



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

WP-300  **Final Report**

The section header consists of the text "WP-300" in a bold, italicized, green sans-serif font on the left. In the center is a circular logo with a white border and a green background, containing a white silhouette of a person's head and shoulders. To the right of the logo is the text "Final Report" in a bold, italicized, green sans-serif font. A small "TM" trademark symbol is located at the bottom right of the logo.

WatR™ Pollution Proficiency Testing

WatR™ Pollution Study

Open Date: 01/13/20

Close Date: 02/27/20

Report Issued Date: 03/02/20



A Waters Company

March 2, 2020

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

Enclosed is your final report for ERA's WP-300 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-300 WatR™ Pollution Proficiency Testing study have been evaluated using the following tiered approach. If the analyte is listed in the most current TNI/NELAP 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/NELAP 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-300 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

Report Recipient	Contact/Phone Number	Reporting Type
Alabama	Benny Laughlin / 334-271-7775	All Analytes
ANAB	Sandra Wharton / 414-501-5494	All Analytes
California ELAP	Christine Sotelo / 916-341-5175	All Analytes
EPA Region 8	Marcie Tidd / (303) 462-9476	All Analytes
Florida	Vanessa Soto / 904-791-1599	All Analytes
Idaho	Ernie Bader / 208-334-2235 x 290	All Analytes
Louisiana	Paul Bergeron / 225-219-3247	All Analytes
Montana	Russell Leu / 406-444-5259	All Analytes
Nebraska	Laurie Wieting / 402-471-8407	All Analytes
Nevada	Paige Menicucci / 775-687-9311	All Analytes
New Mexico (WP)	Barbara Cooney / 505-827-0212	All Analytes
North Dakota	Cynthia Auen / 701-328-6172	All Analytes
Oregon	Stephanie Ringsage / 503-693-4126	All Analytes
South Dakota	Stacy Ellwanger / 605-773-4757	All Analytes
Texas	Frank Jamison / (512) 239-3754	All Analytes
Utah	Cathy Mitchell / (801) 965-2588	All Analytes
Washington	Rebecca Wood / 360-871-8811	All Analytes
Montana (DMR-QA)	Lisa Tucker / (406) 444-5388	All Analytes
U.S. EPA Region 10	Robert Grandinetti / (509) 376-3748	All Analytes
Wyoming (DMR-QA)	Steve Vien / (307) 777-7654	All Analytes



WP-300 Definitions & Study Discussion

Study Dates: 01/13/20 - 02/27/20

Report Issued: 03/02/20

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/NELAP 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 2009 TNI Standards. 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/NELAP FoPT table or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable. This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.

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-300 WatR™Pollution Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2009 TNI Standard and the 2016 TNI Standard, Volume 3, Section 5.9 and the criteria contained in the most current TNI/NELAP Fields of Proficiency Testing (FoPT) table.

ERA's WP-300 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 2009 TNI Standard and the criteria contained in the most current TNI/NELAP FoPT table.

All analytes are included in ERA's A2LA accreditation, certification number 1539.01.

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-300 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.





A Waters Company

WP-300 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
03/02/20
01/13/20 - 02/27/20

Not Acceptable Evaluations

TNI Analyte Code	Analyte	Units	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation	Method Description
WP Hardness (cat# 580, lot# P300-507)							
1035	Calcium	mg/L	29.7	37.0	31.4 - 42.6	Not Acceptable	EPA 6020A 1 2007
WP Trace Metals (cat# 586, lot# P300-500)							
1025	Boron	µg/L	1176	936	796 - 1080	Not Acceptable	EPA 6020A 1 2007
1105	Nickel	µg/L	1934	1710	1510 - 1910	Not Acceptable	EPA 6020A 1 2007
1150	Silver	µg/L	416	578	491 - 665	Not Acceptable	EPA 6010B 2 1996
WP Tin & Titanium (cat# 573, lot# P300-517)							
1180	Titanium	µg/L	139	171	145 - 197	Not Acceptable	EPA 6020A 1 2007



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





Final Report Results For Laboratory Energy Laboratories





Final Evaluation Report

Study: **WP-300**

ERA Customer Number: **E772828**

Laboratory Name: **Energy Laboratories**

Inorganic Results





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Minerals (cat# 581, lot# P300-506)

