	n/a	0.01	NP
Antimony (mg/L)	MW-2 (bg)	0	-22	-43	No	13	100	n/a	n/a	0.01	NP
Arsenic (mg/L)	MW-1 (bg)	0	4	48	No	14	42.86	n/a	n/a	0.01	NP
Arsenic (mg/L)	MW-2 (bg)	0	-17	-48	No	14	50	n/a	n/a	0.01	NP
Barium (mg/L)	MW-1 (bg)	-0.004015	-28	-48	No	14	0	n/a	n/a	0.01	NP
Barium (mg/L)	MW-2 (bg)	0.00365	15	48	No	14	0	n/a	n/a	0.01	NP
Beryllium (mg/L)	MW-1 (bg)	0	-20	-38	No	12	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	MW-2 (bg)	0	-20	-38	No	12	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	MW-1 (bg)	0	-22	-43	No	13	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	MW-2 (bg)	0	-22	-43	No	13	100	n/a	n/a	0.01	NP
Chromium (mg/L)	MW-1 (bg)	0	-24	-38	No	12	83.33	n/a	n/a	0.01	NP
Chromium (mg/L)	MW-2 (bg)	0	-15	-38	No	12	91.67	n/a	n/a	0.01	NP
Cobalt (mg/L)	MW-1 (bg)	0.0001551	20	48	No	14	14.29	n/a	n/a	0.01	NP
Cobalt (mg/L)	MW-2 (bg)	-0.0002646	-51	-48	Yes	14	64.29	n/a	n/a	0.01	NP
Combined Radium 226 + 228 (pCi/L)	MW-1 (bg)	-0.03015	-7	-48	No	14	0	n/a	n/a	0.01	NP
Combined Radium 226 + 228 (pCi/L)	MW-2 (bg)	0.1204	23	48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	0.1056	45	48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-2 (bg)	0.1244	61	48	Yes	14	0	n/a	n/a	0.01	NP
Lead (mg/L)	MW-1 (bg)	0	-23	-38	No	12	91.67	n/a	n/a	0.01	NP
Lead (mg/L)	MW-2 (bg)	0	-20	-38	No	12	100	n/a	n/a	0.01	NP
Lithium (mg/L)	MW-1 (bg)	0	-25	-48	No	14	64.29	n/a	n/a	0.01	NP
Lithium (mg/L)	MW-2 (bg)	0	-12	-48	No	14	71.43	n/a	n/a	0.01	NP
Mercury (mg/L)	MW-1 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Mercury (mg/L)	MW-2 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-1 (bg)	0	10	48	No	14	50	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-2 (bg)	0	-3	-48	No	14	50	n/a	n/a	0.01	NP
Selenium (mg/L)	MW-1 (bg)	-0.001357	-19	-43	No	13	0	n/a	n/a	0.01	NP
Selenium (mg/L)	MW-2 (bg)	0.0003747	33	48	No	14	35.71	n/a	n/a	0.01	NP
Thallium (mg/L)	MW-1 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Thallium (mg/L)	MW-2 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP

ATTACHMENT 9

UPPER TOLERANCE LIMIT SUMMARY (OCTOBER 2020):

BACKGROUND LEVELS UPDATE

Tolerance Limit

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 2/25/2021, 9:10 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.001	n/a	n/a	n/a	26	100	n/a	0.2635	NP Inter(nds)
Arsenic (mg/L)	n/a	0.0018	n/a	n/a	n/a	28	46.43	n/a	0.2378	NP Inter(normality)
Barium (mg/L)	n/a	0.1633	n/a	n/a	n/a	28	0	No	0.05	Inter
Beryllium (mg/L)	n/a	0.001	n/a	n/a	n/a	24	100	n/a	0.292	NP Inter(nds)
Cadmium (mg/L)	n/a	0.001	n/a	n/a	n/a	26	100	n/a	0.2635	NP Inter(nds)
Chromium (mg/L)	n/a	0.0039	n/a	n/a	n/a	24	87.5	n/a	0.292	NP Inter(nds)
Cobalt (mg/L)	n/a	0.0025	n/a	n/a	n/a	28	39.29	n/a	0.2378	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	0.8573	n/a	n/a	n/a	28	0	No	0.05	Inter
Fluoride (mg/L)	n/a	0.8696	n/a	n/a	n/a	28	0	No	0.05	Inter
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	24	95.83	n/a	0.292	NP Inter(nds)
Lithium (mg/L)	n/a	0.005	n/a	n/a	n/a	28	67.86	n/a	0.2378	NP Inter(nds)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	24	100	n/a	0.292	NP Inter(nds)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	28	50	n/a	0.2378	NP Inter(normality)
Selenium (mg/L)	n/a	0.013	n/a	n/a	n/a	27	18.52	sqrt(x)	0.05	Inter
Thallium (mg/L)	n/a	0.0005	n/a	n/a	n/a	24	100	n/a	0.292	NP Inter(nds)

