



A Waters Company

Donny Juarez  
Energy Laboratories  
2393 Salt Creek Hwy  
Casper, WY 82601  
USA

**WP-318**  **Final Report**

The WatR logo is a circular emblem with a green border. Inside, a stylized green figure resembling a person or a water droplet is shown in profile, facing right. A small "TM" trademark symbol is located at the bottom right of the circle.

**WatR™ Pollution Proficiency Testing**

**WatR™ Pollution Study**

**Open Date: 07/19/21**

**Close Date: 09/02/21**

**Report Issued Date: 09/07/21**



A Waters Company

September 7, 2021

Donny Juarez  
Energy Laboratories  
2393 Salt Creek Hwy  
Casper, WY 82601

Enclosed is your final report for ERA's WP-318 WatR™ Pollution Proficiency Testing (PT) study. Your final report includes an evaluation of all results submitted by your laboratory to ERA.

Data Evaluation Protocols: All analytes in ERA's WP-318 WatR™ Pollution Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the most current TNI Fields of Proficiency Testing (FoPT) table the evaluation was completed by comparing the reported result to the acceptance limits generated using the criteria contained in the table and the evaluation criteria contained in the 2016 TNI Standard, Volume 3. If the analyte is not included in the TNI FoPT table, the reported result has been evaluated using the procedures outlined in ERA's Standard Operating Procedure for the Generation of Performance Acceptance Limits (SOP 730002268).

Corrective Action Help: As part of your accreditation(s), you may be required to identify the root cause of any "Not Acceptable" results, implement the necessary corrective actions, and then satisfy your PT requirements by participating in a Supplemental (Quik™ Response) or future ERA PT study. ERA's technical staff is available to help your laboratory resolve any technical issues that may be impairing your PT performance and possibly affecting your routine data quality. Our laboratory and technical staff have many years of collective experience in performing the full range of environmental analyses. As part of our technical support, ERA offers QC samples that can be useful in helping you work through your technical issues.

Thank you for your participation in ERA's WP-318 WatR™ Pollution Proficiency Testing study. If you have any questions, please contact our Proficiency Testing Department at 1-800-372-0122.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew Seebeck", written in a cursive style.

Matthew Seebeck  
Quality Officer

attachments



A Waters Company

<b>Report Recipient</b>	<b>Contact/Phone Number</b>	<b>Reporting Type</b>
Alaska	Shera Hickman / 907-375-8210	All Analytes
ANAB	Zaneta Popovska / 414-501-5341	All Analytes
Florida	Vanessa Soto / 904-791-1599	All Analytes
Louisiana	Paul Bergeron / 225-219-3247	All Analytes
Nevada	Paige Menicucci / 775-687-9311	All Analytes
Texas	Frank Jamison / (512) 239-3754	All Analytes
Utah	Cathy Mitchell / (801) 965-2588	All Analytes



# WP-318 Definitions & Study Discussion

**Study Dates: 07/19/21 - 09/02/21**

**Report Issued: 09/07/21**

## WP Study Definitions

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current TNI Fields of Proficiency Testing (FoPT) table. A parameter not added to the standard is given an Assigned Value of "< PTRL" per the guidelines contained in the 2016 TNI Standard. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current TNI FoPT table or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

- Acceptable = Reported Value falls within the Acceptance Limits.
- Not Acceptable = Reported Value falls outside the Acceptance Limits.
- No Evaluation = Reported Value cannot be evaluated.
- Not Reported = No Value reported.

The Method Description is the method the laboratory reported to ERA.

## WP Study Discussion

ERA's WP-318 WatR™Pollution Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2016 TNI Standard and the criteria contained in the most current TNI Fields of Proficiency Testing (FoPT) table.

ERA's WP-318 WatR™Pollution study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the 2016 TNI Standard and the criteria contained in the most current TNI FoPT table.

All activities associated with this proficiency testing study were performed by Waters/ERA with the exception of those noted below. The following physical samples/products were manufactured for Waters/ERA by a subcontractor:

Microbiology products with the following catalog numbers:  
880, 935, 079, 077, 080, 595, 595A, 576, 576A

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's WP-318 WatR™Pollution study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's WatR™Pollution Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122.





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# WP-318 Laboratory Exception Report

**Donny Juarez**  
**Quality Assurance Manager**  
**Energy Laboratories**  
**2393 Salt Creek Hwy**  
**Casper, WY 82601**  
**307-235-0515 x3244**

**EPA ID:**  
**ERA Customer Number:**  
**Report Issued:**  
**Study Dates:**

**WY00002**  
**E772828**  
**09/07/21**  
**07/19/21 - 09/02/21**

## Not Acceptable Evaluations

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
<i>WP Trace Metals (cat# 586, lot# P318-500)</i>							
1140	Selenium	µg/L	211	173	147 - 199	Not Acceptable	EPA 6010B 2 1996
1140	Selenium	µg/L	145	173	147 - 199	Not Acceptable	EPA 6020A 1 2007



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study # : WP-318



# Final Report Results For Laboratory Energy Laboratories

All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study # : WP-318





# Final Evaluation Report

## Study: **WP-318**

ERA Customer Number: **E772828**

Laboratory Name: **Energy Laboratories**

## Inorganic Results

All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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**WP Minerals (cat# 581, lot# P318-506)**