1505	Alkalinity as CaCO3	mg/L	50.9	50.7	43.1 - 58.3	Acceptable	SM2320B 22nd ED 2011	1/20/2020	0.529	49.5	2.61	dmb
1575	Chloride	mg/L	75.9	76.0	66.4 - 85.8	Acceptable	EPA 300.0 2.1 1993	1/22/2020	0.487	74.7	2.41	ljl
1610	Conductivity at 25°C	µmhos/cm	463	458	412 - 504	Acceptable	SM2510B 22nd ED 2011	1/20/2020	0.513	456	14.1	kjp
1730	Fluoride	mg/L	3.35	3.47	2.81 - 3.99	Acceptable	EPA 300.0 2.1 1993	1/22/2020	-0.210	3.38	0.166	ljl
1125	Potassium	mg/L	34	35.2	28.2 - 42.2	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.212	34.4	1.73	jcg
1155	Sodium	mg/L	70	71.8	57.4 - 86.2	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.00249	70.0	4.03	jcg
2000	Sulfate	mg/L	33	34.4	27.9 - 39.6	Acceptable	EPA 300.0 2.1 1993	1/22/2020	-0.113	33.2	1.60	ljl
1955	Total Dissolved Solids at 180°C	mg/L		296	251 - 341	Not Reported				296	14.5	
1950	Total Solids at 105°C	mg/L		306	261 - 351	Not Reported				304	17.4	

WP Minerals (cat# 581, lot# P300-506)

1505	Alkalinity as CaCO3	mg/L		50.7	43.1 - 58.3	Not Reported				49.5	2.61	
1575	Chloride	mg/L		76.0	66.4 - 85.8	Not Reported				74.7	2.41	
1610	Conductivity at 25°C	µmhos/cm		458	412 - 504	Not Reported				456	14.1	
1730	Fluoride	mg/L	3.42	3.47	2.81 - 3.99	Acceptable	SM4500F- C 22nd ED 2011	1/18/2020	0.211	3.38	0.166	dmb
1125	Potassium	mg/L	36.1	35.2	28.2 - 42.2	Acceptable	EPA 200.7 4.4 1994	2/3/2020	1.00	34.4	1.73	jcg
1155	Sodium	mg/L	74.3	71.8	57.4 - 86.2	Acceptable	EPA 200.7 4.4 1994	2/3/2020	1.06	70.0	4.03	jcg
2000	Sulfate	mg/L		34.4	27.9 - 39.6	Not Reported				33.2	1.60	
1955	Total Dissolved Solids at 180°C	mg/L		296	251 - 341	Not Reported				296	14.5	
1950	Total Solids at 105°C	mg/L		306	261 - 351	Not Reported				304	17.4	

This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Minerals (cat# 581, lot# P300-506)

1505	Alkalinity as CaCO3	mg/L		50.7	43.1 - 58.3	Not Reported				49.5	2.61	
1575	Chloride	mg/L		76.0	66.4 - 85.8	Not Reported				74.7	2.41	
1610	Conductivity at 25°C	µmhos/cm		458	412 - 504	Not Reported				456	14.1	
1730	Fluoride	mg/L		3.47	2.81 - 3.99	Not Reported				3.38	0.166	
1125	Potassium	mg/L	30.1	35.2	28.2 - 42.2	Acceptable	EPA 200.8 5.4 1994	2/4/2020	-2.47	34.4	1.73	meh
1155	Sodium	mg/L	66.2	71.8	57.4 - 86.2	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.944	70.0	4.03	meh
2000	Sulfate	mg/L		34.4	27.9 - 39.6	Not Reported				33.2	1.60	
1955	Total Dissolved Solids at 180°C	mg/L		296	251 - 341	Not Reported				296	14.5	
1950	Total Solids at 105°C	mg/L		306	261 - 351	Not Reported				304	17.4	

WP Minerals (cat# 581, lot# P300-506)