ATTACHMENT 10

BACKGROUND LEVELS AND GROUNDWATER PROTECTION STANDARDS (OCTOBER 2020)

Background Levels and Groundwater Protection Standards Corresponding to the October 2020 Sampling Event
 AES Puerto Rico LP, Guayama, Puerto Rico

Constituent	Units	MCL	CCR-Rule Specified Criteria ¹	Background Level ²	GWPS
Antimony	mg/L	0.006		0.001	0.006
Arsenic	mg/L	0.010		0.0018	0.010
Barium	mg/L	2		0.1633	2
Beryllium	mg/L	0.004		0.001	0.004
Cadmium	mg/L	0.005		0.001	0.005
Chromium	mg/L	0.1		0.0039	0.1
Cobalt	mg/L		0.006	0.0025	0.006
Fluoride	mg/L	4.0		0.8696	4.0
Lead	mg/L		0.015	0.0013	0.015
Lithium	mg/L	0.040		0.005	0.040
Mercury	mg/L	0.002		0.0002	0.002
Molybdenum	mg/L		0.100	0.015	0.100
Selenium	mg/L	0.05		0.013	0.05
Thallium	mg/L	0.002		0.0005	0.002
Radium 266 and 228 combined	pCi/L	5		0.8573	5

Notes:

mg/L = milligram per Liter

MCL = Maximum Contaminant Level

GWPS = Groundwater Protection Standard

¹See Federal Register/Vol. 83, No. 146/Monday, July 30, 2018/Rules and Regulations.

²Background levels were computed as the Upper Tolerance Limit from the pooled background dataset.

ATTACHMENT 11

CONFIDENCE INTERVAL SUMMARY (OCTOBER 2020):

DETERMINATION OF STATISTICALLY SIGNIFICANT LEVEL

Confidence Interval - Significant Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 2/25/2021, 9:21 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	MW-4	0.8771	0.6315	0.04	Yes	14	0.7543	0.2595	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-3	0.2894	0.1677	0.1	Yes	14	0.2286	0.1285	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-4	0.5197	0.4206	0.1	Yes	14	0.4743	0.111	0	None	sqrt(x)	0.05	Param.
Selenium (mg/L)	MW-3	0.2323	0.1083	0.05	Yes	14	0.1886	0.1494	0	None	sqrt(x)	0.05	Param.