1505	Alkalinity as CaCO3	mg/L	94	93.6	79.6 - 108	Acceptable	SM2320B 22nd ED 2011	7/22/2021	0.136	93.5	3.82	dmb
1575	Chloride	mg/L	74.3	72.5	63.3 - 81.9	Acceptable	EPA 300.0 2.1 1993	7/26/2021	0.216	73.7	2.75	dmb
1610	Conductivity at 25°C	µmhos/cm	501	505	455 - 556	Acceptable	SM2510B 22nd ED 2011	7/22/2021	-0.109	502	13.7	kjp
1730	Fluoride	mg/L	3.63	3.62	2.93 - 4.16	Acceptable	EPA 300.0 2.1 1993	7/26/2021	0.0411	3.62	0.222	dmb
1125	Potassium	mg/L	28.6	29.3	23.4 - 35.2	Acceptable	EPA 6010B 2 1996	7/26/2021	-0.681	29.5	1.39	meh
1155	Sodium	mg/L	87.6	88.0	70.4 - 106	Acceptable	EPA 6010B 2 1996	7/26/2021	-0.239	88.7	4.56	meh
2000	Sulfate	mg/L	27.7	26.9	21.6 - 31.2	Acceptable	EPA 300.0 2.1 1993	7/26/2021	0.369	27.0	1.88	dmb
1955	Total Dissolved Solids at 180°C	mg/L		379	334 - 424	Not Reported				378	16.6	
1950	Total Solids at 105°C	mg/L		395	350 - 440	Not Reported				397	20.6	

**WP Minerals (cat# 581, lot# P318-506)**

1505	Alkalinity as CaCO3	mg/L		93.6	79.6 - 108	Not Reported				93.5	3.82	
1575	Chloride	mg/L		72.5	63.3 - 81.9	Not Reported				73.7	2.75	
1610	Conductivity at 25°C	µmhos/cm		505	455 - 556	Not Reported				502	13.7	
1730	Fluoride	mg/L	3.77	3.62	2.93 - 4.16	Acceptable	SM4500F- C 22nd ED 2011	7/23/2021	0.671	3.62	0.222	dmb
1125	Potassium	mg/L	29.6	29.3	23.4 - 35.2	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.0371	29.5	1.39	meh
1155	Sodium	mg/L	89.9	88.0	70.4 - 106	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.265	88.7	4.56	meh
2000	Sulfate	mg/L		26.9	21.6 - 31.2	Not Reported				27.0	1.88	
1955	Total Dissolved Solids at 180°C	mg/L		379	334 - 424	Not Reported				378	16.6	
1950	Total Solids at 105°C	mg/L		395	350 - 440	Not Reported				397	20.6	



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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# WP-318 Final Evaluation Report

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**Quality Assurance Manager**  
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**2393 Salt Creek Hwy**  
**Casper, WY 82601**  
**307-235-0515 x3244**

**EPA ID:**  
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**Report Issued:**  
**Study Dates:**

**WY00002**  
**E772828**  
**09/07/21**  
**07/19/21 - 09/02/21**

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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**WP Minerals (cat# 581, lot# P318-506)**

1505	Alkalinity as CaCO3	mg/L		93.6	79.6 - 108	Not Reported				93.5	3.82	
1575	Chloride	mg/L		72.5	63.3 - 81.9	Not Reported				73.7	2.75	
1610	Conductivity at 25°C	µmhos/cm		505	455 - 556	Not Reported				502	13.7	
1730	Fluoride	mg/L		3.62	2.93 - 4.16	Not Reported				3.62	0.222	
1125	Potassium	mg/L	26.9	29.3	23.4 - 35.2	Acceptable	EPA 200.8 5.4 1994	8/3/2021	-1.90	29.5	1.39	jcg
1155	Sodium	mg/L	84.4	88.0	70.4 - 106	Acceptable	EPA 200.8 5.4 1994	8/3/2021	-0.940	88.7	4.56	jcg
2000	Sulfate	mg/L		26.9	21.6 - 31.2	Not Reported				27.0	1.88	
1955	Total Dissolved Solids at 180°C	mg/L		379	334 - 424	Not Reported				378	16.6	
1950	Total Solids at 105°C	mg/L		395	350 - 440	Not Reported				397	20.6	

**WP Minerals (cat# 581, lot# P318-506)**

1505	Alkalinity as CaCO3	mg/L		93.6	79.6 - 108	Not Reported				93.5	3.82	
1575	Chloride	mg/L		72.5	63.3 - 81.9	Not Reported				73.7	2.75	
1610	Conductivity at 25°C	µmhos/cm		505	455 - 556	Not Reported				502	13.7	
1730	Fluoride	mg/L		3.62	2.93 - 4.16	Not Reported				3.62	0.222	
1125	Potassium	mg/L	27.6	29.3	23.4 - 35.2	Acceptable	EPA 6020A 1 2007	8/3/2021	-1.40	29.5	1.39	jcg
1155	Sodium	mg/L	85.1	88.0	70.4 - 106	Acceptable	EPA 6020A 1 2007	8/3/2021	-0.786	88.7	4.56	jcg
2000	Sulfate	mg/L		26.9	21.6 - 31.2	Not Reported				27.0	1.88	
1955	Total Dissolved Solids at 180°C	mg/L		379	334 - 424	Not Reported				378	16.6	
1950	Total Solids at 105°C	mg/L		395	350 - 440	Not Reported				397	20.6	