1505	Alkalinity as CaCO3	mg/L		50.7	43.1 - 58.3	Not Reported				49.5	2.61	
1575	Chloride	mg/L		76.0	66.4 - 85.8	Not Reported				74.7	2.41	
1610	Conductivity at 25°C	µmhos/cm		458	412 - 504	Not Reported				456	14.1	
1730	Fluoride	mg/L		3.47	2.81 - 3.99	Not Reported				3.38	0.166	
1125	Potassium	mg/L	32	35.2	28.2 - 42.2	Acceptable	EPA 6020A 1 2007	2/4/2020	-1.37	34.4	1.73	meh
1155	Sodium	mg/L	70	71.8	57.4 - 86.2	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.00249	70.0	4.03	meh
2000	Sulfate	mg/L		34.4	27.9 - 39.6	Not Reported				33.2	1.60	
1955	Total Dissolved Solids at 180°C	mg/L		296	251 - 341	Not Reported				296	14.5	
1950	Total Solids at 105°C	mg/L		306	261 - 351	Not Reported				304	17.4	



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Hardness (cat# 580, lot# P300-507)

1960	Total Suspended Solids	mg/L		71.3	57.6 - 79.9	Not Reported				66.6	3.64	
1035	Calcium	mg/L	36.7	37.0	31.4 - 42.6	Acceptable	EPA 6010B 2 1996	2/5/2020	0.433	36.0	1.55	jcg
1085	Magnesium	mg/L	37.1	37.1	31.5 - 42.7	Acceptable	EPA 6010B 2 1996	2/5/2020	0.161	36.9	1.50	jcg
1550	Calcium Hardness as CaCO3	mg/L	94.7	92.4	78.5 - 106	Acceptable	SM2340B 22nd ED 2011	2/13/2020	1.33	89.7	3.75	atd
1755	Total Hardness as CaCO3	mg/L	251	245	208 - 282	Acceptable	SM2340B 22nd ED 2011	2/13/2020	1.15	240	9.46	atd

WP Hardness (cat# 580, lot# P300-507)

1960	Total Suspended Solids	mg/L		71.3	57.6 - 79.9	Not Reported				66.6	3.64	
1035	Calcium	mg/L	37.9	37.0	31.4 - 42.6	Acceptable	EPA 200.7 4.4 1994	2/3/2020	1.21	36.0	1.55	jcg
1085	Magnesium	mg/L	38	37.1	31.5 - 42.7	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.760	36.9	1.50	jcg
1550	Calcium Hardness as CaCO3	mg/L		92.4	78.5 - 106	Not Reported				89.7	3.75	
1755	Total Hardness as CaCO3	mg/L		245	208 - 282	Not Reported				240	9.46	

WP Hardness (cat# 580, lot# P300-507)

1960	Total Suspended Solids	mg/L		71.3	57.6 - 79.9	Not Reported				66.6	3.64	
1035	Calcium	mg/L	34	37.0	31.4 - 42.6	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-1.30	36.0	1.55	meh
1085	Magnesium	mg/L	35	37.1	31.5 - 42.7	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-1.24	36.9	1.50	meh
1550	Calcium Hardness as CaCO3	mg/L		92.4	78.5 - 106	Not Reported				89.7	3.75	
1755	Total Hardness as CaCO3	mg/L		245	208 - 282	Not Reported				240	9.46	



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Hardness (cat# 580, lot# P300-507)

1960	Total Suspended Solids	mg/L		71.3	57.6 - 79.9	Not Reported				66.6	3.64	
1035	Calcium	mg/L	29.7	37.0	31.4 - 42.6	Not Acceptable	EPA 6020A 1 2007	2/4/2020	-4.07	36.0	1.55	meh
1085	Magnesium	mg/L	35.9	37.1	31.5 - 42.7	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.637	36.9	1.50	meh
1550	Calcium Hardness as CaCO3	mg/L		92.4	78.5 - 106	Not Reported				89.7	3.75	
1755	Total Hardness as CaCO3	mg/L		245	208 - 282	Not Reported				240	9.46	

WP pH (cat# 577, lot# P300-977)

1900	pH	S.U.	6.75	6.70	6.50 - 6.90	Acceptable	SM4500H+ B 22nd ED 2011	1/20/2020	1.10	6.71	0.0401	kjp
------	----	------	------	------	-------------	------------	-------------------------	-----------	------	------	--------	-----