Confidence Interval - All Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2020_Statistics_AES.mdb Printed 2/25/2021, 9:23 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MW-3	0.0025	0.0012	0.006	No	13	0.002046	0.0006319	76.92	None	No	0.05	NP (NDs)
Antimony (mg/L)	MW-4	0.0025	0.0019	0.006	No	13	0.002085	0.0006081	69.23	None	No	0.05	NP (NDs)
Antimony (mg/L)	MW-5	0.0049	0.001	0.006	No	13	0.01007	0.02703	92.31	None	No	0.05	NP (NDs)
Arsenic (mg/L)	MW-3	0.003012	0.002274	0.01	No	14	0.002643	0.0007803	0	None	No	0.05	Param.
Arsenic (mg/L)	MW-4	0.003975	0.002896	0.01	No	14	0.003436	0.00114	0	None	No	0.05	Param.
Arsenic (mg/L)	MW-5	0.008673	0.004272	0.01	No	14	0.007079	0.005499	0	None	sqrt(x)	0.05	Param.
Barium (mg/L)	MW-3	0.2987	0.211	2	No	14	0.27	0.1271	0	None	ln(x)	0.05	Param.
Barium (mg/L)	MW-4	0.05519	0.04738	2	No	14	0.05129	0.00825	0	None	No	0.05	Param.
Barium (mg/L)	MW-5	0.03909	0.03406	2	No	14	0.03657	0.005316	7.143	None	No	0.05	Param.
Beryllium (mg/L)	MW-3	0.0025	0.001	0.004	No	12	0.002191	0.0007378	91.67	None	No	0.05	NP (NDs)
Beryllium (mg/L)	MW-4	0.0025	0.0017	0.004	No	12	0.002308	0.0004719	91.67	None	No	0.05	NP (NDs)
Beryllium (mg/L)	MW-5	0.1	0.001	0.004	No	12	0.0105	0.02819	100	None	No	0.05	NP (NDs)
Cadmium (mg/L)	MW-3	0.0025	0.00063	0.005	No	13	0.001758	0.0009891	69.23	None	No	0.05	NP (NDs)
Cadmium (mg/L)	MW-4	0.0025	0.00036	0.005	No	13	0.001531	0.001095	53.85	None	No	0.05	NP (NDs)
Cadmium (mg/L)	MW-5	0.1	0.000091	0.005	No	13	0.009815	0.02711	92.31	None	No	0.05	NP (NDs)
Chromium (mg/L)	MW-3	0.031	0.0024	0.1	No	12	0.004617	0.008328	83.33	None	No	0.05	NP (NDs)
Chromium (mg/L)	MW-4	0.0035	0.0012	0.1	No	12	0.002225	0.0007557	83.33	None	No	0.05	NP (NDs)
Chromium (mg/L)	MW-5	0.1	0.001	0.1	No	12	0.0105	0.02819	100	None	No	0.05	NP (NDs)
Cobalt (mg/L)	MW-3	0.002784	0.002038	0.006	No	14	0.002411	0.0007879	0	None	No	0.05	Param.
Cobalt (mg/L)	MW-4	0.0018	0.0011	0.006	No	14	0.001499	0.0003583	0	None	No	0.05	NP (normality)
Cobalt (mg/L)	MW-5	0.0034	0.0029	0.006	No	14	0.006471	0.01253	7.143	None	No	0.05	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-3	0.511	0.253	5	No	14	0.4481	0.4025	0	None	No	0.05	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-4	0.5179	0.2016	5	No	14	0.3598	0.3342	0	None	No	0.05	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.462	0.2514	5	No	14	0.3567	0.2225	0	None	No	0.05	Param.
Fluoride (mg/L)	MW-3	1.937	1.583	4	No	14	1.76	0.3735	0	None	No	0.05	Param.
Fluoride (mg/L)	MW-4	0.76	0.63	4	No	14	1.334	2.501	7.143	None	No	0.05	NP (normality)
Fluoride (mg/L)	MW-5	0.49	0.42	4	No	14	0.5336	0.4389	14.29	None	No	0.05	NP (normality)
Lead (mg/L)	MW-3	0.0013	0.001	0.015	No	12	0.00125	0.0001168	100	None	No	0.05	NP (NDs)
Lead (mg/L)	MW-4	0.0013	0.001	0.015	No	12	0.001103	0.0003417	83.33	None	No	0.05	NP (NDs)
Lead (mg/L)	MW-5	0.1	0.001	0.015	No	12	0.0095	0.0285	100	None	No	0.05	NP (NDs)
Lithium (mg/L)	MW-3	0.01167	0.005302	0.04	No	14	0.009464	0.008503	0	None	sqrt(x)	0.05	Param.
Lithium (mg/L)	MW-4	0.8771	0.6315	0.04	Yes	14	0.7543	0.2595	0	None	No	0.05	Param.
Lithium (mg/L)	MW-5	0.0047	0.0038	0.04	No	14	0.007379	0.01234	14.29	None	No	0.05	NP (normality)
Mercury (mg/L)	MW-3	0.0002	0.0002	0.002	No	12	0.0002	0	100	None	No	0.05	NP (NDs)
Mercury (mg/L)	MW-4	0.0002	0.0002	0.002	No	12	0.0002	0	100	None	No	0.05	NP (NDs)
Mercury (mg/L)	MW-5	0.0002	0.0002	0.002	No	12	0.0002	0	100	None	No	0.05	NP (NDs)
Molybdenum (mg/L)	MW-3	0.2894	0.1677	0.1	Yes	14	0.2286	0.1285	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-4	0.5197	0.4206	0.1	Yes	14	0.4743	0.111	0	None	sqrt(x)	0.05	Param.
Molybdenum (mg/L)	MW-5	0.0076	0.0036	0.1	No	14	0.01541	0.03879	7.143	None	No	0.05	NP (normality)
Selenium (mg/L)	MW-3	0.2323	0.1083	0.05	Yes	14	0.1886	0.1494	0	None	sqrt(x)	0.05	Param.
Selenium (mg/L)	MW-4	0.008279	0.005064	0.05	No	14	0.006671	0.003396	0	None	No	0.05	Param.
Selenium (mg/L)	MW-5	0.006123	0.002137	0.05	No	14	0.008533	0.0128	21.43	Kaplan-Meier	$x^{(1/3)}$	0.05	Param.
Thallium (mg/L)	MW-3	0.0005	0.0005	0.002	No	12	0.0005	0	100	None	No	0.05	NP (NDs)
Thallium (mg/L)	MW-4	0.0005	0.0005	0.002	No	12	0.0005	0	100	None	No	0.05	NP (NDs)
Thallium (mg/L)	MW-5	0.05	0.0005	0.002	No	12	0.004625	0.01429	100	None	No	0.05	NP (NDs)

ATTACHMENT 12

BOX PLOT SUMMARY: ALL CCR WELLS (APRIL 2021)

Box & Whiskers Plot

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2021_Statistics_AES.mdb Printed 9/30/2021, 9:01 AM