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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**WP Hardness (cat# 580, lot# P318-507)**

1960	Total Suspended Solids	mg/L		84.0	68.8 - 93.4	Not Reported				82.5	3.46	
1035	Calcium	mg/L	52.3	54.6	46.4 - 62.8	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.20	55.8	2.92	meh
1085	Magnesium	mg/L	15.8	17.0	14.4 - 19.6	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.72	17.2	0.790	meh
1550	Calcium Hardness as CaCO3	mg/L	140	136	116 - 156	Acceptable	SM2340B 22nd ED 2011	7/27/2021	0.000369	140	6.91	jlw
1755	Total Hardness as CaCO3	mg/L	213	206	175 - 237	Acceptable	SM2340B 22nd ED 2011	7/27/2021	0.232	211	10.2	jlw

**WP Hardness (cat# 580, lot# P318-507)**

1960	Total Suspended Solids	mg/L		84.0	68.8 - 93.4	Not Reported				82.5	3.46	
1035	Calcium	mg/L	56.2	54.6	46.4 - 62.8	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.137	55.8	2.92	meh
1085	Magnesium	mg/L	17.7	17.0	14.4 - 19.6	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.687	17.2	0.790	meh
1550	Calcium Hardness as CaCO3	mg/L		136	116 - 156	Not Reported				140	6.91	
1755	Total Hardness as CaCO3	mg/L		206	175 - 237	Not Reported				211	10.2	

**WP Hardness (cat# 580, lot# P318-507)**

1960	Total Suspended Solids	mg/L		84.0	68.8 - 93.4	Not Reported				82.5	3.46	
1035	Calcium	mg/L	53	54.6	46.4 - 62.8	Acceptable	EPA 200.8 5.4 1994	8/3/2021	-0.959	55.8	2.92	jcg
1085	Magnesium	mg/L	17.3	17.0	14.4 - 19.6	Acceptable	EPA 200.8 5.4 1994	8/3/2021	0.181	17.2	0.790	jcg
1550	Calcium Hardness as CaCO3	mg/L		136	116 - 156	Not Reported				140	6.91	
1755	Total Hardness as CaCO3	mg/L		206	175 - 237	Not Reported				211	10.2	



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.





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### WP Hardness (cat# 580, lot# P318-507)

1960	Total Suspended Solids	mg/L		84.0	68.8 - 93.4	Not Reported				82.5	3.46	
1035	Calcium	mg/L	52.2	54.6	46.4 - 62.8	Acceptable	EPA 6020A 1 2007	8/3/2021	-1.23	55.8	2.92	jcg
1085	Magnesium	mg/L	16.7	17.0	14.4 - 19.6	Acceptable	EPA 6020A 1 2007	8/3/2021	-0.578	17.2	0.790	jcg
1550	Calcium Hardness as CaCO3	mg/L		136	116 - 156	Not Reported				140	6.91	
1755	Total Hardness as CaCO3	mg/L		206	175 - 237	Not Reported				211	10.2	

### WP pH (cat# 577, lot# P318-977)

1900	pH	S.U.	7.3	7.24	7.04 - 7.44	Acceptable	SM4500H+ B 22nd ED 2011	7/22/2021	0.543	7.27	0.0497	kjp
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### WP Solids (cat# 241, lot# P318-499)

1960	Total Suspended Solids	mg/L	75.8	75.7	61.5 - 84.6	Acceptable	SM2540D 22nd ED 2011	7/23/2021	0.734	73.1	3.72	kjp
1955	Total Dissolved Solids at 180°C	mg/L	258	262	217 - 307	Acceptable	SM2540C 21st ED 1997	7/23/2021	-0.153	260	15.5	kjp
1950	Total Solids at 105°C	mg/L		339	294 - 384	Not Reported				342	21.9	

### WP Simple Nutrients (cat# 584, lot# P318-505)

1515	Ammonia as N	mg/L	19.1	18.2	14.7 - 21.6	Acceptable	EPA 350.1 2 1993	7/22/2021	0.867	18.3	0.949	dmb
1820	Nitrate + Nitrite as N	mg/L	7.14	6.94	5.73 - 8.09	Acceptable	EPA 300.0 2.1 1993	7/26/2021	0.554	6.94	0.363	dmb
1810	Nitrate as N	mg/L	6.96	6.94	5.68 - 8.17	Acceptable	EPA 353.2 (calc)	7/30/2021	0.0625	6.94	0.391	jlw
1870	ortho-Phosphate as P	mg/L	2.98	3.07	2.61 - 3.53	Acceptable	EPA 365.1 2 1993	7/22/2021	-0.521	3.08	0.185	dmb

### WP Simple Nutrients (cat# 584, lot# P318-505)

1515	Ammonia as N	mg/L		18.2	14.7 - 21.6	Not Reported				18.3	0.949	
1820	Nitrate + Nitrite as N	mg/L	6.96	6.94	5.73 - 8.09	Acceptable	EPA 353.2 2 1993	7/24/2021	0.0584	6.94	0.363	dmb
1810	Nitrate as N	mg/L		6.94	5.68 - 8.17	Not Reported				6.94	0.391	
1870	ortho-Phosphate as P	mg/L		3.07	2.61 - 3.53	Not Reported				3.08	0.185	