WP Solids (cat# 241, lot# P300-499)

1960	Total Suspended Solids	mg/L	74.5	78.5	63.9 - 87.5	Acceptable	SM2540D 22nd ED 2011	1/16/2020	0.276	73.6	3.19	kjp
1955	Total Dissolved Solids at 180°C	mg/L	539	542	488 - 596	Acceptable	SM2540C 21st ED 1997	1/17/2020	0.302	533	19.8	kjp
1950	Total Solids at 105°C	mg/L		622	560 - 684	Not Reported				623	22.5	

WP Simple Nutrients (cat# 584, lot# P300-505)

1515	Ammonia as N	mg/L	3.71	3.88	2.95 - 4.86	Acceptable	EPA 350.1 2 1993	1/17/2020	-0.892	3.97	0.286	dmb
1820	Nitrate + Nitrite as N	mg/L	5.68	5.65	4.64 - 6.61	Acceptable	EPA 300.0 2.1 1993	1/22/2020	0.278	5.60	0.286	ljl
1810	Nitrate as N	mg/L	5.5	5.65	4.59 - 6.69	Acceptable	EPA 353.2 (calc)	1/20/2020	-0.321	5.59	0.292	atd
1870	ortho-Phosphate as P	mg/L	2.97	3.11	2.64 - 3.58	Acceptable	EPA 365.1 2 1993	1/16/2020	-1.02	3.15	0.176	dmb

WP Simple Nutrients (cat# 584, lot# P300-505)

1515	Ammonia as N	mg/L		3.88	2.95 - 4.86	Not Reported				3.97	0.286	
1820	Nitrate + Nitrite as N	mg/L	5.5	5.65	4.64 - 6.61	Acceptable	EPA 353.2 2 1993	1/18/2020	-0.351	5.60	0.286	dmb
1810	Nitrate as N	mg/L		5.65	4.59 - 6.69	Not Reported				5.59	0.292	
1870	ortho-Phosphate as P	mg/L		3.11	2.64 - 3.58	Not Reported				3.15	0.176	

This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Complex Nutrients (cat# 579, lot# P300-525)

1795	Total Kjeldahl Nitrogen	mg/L		32.0	24.2 - 38.4	Not Reported				31.1	1.85	
1910	Total phosphorus as P	mg/L	8.15	8.24	6.87 - 9.52	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.0708	8.18	0.393	jcg

WP Complex Nutrients (cat# 579, lot# P300-525)

1795	Total Kjeldahl Nitrogen	mg/L		32.0	24.2 - 38.4	Not Reported				31.1	1.85	
1910	Total phosphorus as P	mg/L	8.8	8.24	6.87 - 9.52	Acceptable	EPA 200.7 4.4 1994	2/3/2020	1.58	8.18	0.393	jcg

WP Complex Nutrients (cat# 579, lot# P300-525)

1795	Total Kjeldahl Nitrogen	mg/L		32.0	24.2 - 38.4	Not Reported				31.1	1.85	
1910	Total phosphorus as P	mg/L	8.26	8.24	6.87 - 9.52	Acceptable	EPA 365.1 2 1993	1/17/2020	0.209	8.18	0.393	dmb

WP Nitrite (cat# 888, lot# P300-770)

1840	Nitrite as N	mg/L	2.21	2.30	1.97 - 2.64	Acceptable	SM4500NO2- B 22nd ED 2011	1/16/2020	-0.855	2.31	0.120	dmb
------	--------------	------	------	------	-------------	------------	---------------------------	-----------	--------	------	-------	-----

WP Demand (cat# 578, lot# P300-516)

1530	BOD	mg/L	56.6	79.9	42.6 - 117	Acceptable	SM5210B 21st ED 2001	1/22/2020	-1.98	81.9	12.8	kjp
1555	CBOD	mg/L	59.8	72.4	33.2 - 112	Acceptable	SM5210B 21st ED 2001	1/22/2020	-1.14	75.6	13.8	kjp
1565	COD	mg/L		130	102 - 154	Not Reported				130	9.53	
2040	TOC	mg/L	52.5	51.4	42.8 - 59.5	Acceptable	SM5310C 22nd ED 2011	1/23/2020	0.114	52.1	3.33	dmb