<u>Constituent</u>	<u>Well</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Std. Err.</u>	<u>Median</u>	<u>Min.</u>	<u>Max.</u>	<u>%NDs</u>
Antimony (mg/L)	MW-1 (bg)	14	0.002321	0.0005754	0.0001538	0.0025	0.001	0.003	100
Antimony (mg/L)	MW-2 (bg)	14	0.002321	0.0005754	0.0001538	0.0025	0.001	0.003	100
Antimony (mg/L)	MW-3	14	0.002114	0.0006585	0.000176	0.0025	0.001	0.003	78.57
Antimony (mg/L)	MW-4	14	0.00215	0.0006334	0.0001693	0.0025	0.001	0.003	71.43
Antimony (mg/L)	MW-5	14	0.009564	0.02604	0.00696	0.0025	0.001	0.1	92.86
Arsenic (mg/L)	MW-1 (bg)	15	0.0009633	0.0004304	0.0001111	0.00087	0.00043	0.0018	40
Arsenic (mg/L)	MW-2 (bg)	15	0.000976	0.000402	0.0001038	0.0013	0.00031	0.0014	46.67
Arsenic (mg/L)	MW-3	15	0.002613	0.0007605	0.0001964	0.0024	0.0015	0.0038	0
Arsenic (mg/L)	MW-4	15	0.003453	0.001101	0.0002842	0.0035	0.0021	0.0059	0
Arsenic (mg/L)	MW-5	15	0.007673	0.005778	0.001492	0.006	0.0018	0.022	0
Barium (mg/L)	MW-1 (bg)	15	0.04773	0.01227	0.003167	0.05	0.019	0.063	0
Barium (mg/L)	MW-2 (bg)	15	0.1166	0.02129	0.005497	0.11	0.089	0.16	0
Barium (mg/L)	MW-3	15	0.2667	0.1232	0.0318	0.23	0.16	0.66	0
Barium (mg/L)	MW-4	15	0.05073	0.008233	0.002126	0.055	0.035	0.061	0
Barium (mg/L)	MW-5	15	0.0364	0.005166	0.001334	0.034	0.03	0.05	6.667
Beryllium (mg/L)	MW-1 (bg)	13	0.002154	0.0006578	0.0001824	0.0025	0.001	0.0025	100
Beryllium (mg/L)	MW-2 (bg)	13	0.002154	0.0006578	0.0001824	0.0025	0.001	0.0025	100
Beryllium (mg/L)	MW-3	13	0.002099	0.0007797	0.0002163	0.0025	0.00029	0.0025	92.31
Beryllium (mg/L)	MW-4	13	0.002208	0.0005795	0.0001607	0.0025	0.001	0.0025	92.31
Beryllium (mg/L)	MW-5	13	0.009769	0.02712	0.007521	0.0025	0.001	0.1	100
Cadmium (mg/L)	MW-1 (bg)	14	0.002143	0.0007187	0.0001921	0.0025	0.0005	0.0025	100
Cadmium (mg/L)	MW-2 (bg)	14	0.002143	0.0007187	0.0001921	0.0025	0.0005	0.0025	100
Cadmium (mg/L)	MW-3	14	0.001669	0.001008	0.0002694	0.0025	0.00027	0.0025	71.43
Cadmium (mg/L)	MW-4	14	0.001457	0.001087	0.0002906	0.001555	0.00018	0.0025	57.14
Cadmium (mg/L)	MW-5	14	0.009149	0.02616	0.006992	0.0025	0.000091	0.1	92.86
Chromium (mg/L)	MW-1 (bg)	13	0.002423	0.0009876	0.0002739	0.0025	0.0007	0.005	84.62
Chromium (mg/L)	MW-2 (bg)	13	0.002569	0.001027	0.0002847	0.0025	0.001	0.005	92.31
Chromium (mg/L)	MW-3	13	0.004646	0.007975	0.002212	0.0025	0.001	0.031	84.62
Chromium (mg/L)	MW-4	13	0.002208	0.0007262	0.0002014	0.0025	0.001	0.0035	76.92
Chromium (mg/L)	MW-5	13	0.01008	0.02703	0.007497	0.0025	0.001	0.1	100
Cobalt (mg/L)	MW-1 (bg)	15	0.0009687	0.0006474	0.0001672	0.00075	0.00046	0.0025	13.33
Cobalt (mg/L)	MW-2 (bg)	15	0.001695	0.001024	0.0002644	0.0025	0.00028	0.0025	60
Cobalt (mg/L)	MW-3	15	0.002397	0.0007612	0.0001965	0.0023	0.00085	0.004	0
Cobalt (mg/L)	MW-4	15	0.001486	0.000349	0.00009012	0.0017	0.00083	0.0018	0
Cobalt (mg/L)	MW-5	15	0.009553	0.02502	0.006461	0.003	0.0027	0.1	6.667
Combined Radium 226 + 228 (pCi/L)	MW-1 (bg)	15	0.3139	0.2025	0.05229	0.349	-0.168	0.62	0
Combined Radium 226 + 228 (pCi/L)	MW-2 (bg)	15	0.2838	0.286	0.07384	0.23	-0.0965	0.839	0
Combined Radium 226 + 228 (pCi/L)	MW-3	15	0.4392	0.3894	0.1005	0.374	-0.0595	1.49	0
Combined Radium 226 + 228 (pCi/L)	MW-4	15	0.3186	0.3594	0.0928	0.341	-0.258	1.12	0
Combined Radium 226 + 228 (pCi/L)	MW-5	15	0.3366	0.2281	0.0589	0.326	-0.0397	0.723	0
Fluoride (mg/L)	MW-1 (bg)	15	0.6087	0.1311	0.03386	0.58	0.4	0.91	0
Fluoride (mg/L)	MW-2 (bg)	15	0.5105	0.1422	0.03672	0.43	0.35	0.728	0
Fluoride (mg/L)	MW-3	15	1.769	0.3617	0.09339	1.8	0.87	2.3	0
Fluoride (mg/L)	MW-4	15	1.285	2.417	0.624	0.65	0.23	10	6.667
Fluoride (mg/L)	MW-5	15	0.5287	0.4234	0.1093	0.46	0.05	2	13.33
Lead (mg/L)	MW-1 (bg)	13	0.001152	0.0002605	0.00007225	0.0013	0.0005	0.0013	92.31
Lead (mg/L)	MW-2 (bg)	13	0.001192	0.0002362	0.0000655	0.0013	0.0005	0.0013	100
Lead (mg/L)	MW-3	13	0.001192	0.0002362	0.0000655	0.0013	0.0005	0.0013	100
Lead (mg/L)	MW-4	13	0.001041	0.0003957	0.0001097	0.0013	0.0003	0.0013	76.92
Lead (mg/L)	MW-5	13	0.008808	0.0274	0.0076	0.0013	0.0005	0.1	100