All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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**WP Complex Nutrients (cat# 579, lot# P318-525)**

1795	Total Kjeldahl Nitrogen	mg/L		31.9	24.1 - 38.3	Not Reported				31.2	2.32	
1910	Total phosphorus as P	mg/L	0.59	0.737	0.552 - 0.928	Acceptable	EPA 6010B 2 1996	7/26/2021	-3.20	0.728	0.0432	meh

**WP Complex Nutrients (cat# 579, lot# P318-525)**

1795	Total Kjeldahl Nitrogen	mg/L		31.9	24.1 - 38.3	Not Reported				31.2	2.32	
1910	Total phosphorus as P	mg/L	0.719	0.737	0.552 - 0.928	Acceptable	EPA 200.7 4.4 1994	7/23/2021	-0.211	0.728	0.0432	meh

**WP Complex Nutrients (cat# 579, lot# P318-525)**

1795	Total Kjeldahl Nitrogen	mg/L		31.9	24.1 - 38.3	Not Reported				31.2	2.32	
1910	Total phosphorus as P	mg/L	0.65	0.737	0.552 - 0.928	Acceptable	EPA 365.1 2 1993	7/26/2021	-1.81	0.728	0.0432	dmb

**WP Nitrite (cat# 888, lot# P318-770)**

1840	Nitrite as N	mg/L	2.67	2.64	2.27 - 3.02	Acceptable	SM4500NO2- B 22nd ED 2011	7/27/2021	0.182	2.64	0.151	dmb
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**WP Demand (cat# 578, lot# P318-516)**

1530	BOD	mg/L	114	119	64.3 - 174	Acceptable	SM5210B 21st ED 2001	7/28/2021	-0.257	119	19.5	sac
1555	CBOD	mg/L	114	108	50.5 - 165	Acceptable	SM5210B 21st ED 2001	7/29/2021	0.0539	113	20.1	sac
1565	COD	mg/L		194	156 - 225	Not Reported				192	13.3	
2040	TOC	mg/L	74.9	76.7	64.4 - 88.2	Acceptable	SM5310C 22nd ED 2011	7/29/2021	-0.290	76.3	4.66	dmb

**WP Demand (cat# 578, lot# P318-516)**

1530	BOD	mg/L		119	64.3 - 174	Not Reported				119	19.5	
1555	CBOD	mg/L		108	50.5 - 165	Not Reported				113	20.1	
1565	COD	mg/L		194	156 - 225	Not Reported				192	13.3	
2040	TOC	mg/L	75.4	76.7	64.4 - 88.2	Acceptable	EPA 9060A 2004	7/28/2021	-0.183	76.3	4.66	dmb



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.





A Waters Company

# WP-318 Final Evaluation Report

**Donny Juarez**  
**Quality Assurance Manager**  
**Energy Laboratories**  
**2393 Salt Creek Hwy**  
**Casper, WY 82601**  
**307-235-0515 x3244**

**EPA ID:** WY00002  
**ERA Customer Number:** E772828  
**Report Issued:** 09/07/21  
**Study Dates:** 07/19/21 - 09/02/21

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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**WP Oil & Grease (cat# 582, lot# P318-518)**

1803	n-Hexane Extractable Material(O&G)(Grav)	mg/L	119	122	88.1 - 140	Acceptable	EPA 1664A 1999	7/27/2021	0.325	114	16.5	
1803	n-Hexane Extractable Material(O&G)(IR)	mg/L		150	110 - 171	Not Reported				110	13.8	



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study # : WP-318



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# WP-318 Final Evaluation Report

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## WP Trace Metals (cat# 586, lot# P318-500)

1000	Aluminum	µg/L	1859	1880	1560 - 2160	Acceptable	EPA 6010B 2 1996	7/26/2021	-0.622	1930	109	meh
1005	Antimony	µg/L	700	752	616 - 865	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.01	744	43.1	meh
1010	Arsenic	µg/L	782	862	731 - 981	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.05	825	41.0	meh
1015	Barium	µg/L	1508	1500	1280 - 1720	Acceptable	EPA 6010B 2 1996	7/27/2021	-0.166	1520	64.5	meh
1020	Beryllium	µg/L	279	295	251 - 339	Acceptable	EPA 6010B 2 1996	7/26/2021	-0.782	291	15.4	meh
1025	Boron	µg/L	1340	1400	1190 - 1610	Acceptable	EPA 6010B 2 1996	7/26/2021	-0.627	1390	73.4	meh
1030	Cadmium	µg/L	116	122	104 - 140	Acceptable	EPA 6010B 2 1996	7/26/2021	-0.708	120	6.10	meh
1040	Chromium	µg/L	710	744	632 - 856	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.26	750	31.7	meh
1050	Cobalt	µg/L	634	657	558 - 756	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.39	675	29.8	meh
1055	Copper	µg/L	523	564	479 - 649	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.67	561	22.9	meh
1070	Iron	µg/L	2866	2910	2470 - 3350	Acceptable	EPA 6010B 2 1996	7/26/2021	-0.661	2950	120	meh
1075	Lead	µg/L	1330	1370	1160 - 1580	Acceptable	EPA 6010B 2 1996	7/27/2021	-1.01	1400	73.2	meh
1090	Manganese	µg/L	1211	1290	1100 - 1480	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.72	1310	56.5	meh
1100	Molybdenum	µg/L	185	202	171 - 231	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.59	201	9.83	meh
1105	Nickel	µg/L	1060	1160	1020 - 1300	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.84	1160	54.5	meh
1140	Selenium	µg/L	211	173	147 - 199	Not Acceptable	EPA 6010B 2 1996	7/26/2021	3.51	171	11.4	meh
1150	Silver	µg/L	361	368	313 - 423	Acceptable	EPA 6010B 2 1996	8/6/2021	-0.497	372	21.2	meh
1160	Strontium	µg/L	404	416	354 - 478	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.25	422	14.6	meh
1165	Thallium	µg/L		265	211 - 313	Not Reported				267	17.1	
1185	Vanadium	µg/L	1339	1410	1200 - 1620	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.15	1410	57.5	meh