WP Demand (cat# 578, lot# P300-516)

1530	BOD	mg/L		79.9	42.6 - 117	Not Reported				81.9	12.8	
1555	CBOD	mg/L		72.4	33.2 - 112	Not Reported				75.6	13.8	
1565	COD	mg/L		130	102 - 154	Not Reported				130	9.53	
2040	TOC	mg/L	52.5	51.4	42.8 - 59.5	Acceptable	EPA 9060A 2004	1/25/2020	0.114	52.1	3.33	dmb



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 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: 03/02/20
Study Dates: 01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Oil & Grease Concentrate (cat# 4120, lot# P300-4122)

1803	n-Hexane Extractable Material(O&G)(Grav)	mg/L	134	168	124 - 191	Acceptable	EPA 1664A 1999	1/24/2020	-1.37	153	13.7	bah
------	--	------	-----	-----	-----------	------------	----------------	-----------	-------	-----	------	-----



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Trace Metals (cat# 586, lot# P300-500)

1000	Aluminum	µg/L	1985	1880	1560 - 2160	Acceptable	EPA 6010B 2 1996	2/5/2020	0.569	1920	109	jcg
1005	Antimony	µg/L	268	257	198 - 307	Acceptable	EPA 6010B 2 1996	2/5/2020	0.992	253	15.5	jcg
1010	Arsenic	µg/L	772	772	654 - 880	Acceptable	EPA 6010B 2 1996	2/5/2020	0.923	744	30.3	jcg
1015	Barium	µg/L	870	840	714 - 966	Acceptable	EPA 6010B 2 1996	2/5/2020	0.810	845	31.5	jcg
1020	Beryllium	µg/L	311	313	266 - 360	Acceptable	EPA 6010B 2 1996	2/5/2020	0.0525	310	14.2	jcg
1025	Boron	µg/L	932	936	796 - 1080	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.122	938	53.1	jcg
1030	Cadmium	µg/L	834	851	723 - 979	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.279	843	33.1	jcg
1040	Chromium	µg/L	542	533	453 - 613	Acceptable	EPA 6010B 2 1996	2/5/2020	0.227	537	20.9	jcg
1050	Cobalt	µg/L	110	110	93.5 - 126	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.838	115	5.46	jcg
1055	Copper	µg/L	295	296	252 - 340	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.147	297	14.0	jcg
1070	Iron	µg/L	3514	3350	2850 - 3850	Acceptable	EPA 6010B 2 1996	2/5/2020	1.04	3370	140	jcg
1075	Lead	µg/L	623	648	551 - 745	Acceptable	EPA 6010B 2 1996	2/5/2020	-1.02	654	29.8	jcg
1090	Manganese	µg/L	1551	1500	1280 - 1720	Acceptable	EPA 6010B 2 1996	2/5/2020	0.173	1540	62.7	jcg
1100	Molybdenum	µg/L	83.7	79.9	62.8 - 95.9	Acceptable	EPA 6010B 2 1996	2/5/2020	1.15	79.2	3.94	jcg
1105	Nickel	µg/L	1715	1710	1510 - 1910	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.288	1740	75.5	jcg
1140	Selenium	µg/L	494	510	434 - 586	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.565	508	24.0	jcg
1150	Silver	µg/L	416	578	491 - 665	Not Acceptable	EPA 6010B 2 1996	2/6/2020	-4.83	583	34.5	jcg
1160	Strontium	µg/L	300	288	245 - 331	Acceptable	EPA 6010B 2 1996	2/5/2020	0.797	291	11.3	jcg
1165	Thallium	µg/L		662	549 - 764	Not Reported				665	33.9	
1185	Vanadium	µg/L	606	598	508 - 688	Acceptable	EPA 6010B 2 1996	2/5/2020	0.607	592	23.0	jcg



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 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: 03/02/20
Study Dates: 01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Trace Metals (cat# 586, lot# P300-500) (Continued)

1190	Zinc	µg/L	1578	1600	1360 - 1840	Acceptable	EPA 6010B 2 1996	2/5/2020	-0.364	1610	74.4	jcg
------	------	------	------	------	-------------	------------	------------------	----------	--------	------	------	-----