Box & Whiskers Plot

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2021_Statistics_AES.mdb Printed 9/30/2021, 9:01 AM

<u>Constituent</u>	<u>Well</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Std. Err.</u>	<u>Median</u>	<u>Min.</u>	<u>Max.</u>	<u>%NDs</u>
Lithium (mg/L)	MW-1 (bg)	15	0.003199	0.002017	0.0005207	0.005	0.00054	0.005	60
Lithium (mg/L)	MW-2 (bg)	15	0.003237	0.001972	0.0005092	0.005	0.00075	0.005	66.67
Lithium (mg/L)	MW-3	15	0.008993	0.008394	0.002167	0.0073	0.0014	0.034	0
Lithium (mg/L)	MW-4	15	0.748	0.2512	0.06486	0.75	0.28	1.1	0
Lithium (mg/L)	MW-5	15	0.01071	0.02473	0.006386	0.0044	0.0014	0.1	13.33
Mercury (mg/L)	MW-1 (bg)	13	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-2 (bg)	13	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-3	13	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-4	13	0.0002	0	0	0.0002	0.0002	0.0002	100
Mercury (mg/L)	MW-5	13	0.0002	0	0	0.0002	0.0002	0.0002	100
Molybdenum (mg/L)	MW-1 (bg)	15	0.007504	0.006394	0.001651	0.003	0.00076	0.015	53.33
Molybdenum (mg/L)	MW-2 (bg)	15	0.007979	0.006867	0.001773	0.005	0.00085	0.015	53.33
Molybdenum (mg/L)	MW-3	15	0.226	0.1242	0.03208	0.2	0.064	0.53	0
Molybdenum (mg/L)	MW-4	15	0.508	0.1688	0.04358	0.44	0.35	0.98	0
Molybdenum (mg/L)	MW-5	15	0.02471	0.07618	0.01967	0.0053	0.0022	0.3	13.33
Selenium (mg/L)	MW-1 (bg)	14	0.006021	0.003119	0.0008336	0.0058	0.0014	0.015	0
Selenium (mg/L)	MW-2 (bg)	15	0.0009873	0.0008619	0.0002225	0.00065	0.00035	0.0034	40
Selenium (mg/L)	MW-3	15	0.1867	0.1441	0.03721	0.14	0.026	0.57	0
Selenium (mg/L)	MW-4	15	0.006573	0.003294	0.0008505	0.006	0.0012	0.013	0
Selenium (mg/L)	MW-5	15	0.008047	0.01247	0.003221	0.0038	0.00046	0.05	26.67
Thallium (mg/L)	MW-1 (bg)	13	0.0005385	0.0001387	0.00003846	0.0005	0.0005	0.001	100
Thallium (mg/L)	MW-2 (bg)	13	0.0005385	0.0001387	0.00003846	0.0005	0.0005	0.001	100
Thallium (mg/L)	MW-3	13	0.0005385	0.0001387	0.00003846	0.0005	0.0005	0.001	100
Thallium (mg/L)	MW-4	13	0.0005385	0.0001387	0.00003846	0.0005	0.0005	0.001	100
Thallium (mg/L)	MW-5	13	0.004346	0.01372	0.003805	0.0005	0.0005	0.05	100

ATTACHMENT 13

OUTLIER ANALYSIS SUMMARY: BACKGROUND WELLS (APRIL 2021)