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study #: WP-318



A Waters Company

# WP-318 Final Evaluation Report

**Donny Juarez**  
**Quality Assurance Manager**  
**Energy Laboratories**  
**2393 Salt Creek Hwy**  
**Casper, WY 82601**  
**307-235-0515 x3244**

**EPA ID:** WY00002  
**ERA Customer Number:** E772828  
**Report Issued:** 09/07/21  
**Study Dates:** 07/19/21 - 09/02/21

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**WP Trace Metals (cat# 586, lot# P318-500) (Continued)**

1190	Zinc	µg/L	1350	1460	1240 - 1680	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.59	1460	70.7	meh
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All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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# WP-318 Final Evaluation Report

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## WP Trace Metals (cat# 586, lot# P318-500)

1000	Aluminum	µg/L	1976	1880	1560 - 2160	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.447	1930	109	meh
1005	Antimony	µg/L	802	752	616 - 865	Acceptable	EPA 200.7 4.4 1994	7/23/2021	1.35	744	43.1	meh
1010	Arsenic	µg/L	865	862	731 - 981	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.974	825	41.0	meh
1015	Barium	µg/L	1540	1500	1280 - 1720	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.330	1520	64.5	meh
1020	Beryllium	µg/L	299	295	251 - 339	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.515	291	15.4	meh
1025	Boron	µg/L	1428	1400	1190 - 1610	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.571	1390	73.4	meh
1030	Cadmium	µg/L	119	122	104 - 140	Acceptable	EPA 200.7 4.4 1994	7/23/2021	-0.217	120	6.10	meh
1040	Chromium	µg/L	757	744	632 - 856	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.224	750	31.7	meh
1050	Cobalt	µg/L	677	657	558 - 756	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.0601	675	29.8	meh
1055	Copper	µg/L	542	564	479 - 649	Acceptable	EPA 200.7 4.4 1994	7/26/2021	-0.841	561	22.9	meh
1070	Iron	µg/L	3105	2910	2470 - 3350	Acceptable	EPA 200.7 4.4 1994	7/23/2021	1.33	2950	120	meh
1075	Lead	µg/L	1421	1370	1160 - 1580	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.233	1400	73.2	meh
1090	Manganese	µg/L	1292	1290	1100 - 1480	Acceptable	EPA 200.7 4.4 1994	7/23/2021	-0.284	1310	56.5	meh
1100	Molybdenum	µg/L	209	202	171 - 231	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.851	201	9.83	meh
1105	Nickel	µg/L	1108	1160	1020 - 1300	Acceptable	EPA 200.7 4.4 1994	7/26/2021	-0.955	1160	54.5	meh
1140	Selenium	µg/L	157	173	147 - 199	Acceptable	EPA 200.7 4.4 1994	8/6/2021	-1.24	171	11.4	meh
1150	Silver	µg/L	411	368	313 - 423	Acceptable	EPA 200.7 4.4 1994	8/6/2021	1.86	372	21.2	meh
1160	Strontium	µg/L	424	416	354 - 478	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.124	422	14.6	meh
1165	Thallium	µg/L		265	211 - 313	Not Reported				267	17.1	
1185	Vanadium	µg/L	1430	1410	1200 - 1620	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.432	1410	57.5	meh



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study #: WP-318







A Waters Company

# WP-318 Final Evaluation Report

**Donny Juarez**  
**Quality Assurance Manager**  
**Energy Laboratories**  
**2393 Salt Creek Hwy**  
**Casper, WY 82601**  
**307-235-0515 x3244**

**EPA ID:** WY00002  
**ERA Customer Number:** E772828  
**Report Issued:** 09/07/21  
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**WP Trace Metals (cat# 586, lot# P318-500) (Continued)**

1190	Zinc	µg/L	1470	1460	1240 - 1680	Acceptable	EPA 200.7 4.4 1994	7/23/2021	0.105	1460	70.7	meh
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All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Donny Juarez  
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## WP Trace Metals (cat# 586, lot# P318-500)

1000	Aluminum	µg/L	1912	1880	1560 - 2160	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-0.138	1930	109	srm
1005	Antimony	µg/L	751	752	616 - 865	Acceptable	EPA 200.8 5.4 1994	7/28/2021	0.168	744	43.1	srm
1010	Arsenic	µg/L	834	862	731 - 981	Acceptable	EPA 200.8 5.4 1994	7/28/2021	0.218	825	41.0	srm
1015	Barium	µg/L	1421	1500	1280 - 1720	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-1.52	1520	64.5	srm
1020	Beryllium	µg/L	280	295	251 - 339	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-0.717	291	15.4	srm
1025	Boron	µg/L	1403	1400	1190 - 1610	Acceptable	EPA 200.8 5.4 1994	8/6/2021	0.231	1390	73.4	srm
1030	Cadmium	µg/L	121	122	104 - 140	Acceptable	EPA 200.8 5.4 1994	8/6/2021	0.111	120	6.10	srm
1040	Chromium	µg/L	746	744	632 - 856	Acceptable	EPA 200.8 5.4 1994	8/6/2021	-0.123	750	31.7	srm
1050	Cobalt	µg/L	677	657	558 - 756	Acceptable	EPA 200.8 5.4 1994	7/28/2021	0.0601	675	29.8	srm
1055	Copper	µg/L	580	564	479 - 649	Acceptable	EPA 200.8 5.4 1994	7/28/2021	0.815	561	22.9	srm
1070	Iron	µg/L	2977	2910	2470 - 3350	Acceptable	EPA 200.8 5.4 1994	7/28/2021	0.265	2950	120	srm
1075	Lead	µg/L	1306	1370	1160 - 1580	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-1.34	1400	73.2	srm
1090	Manganese	µg/L	1322	1290	1100 - 1480	Acceptable	EPA 200.8 5.4 1994	7/28/2021	0.247	1310	56.5	srm
1100	Molybdenum	µg/L	191	202	171 - 231	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-0.979	201	9.83	srm
1105	Nickel	µg/L	1114	1160	1020 - 1300	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-0.845	1160	54.5	srm
1140	Selenium	µg/L	168	173	147 - 199	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-0.272	171	11.4	srm
1150	Silver	µg/L	361	368	313 - 423	Acceptable	EPA 200.8 5.4 1994	8/12/2021	-0.497	372	21.2	srm
1160	Strontium	µg/L	426	416	354 - 478	Acceptable	EPA 200.8 5.4 1994	7/28/2021	0.261	422	14.6	srm
1165	Thallium	µg/L	263	265	211 - 313	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-0.210	267	17.1	srm
1185	Vanadium	µg/L	1321	1410	1200 - 1620	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-1.46	1410	57.5	srm



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study #: WP-318



A Waters Company

# WP-318 Final Evaluation Report

**Donny Juarez**  
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**Energy Laboratories**  
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**WP Trace Metals (cat# 586, lot# P318-500) (Continued)**

1190	Zinc	µg/L	1490	1460	1240 - 1680	Acceptable	EPA 200.8 5.4 1994	8/6/2021	0.388	1460	70.7	srm
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All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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## WP Trace Metals (cat# 586, lot# P318-500)

1000	Aluminum	µg/L	1911	1880	1560 - 2160	Acceptable	EPA 6020A 1 2007	7/28/2021	-0.147	1930	109	srm
1005	Antimony	µg/L	702	752	616 - 865	Acceptable	EPA 6020A 1 2007	7/28/2021	-0.968	744	43.1	srm
1010	Arsenic	µg/L	735	862	731 - 981	Acceptable	EPA 6020A 1 2007	8/10/2021	-2.20	825	41.0	srm
1015	Barium	µg/L	1449	1500	1280 - 1720	Acceptable	EPA 6020A 1 2007	7/28/2021	-1.08	1520	64.5	srm
1020	Beryllium	µg/L	283	295	251 - 339	Acceptable	EPA 6020A 1 2007	7/28/2021	-0.523	291	15.4	srm
1025	Boron	µg/L	1495	1400	1190 - 1610	Acceptable	EPA 6020A 1 2007	8/9/2021	1.48	1390	73.4	srm
1030	Cadmium	µg/L	115	122	104 - 140	Acceptable	EPA 6020A 1 2007	7/28/2021	-0.872	120	6.10	srm
1040	Chromium	µg/L	726	744	632 - 856	Acceptable	EPA 6020A 1 2007	8/10/2021	-0.754	750	31.7	srm
1050	Cobalt	µg/L	619	657	558 - 756	Acceptable	EPA 6020A 1 2007	7/28/2021	-1.89	675	29.8	srm
1055	Copper	µg/L	552	564	479 - 649	Acceptable	EPA 6020A 1 2007	8/9/2021	-0.405	561	22.9	srm
1070	Iron	µg/L	3021	2910	2470 - 3350	Acceptable	EPA 6020A 1 2007	7/28/2021	0.632	2950	120	srm
1075	Lead	µg/L	1363	1370	1160 - 1580	Acceptable	EPA 6020A 1 2007	7/28/2021	-0.559	1400	73.2	srm
1090	Manganese	µg/L	1268	1290	1100 - 1480	Acceptable	EPA 6020A 1 2007	7/28/2021	-0.709	1310	56.5	srm
1100	Molybdenum	µg/L	191	202	171 - 231	Acceptable	EPA 6020A 1 2007	7/28/2021	-0.979	201	9.83	srm
1105	Nickel	µg/L	1141	1160	1020 - 1300	Acceptable	EPA 6020A 1 2007	8/9/2021	-0.350	1160	54.5	srm
1140	Selenium	µg/L	145	173	147 - 199	Not Acceptable	EPA 6020A 1 2007	8/9/2021	-2.29	171	11.4	srm
1150	Silver	µg/L	357	368	313 - 423	Acceptable	EPA 6020A 1 2007	8/9/2021	-0.686	372	21.2	srm
1160	Strontium	µg/L	380	416	354 - 478	Acceptable	EPA 6020A 1 2007	8/9/2021	-2.89	422	14.6	srm
1165	Thallium	µg/L	277	265	211 - 313	Acceptable	EPA 6020A 1 2007	7/28/2021	0.611	267	17.1	srm
1185	Vanadium	µg/L	1252	1410	1200 - 1620	Acceptable	EPA 6020A 1 2007	7/28/2021	-2.66	1410	57.5	srm