Outlier Analysis - All Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2021_Statistics_AES.mdb Printed 9/30/2021, 9:01 AM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Antimony (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	28	0.002321	0.0005646	unknown	ShapiroWilk
Arsenic (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	30	0.0009697	0.0004093	normal	ShapiroWilk
Barium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	30	0.08217	0.03896	normal	ShapiroWilk
Beryllium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	26	0.002154	0.0006445	normal	ShapiroWilk
Cadmium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	28	0.002143	0.0007052	unknown	ShapiroWilk
Chromium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	26	0.002496	0.0009897	unknown	ShapiroWilk
Cobalt (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	30	0.001332	0.0009194	normal	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	30	0.2988	0.244	normal	ShapiroWilk
Fluoride (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	30	0.5596	0.1434	normal	ShapiroWilk
Lead (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	26	0.001172	0.0002445	unknown	ShapiroWilk
Lithium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	30	0.003218	0.00196	normal	ShapiroWilk
Mercury (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	26	0.0002	0	unknown	ShapiroWilk
Molybdenum (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	30	0.007742	0.006524	normal	ShapiroWilk
Selenium (mg/L)	MW-1,MW-2	No	n/a	n/a w/combined bg	NP	NaN	29	0.003568	0.003276	normal	ShapiroWilk
Thallium (mg/L)	MW-1,MW-2	n/a	n/a	n/a w/combined bg	NP	NaN	26	0.0005385	0.0001359	unknown	ShapiroWilk

ATTACHMENT 14

TREND TEST SUMMARY: BACKGROUND WELLS (APRIL 2021)

Trend Test - Significant Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2021_Statistics_AES.mdb Printed 9/30/2021, 9:01 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cobalt (mg/L)	MW-2 (bg)	-0.0003681	-61	-53	Yes	15	60	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	0.09407	57	53	Yes	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-2 (bg)	0.1043	67	53	Yes	15	0	n/a	n/a	0.01	NP

Trend Test - All Results

AES Puerto Rico	Client: AES Puerto Rico, LP	Data: 2021_Statistics_AES.mdb	Printed 9/30/2021, 9:01 AM								
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Antimony (mg/L)	MW-1 (bg)	0	-9	-48	No	14	100	n/a	n/a	0.01	NP
Antimony (mg/L)	MW-2 (bg)	0	-9	-48	No	14	100	n/a	n/a	0.01	NP
Arsenic (mg/L)	MW-1 (bg)	0	2	53	No	15	40	n/a	n/a	0.01	NP
Arsenic (mg/L)	MW-2 (bg)	-0.000003625	-23	-53	No	15	46.67	n/a	n/a	0.01	NP
Barium (mg/L)	MW-1 (bg)	-0.003769	-34	-53	No	15	0	n/a	n/a	0.01	NP
Barium (mg/L)	MW-2 (bg)	0.01029	29	53	No	15	0	n/a	n/a	0.01	NP
Beryllium (mg/L)	MW-1 (bg)	0	-30	-43	No	13	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	MW-2 (bg)	0	-30	-43	No	13	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	MW-1 (bg)	0	-35	-48	No	14	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	MW-2 (bg)	0	-35	-48	No	14	100	n/a	n/a	0.01	NP
Chromium (mg/L)	MW-1 (bg)	0	-12	-43	No	13	84.62	n/a	n/a	0.01	NP
Chromium (mg/L)	MW-2 (bg)	0	-3	-43	No	13	92.31	n/a	n/a	0.01	NP
Cobalt (mg/L)	MW-1 (bg)	0.00008736	26	53	No	15	13.33	n/a	n/a	0.01	NP
Cobalt (mg/L)	MW-2 (bg)	-0.0003681	-61	-53	Yes	15	60	n/a	n/a	0.01	NP
Combined Radium 226 + 228 (pCi/L)	MW-1 (bg)	-0.02668	-5	-53	No	15	0	n/a	n/a	0.01	NP
Combined Radium 226 + 228 (pCi/L)	MW-2 (bg)	0.03093	13	53	No	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	0.09407	57	53	Yes	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-2 (bg)	0.1043	67	53	Yes	15	0	n/a	n/a	0.01	NP
Lead (mg/L)	MW-1 (bg)	0	-35	-43	No	13	92.31	n/a	n/a	0.01	NP
Lead (mg/L)	MW-2 (bg)	0	-32	-43	No	13	100	n/a	n/a	0.01	NP
Lithium (mg/L)	MW-1 (bg)	-0.000036	-29	-53	No	15	60	n/a	n/a	0.01	NP
Lithium (mg/L)	MW-2 (bg)	0	-26	-53	No	15	66.67	n/a	n/a	0.01	NP
Mercury (mg/L)	MW-1 (bg)	0	0	43	No	13	100	n/a	n/a	0.01	NP
Mercury (mg/L)	MW-2 (bg)	0	0	43	No	13	100	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-1 (bg)	0	12	53	No	15	53.33	n/a	n/a	0.01	NP
Molybdenum (mg/L)	MW-2 (bg)	0	-3	-53	No	15	53.33	n/a	n/a	0.01	NP
Selenium (mg/L)	MW-1 (bg)	-0.0006552	-26	-48	No	14	0	n/a	n/a	0.01	NP
Selenium (mg/L)	MW-2 (bg)	0.0004138	44	53	No	15	40	n/a	n/a	0.01	NP
Thallium (mg/L)	MW-1 (bg)	0	12	43	No	13	100	n/a	n/a	0.01	NP
Thallium (mg/L)	MW-2 (bg)	0	12	43	No	13	100	n/a	n/a	0.01	NP