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study #: WP-318



# WP-318 Final Evaluation Report

A Waters Company

**Donny Juarez**  
**Quality Assurance Manager**  
**Energy Laboratories**  
**2393 Salt Creek Hwy**  
**Casper, WY 82601**  
**307-235-0515 x3244**

**EPA ID:**  
**ERA Customer Number:**  
**Report Issued:**  
**Study Dates:**

**WY00002**  
**E772828**  
**09/07/21**  
**07/19/21 - 09/02/21**

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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**WP Trace Metals (cat# 586, lot# P318-500) (Continued)**

1190	Zinc	µg/L	1252	1460	1240 - 1680	Acceptable	EPA 6020A 1 2007	8/9/2021	-2.98	1460	70.7	srm
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**WP Hexavalent Chromium (cat# 898, lot# P318-984)**

1045	Hexavalent Chromium	µg/L	584	585	491 - 671	Acceptable	SM3500Cr B 22nd ED 2011	8/5/2021	0.0806	582	30.2	dmb
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**WP Tin & Titanium (cat# 573, lot# P318-517)**

1175	Tin	µg/L		1580	1110 - 2050	Not Reported				1560	89.1	
1180	Titanium	µg/L	162	172	146 - 198	Acceptable	EPA 6010B 2 1996	7/26/2021	-1.10	170	7.57	meh

**WP Tin & Titanium (cat# 573, lot# P318-517)**

1175	Tin	µg/L		1580	1110 - 2050	Not Reported				1560	89.1	
1180	Titanium	µg/L	168	172	146 - 198	Acceptable	EPA 200.7 4.4 1994	7/23/2021	-0.310	170	7.57	meh

**WP Tin & Titanium (cat# 573, lot# P318-517)**

1175	Tin	µg/L	1495	1580	1110 - 2050	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-0.766	1560	89.1	srm
1180	Titanium	µg/L	155	172	146 - 198	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-2.03	170	7.57	srm

**WP Tin & Titanium (cat# 573, lot# P318-517)**

1175	Tin	µg/L	1454	1580	1110 - 2050	Acceptable	EPA 6020A 1 2007	7/28/2021	-1.23	1560	89.1	srm
1180	Titanium	µg/L	159	172	146 - 198	Acceptable	EPA 6020A 1 2007	7/28/2021	-1.50	170	7.57	srm

**WP Uranium (cat# 4400, lot# P318-4402)**

3055	Uranium (Nat) mass	µg/L	91.4	104	77.7 - 122	Acceptable	EPA 200.8 5.4 1994	7/28/2021	-1.59	100	5.58	srm
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**WP Uranium (cat# 4400, lot# P318-4402)**

3055	Uranium (Nat) mass	µg/L	98.9	104	77.7 - 122	Acceptable	EPA 6020A 1 2007	7/28/2021	-0.245	100	5.58	srm
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All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.





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TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description	Analysis Date	Z Score	Study Mean	Study Standard Deviation	Analyst Name
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**WP Silica (cat# 890, lot# P318-775)**

1990	Silica as SiO2	mg/L	96.8	100	75.0 - 125	Acceptable	EPA 6010B 2 1996	7/26/2021	-0.734	101	5.86	meh
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**WP Silica (cat# 890, lot# P318-775)**

1990	Silica as SiO2	mg/L	101	100	75.0 - 125	Acceptable	EPA 200.7 4.4 1994	7/23/2021	-0.0172	101	5.86	meh
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**WP Silica (cat# 890, lot# P318-775)**

1990	Silica as SiO2	mg/L	96.6	100	75.0 - 125	Acceptable	EPA 6020A 1 2007	8/6/2021	-0.769	101	5.86	srm
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**WP Sulfide (cat# 891, lot# P318-071)**

2005	Sulfide	mg/L	9.2	9.53	4.79 - 13.4	Acceptable	SM 4500-S2 F-2011 2011	7/27/2021	0.283	8.73	1.64	dmb
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**WP Sulfide (cat# 891, lot# P318-071)**

2005	Sulfide	mg/L	11.4	9.53	4.79 - 13.4	Acceptable	SM 4500-S2 D-2011 2011	7/27/2021	1.62	8.73	1.64	dmb
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**WP Acidity (cat# 885, lot# P318-915)**

1500	Acidity as CaCO3	mg/L	1450	1390	1250 - 1530	Acceptable	SM2310B 22nd ED 2011	7/23/2021	1.29	1380	57.0	dmb
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**WP Bromide (cat# 887, lot# P318-769)**

1540	Bromide	mg/L	5.98	5.85	4.88 - 6.83	Acceptable	EPA 300.0 2.1 1993	7/26/2021	0.116	5.94	0.365	dmb
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All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.