ATTACHMENT 15

BACKGROUND LEVELS AND GROUNDWATER PROTECTION STANDARDS (APRIL 2021)

Background Levels and Groundwater Protection Standards Corresponding to the April 2021 Sampling Event
 AES Puerto Rico LP, Guayama, Puerto Rico

Constituent	Units	MCL	CCR-Rule Specified Criteria ¹	Background Level ²	GWPS
Antimony	mg/L	0.006		0.001	0.006
Arsenic	mg/L	0.010		0.0018	0.010
Barium	mg/L	2		0.1633	2
Beryllium	mg/L	0.004		0.001	0.004
Cadmium	mg/L	0.005		0.001	0.005
Chromium	mg/L	0.1		0.0039	0.1
Cobalt	mg/L		0.006	0.0025	0.006
Fluoride	mg/L	4.0		0.8696	4.0
Lead	mg/L		0.015	0.0013	0.015
Lithium	mg/L	0.040		0.005	0.040
Mercury	mg/L	0.002		0.0002	0.002
Molybdenum	mg/L		0.100	0.015	0.100
Selenium	mg/L	0.05		0.013	0.05
Thallium	mg/L	0.002		0.0005	0.002
Radium 266 and 228 combined	pCi/L	5		0.8573	5

Notes:

mg/L = milligram per Liter

MCL = Maximum Contaminant Level

GWPS = Groundwater Protection Standard

¹Federal Register/Vol. 83, No. 146/Monday, July 30, 2018/Rules and Regulations.

²Background levels correspond to the 2020 update.

ATTACHMENT 16

*CONFIDENCE INTERVAL SUMMARY (APRIL 2021):
DETERMINATION OF STATISTICALLY SIGNIFICANT LEVEL*

Confidence Interval - Significant Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2021_Statistics_AES.mdb Printed 9/30/2021, 10:09 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	MW-4	0.8622	0.6338	0.04	Yes	15	0.748	0.2512	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-3	0.2825	0.1695	0.1	Yes	15	0.226	0.1242	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-4	0.55	0.41	0.1	Yes	15	0.508	0.1688	0	None	No	0.05	NP (normality)
Selenium (mg/L)	MW-3	0.2265	0.1118	0.05	Yes	15	0.1867	0.1441	0	None	sqrt(x)	0.05	Param.