# Final Evaluation Report

Study: **WP-318**

ERA Customer Number: **E772828**

Laboratory Name: **Energy Laboratories**

## Microbiology Results

All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study # : WP-318





# WP-318 Final Evaluation Report

A Waters Company

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**Quality Assurance Manager**  
**Energy Laboratories**  
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**09/07/21**  
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**WP WasteWatR™ Coliform MicrobE™ (cat# 576, lot# P318-083)**

2500	Total Coliforms (MF)	CFU/100mL		1120	448 - 2800	Not Reported				1120	393	
2530	Fecal Coliforms (MF)	CFU/100mL		697	261 - 1860	Not Reported				697	267	
2525	E.coli (MF)	CFU/100mL		1040	533 - 2020	Not Reported				1040	248	
2500	Total Coliform (MPN-Multiple Well)	MPN/100mL	1986	1550	742 - 3250	Acceptable	SM 9223 B (Colilert-18 Quanti-Tray)-2004 2004	7/26/2021	0.0409	1550	417	
2530	Fecal Coliform (MPN-Multiple Well)	MPN/100mL	980	1080	527 - 2200	Acceptable	Colilert®-18 (Fecal Coliforms) 2010	7/26/2021	-0.0167	1080	279	
2525	E.coli (MPN-Multiple Well)	MPN/100mL	1986	1550	743 - 3230	Acceptable	SM 9223 B (Colilert-18 Quanti-Tray)-2004 2004	7/26/2021	0.0411	1550	415	

**WP WasteWatR™ Coliform MicrobE™ (cat# 576, lot# P318-083)**

2500	Total Coliforms (MF)	CFU/100mL		1120	448 - 2800	Not Reported				1120	393	
2530	Fecal Coliforms (MF)	CFU/100mL		697	261 - 1860	Not Reported				697	267	
2525	E.coli (MF)	CFU/100mL		1040	533 - 2020	Not Reported				1040	248	
2500	Total Coliform (MPN-Multiple Well)	MPN/100mL	1986	1550	742 - 3250	Acceptable	SM 9223 B (Colilert Quanti-Tray)-2004 2004	7/26/2021	0.0409	1550	417	
2530	Fecal Coliform (MPN-Multiple Well)	MPN/100mL		1080	527 - 2200	Not Reported				1080	279	
2525	E.coli (MPN-Multiple Well)	MPN/100mL	1986	1550	743 - 3230	Acceptable	SM 9223 B (Colilert Quanti-Tray)-2004 2004	7/26/2021	0.0411	1550	415	



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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Study # : WP-318



## Final Evaluation Report

Study: **WP-318**

ERA Customer Number: **E772828**

Laboratory Name: **Energy Laboratories**

## Organic Results

All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.

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A Waters Company

# WP-318 Final Evaluation Report

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**WP Gasoline Range Organics (GRO) in Water (cat# 640, lot# P318-762)**

9408	Gasoline Range Organics (GRO)	µg/L	974	1160	374 - 2090	Acceptable	EPA 8015C 3 2007	7/26/2021	-1.19	1330	302	adw
4375	Benzene in GRO	µg/L		5.13	2.58 - 8.16	Not Reported				4.90	1.73	
4765	Ethylbenzene in GRO	µg/L		19.5	12.1 - 27.3	Not Reported				18.6	4.90	
5140	Toluene in GRO	µg/L		59.0	33.0 - 77.0	Not Reported				61.4	10.7	
5260	Xylenes, total in GRO	µg/L		99.8	62.6 - 138	Not Reported				96.0	29.6	

**WP Diesel Range Organics (DRO) in Water (cat# 641, lot# P318-764)**

9369	Diesel Range Organics (DRO)	µg/L	3620	5860	1700 - 7230	Acceptable	EPA 8015C 3 2007	7/28/2021	-0.637	4330	1110	adw
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**WP Total Petroleum Hydrocarbons (TPH) in Water (cat# 642, lot# P318-642)**

1853	TPH (Gravimetric)	mg/L	63.8	90.0	42.1 - 130	Acceptable	EPA 1664A 1999	7/31/2021	-0.0237	64.1	11.8	
1853	TPH (IR)	mg/L		111	52.5 - 160	Not Reported				84.7	29.4	



All analytes except for 1,1-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833, are included in ERA's A2LA accreditation. Lab Code 1539.01.



# CERTIFICATE OF RECOGNITION

ERA congratulates  
Energy Laboratories  
WP-318

For your participation and successful evaluation, we recognize the performance of this laboratory for achieving acceptable evaluation in the following standards.

Acidity	Bromide	Complex Nutrients	Demand
Diesel Range Organics (DRO) in Water	Gasoline Range Organics (GRO) in Water	Hardness	Hexavalent Chromium
Minerals	Nitrite	Oil & Grease	pH
Silica	Simple Nutrients	Solids	Sulfide
Tin & Titanium	Total Petroleum Hydrocarbons (TPH) in Water	Uranium	WasteWatR™ Coliform MicrobE™



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Matthew Seebeck  
Quality Officer