Confidence Interval - All Results

AES Puerto Rico Client: AES Puerto Rico, LP Data: 2021_Statistics_AES.mdb Printed 9/30/2021, 10:09 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	MW-3	0.0025	0.0017	0.006	No	14	0.002114	0.0006585	78.57	None	No	0.05	NP (NDs)
Antimony (mg/L)	MW-4	0.0025	0.0019	0.006	No	14	0.00215	0.0006334	71.43	None	No	0.05	NP (NDs)
Antimony (mg/L)	MW-5	0.003	0.0025	0.006	No	14	0.009564	0.02604	92.86	None	No	0.05	NP (NDs)
Arsenic (mg/L)	MW-3	0.002959	0.002267	0.01	No	15	0.002613	0.0007605	0	None	No	0.05	Param.
Arsenic (mg/L)	MW-4	0.003954	0.002953	0.01	No	15	0.003453	0.001101	0	None	No	0.05	Param.
Arsenic (mg/L)	MW-5	0.009292	0.004677	0.01	No	15	0.007673	0.005778	0	None	sqr(x)	0.05	Param.
Barium (mg/L)	MW-3	0.2925	0.2117	2	No	15	0.2667	0.1232	0	None	ln(x)	0.05	Param.
Barium (mg/L)	MW-4	0.05448	0.04699	2	No	15	0.05073	0.008233	0	None	No	0.05	Param.
Barium (mg/L)	MW-5	0.03854	0.03401	2	No	15	0.0364	0.005166	6.667	None	sqr(x)	0.05	Param.
Beryllium (mg/L)	MW-3	0.0025	0.001	0.004	No	13	0.002099	0.0007797	92.31	None	No	0.05	NP (NDs)
Beryllium (mg/L)	MW-4	0.0025	0.0017	0.004	No	13	0.002208	0.0005795	92.31	None	No	0.05	NP (NDs)
Beryllium (mg/L)	MW-5	0.1	0.001	0.004	No	13	0.009769	0.02712	100	None	No	0.05	NP (NDs)
Cadmium (mg/L)	MW-3	0.0025	0.00054	0.005	No	14	0.001669	0.001008	71.43	None	No	0.05	NP (NDs)
Cadmium (mg/L)	MW-4	0.0025	0.00036	0.005	No	14	0.001457	0.001087	57.14	None	No	0.05	NP (NDs)
Cadmium (mg/L)	MW-5	0.1	0.0005	0.005	No	14	0.009149	0.02616	92.86	None	No	0.05	NP (NDs)
Chromium (mg/L)	MW-3	0.005	0.0024	0.1	No	13	0.004646	0.007975	84.62	None	No	0.05	NP (NDs)
Chromium (mg/L)	MW-4	0.0025	0.002	0.1	No	13	0.002208	0.0007262	76.92	None	No	0.05	NP (NDs)
Chromium (mg/L)	MW-5	0.005	0.001	0.1	No	13	0.01008	0.02703	100	None	No	0.05	NP (NDs)
Cobalt (mg/L)	MW-3	0.002743	0.00205	0.006	No	15	0.002397	0.0007612	0	None	No	0.05	Param.
Cobalt (mg/L)	MW-4	0.0017	0.0013	0.006	No	15	0.001486	0.000349	0	None	No	0.05	NP (normality)
Cobalt (mg/L)	MW-5	0.0034	0.0029	0.006	No	15	0.00622	0.01211	6.667	None	No	0.05	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-3	0.511	0.253	5	No	15	0.4392	0.3894	0	None	No	0.05	NP (normality)
Combined Radium 226 + 228 (pCi/L)	MW-4	0.482	0.1551	5	No	15	0.3186	0.3594	0	None	No	0.05	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.4403	0.2328	5	No	15	0.3366	0.2281	0	None	No	0.05	Param.
Fluoride (mg/L)	MW-3	1.934	1.605	4	No	15	1.769	0.3617	0	None	No	0.05	Param.
Fluoride (mg/L)	MW-4	0.76	0.63	4	No	15	1.285	2.417	6.667	None	No	0.05	NP (normality)
Fluoride (mg/L)	MW-5	0.49	0.43	4	No	15	0.5287	0.4234	13.33	None	No	0.05	NP (normality)
Lead (mg/L)	MW-3	0.0013	0.001	0.015	No	13	0.001192	0.0002362	100	None	No	0.05	NP (NDs)
Lead (mg/L)	MW-4	0.0013	0.00047	0.015	No	13	0.001041	0.0003957	76.92	None	No	0.05	NP (NDs)
Lead (mg/L)	MW-5	0.1	0.001	0.015	No	13	0.008808	0.0274	100	None	No	0.05	NP (NDs)
Lithium (mg/L)	MW-3	0.01096	0.004991	0.04	No	15	0.008993	0.008394	0	None	sqr(x)	0.05	Param.
Lithium (mg/L)	MW-4	0.8622	0.6338	0.04	Yes	15	0.748	0.2512	0	None	No	0.05	Param.
Lithium (mg/L)	MW-5	0.0048	0.0038	0.04	No	15	0.007207	0.01191	13.33	None	No	0.05	NP (normality)
Mercury (mg/L)	MW-3	0.0002	0.0002	0.002	No	13	0.0002	0	100	None	No	0.05	NP (NDs)
Mercury (mg/L)	MW-4	0.0002	0.0002	0.002	No	13	0.0002	0	100	None	No	0.05	NP (NDs)
Mercury (mg/L)	MW-5	0.0002	0.0002	0.002	No	13	0.0002	0	100	None	No	0.05	NP (NDs)
Molybdenum (mg/L)	MW-3	0.2825	0.1695	0.1	Yes	15	0.226	0.1242	0	None	No	0.05	Param.
Molybdenum (mg/L)	MW-4	0.55	0.41	0.1	Yes	15	0.508	0.1688	0	None	No	0.05	NP (normality)
Molybdenum (mg/L)	MW-5	0.0076	0.0036	0.1	No	15	0.01455	0.03753	13.33	None	No	0.05	NP (normality)
Selenium (mg/L)	MW-3	0.2265	0.1118	0.05	Yes	15	0.1867	0.1441	0	None	sqr(x)	0.05	Param.
Selenium (mg/L)	MW-4	0.008071	0.005075	0.05	No	15	0.006573	0.003294	0	None	No	0.05	Param.
Selenium (mg/L)	MW-5	0.005608	0.001964	0.05	No	15	0.008047	0.01247	26.67	Kaplan-Meier	x^(1/3)	0.05	Param.
Thallium (mg/L)	MW-3	0.001	0.0005	0.002	No	13	0.0005385	0.0001387	100	None	No	0.05	NP (NDs)
Thallium (mg/L)	MW-4	0.001	0.0005	0.002	No	13	0.0005385	0.0001387	100	None	No	0.05	NP (NDs)
Thallium (mg/L)	MW-5	0.001	0.0005	0.002	No	13	0.004346	0.01372	100	None	No	0.05	NP (NDs)