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Trace Metals (cat# 586, lot# P300-500)

1000	Aluminum	µg/L	2006	1880	1560 - 2160	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.762	1920	109	jcg
1005	Antimony	µg/L	266	257	198 - 307	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.863	253	15.5	jcg
1010	Arsenic	µg/L	767	772	654 - 880	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.758	744	30.3	jcg
1015	Barium	µg/L	869	840	714 - 966	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.778	845	31.5	jcg
1020	Beryllium	µg/L	329	313	266 - 360	Acceptable	EPA 200.7 4.4 1994	2/6/2020	1.32	310	14.2	jcg
1025	Boron	µg/L	939	936	796 - 1080	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.0102	938	53.1	jcg
1030	Cadmium	µg/L	857	851	723 - 979	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.416	843	33.1	jcg
1040	Chromium	µg/L	549	533	453 - 613	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.562	537	20.9	jcg
1050	Cobalt	µg/L	112	110	93.5 - 126	Acceptable	EPA 200.7 4.4 1994	2/3/2020	-0.472	115	5.46	jcg
1055	Copper	µg/L	302	296	252 - 340	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.354	297	14.0	jcg
1070	Iron	µg/L	3653	3350	2850 - 3850	Acceptable	EPA 200.7 4.4 1994	2/3/2020	2.03	3370	140	jcg
1075	Lead	µg/L	649	648	551 - 745	Acceptable	EPA 200.7 4.4 1994	2/3/2020	-0.151	654	29.8	jcg
1090	Manganese	µg/L	1583	1500	1280 - 1720	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.683	1540	62.7	jcg
1100	Molybdenum	µg/L	82.1	79.9	62.8 - 95.9	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.739	79.2	3.94	jcg
1105	Nickel	µg/L	1742	1710	1510 - 1910	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.0694	1740	75.5	jcg
1140	Selenium	µg/L	527	510	434 - 586	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.811	508	24.0	jcg
1150	Silver	µg/L	499	578	491 - 665	Acceptable	EPA 200.7 4.4 1994	2/5/2020	-2.43	583	34.5	jcg
1160	Strontium	µg/L	300	288	245 - 331	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.797	291	11.3	jcg
1165	Thallium	µg/L		662	549 - 764	Not Reported				665	33.9	
1185	Vanadium	µg/L	614	598	508 - 688	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.955	592	23.0	jcg



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 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: 03/02/20
Study Dates: 01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Trace Metals (cat# 586, lot# P300-500) (Continued)

1190	Zinc	µg/L	1616	1600	1360 - 1840	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.146	1610	74.4	jcg
------	------	------	------	------	-------------	------------	--------------------	----------	-------	------	------	-----



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Trace Metals (cat# 586, lot# P300-500)

1000	Aluminum	µg/L	1836	1880	1560 - 2160	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.801	1920	109	meh
1005	Antimony	µg/L	247	257	198 - 307	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.360	253	15.5	meh
1010	Arsenic	µg/L	737	772	654 - 880	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.232	744	30.3	meh
1015	Barium	µg/L	828	840	714 - 966	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.525	845	31.5	meh
1020	Beryllium	µg/L	327	313	266 - 360	Acceptable	EPA 200.8 5.4 1994	2/4/2020	1.18	310	14.2	meh
1025	Boron	µg/L	1016	936	796 - 1080	Acceptable	EPA 200.8 5.4 1994	2/5/2020	1.46	938	53.1	meh
1030	Cadmium	µg/L	866	851	723 - 979	Acceptable	EPA 200.8 5.4 1994	1/31/2020	0.689	843	33.1	meh
1040	Chromium	µg/L	518	533	453 - 613	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.924	537	20.9	meh
1050	Cobalt	µg/L	111	110	93.5 - 126	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.655	115	5.46	meh
1055	Copper	µg/L	302	296	252 - 340	Acceptable	EPA 200.8 5.4 1994	1/31/2020	0.354	297	14.0	meh
1070	Iron	µg/L	3279	3350	2850 - 3850	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.642	3370	140	meh
1075	Lead	µg/L	663	648	551 - 745	Acceptable	EPA 200.8 5.4 1994	1/31/2020	0.319	654	29.8	meh
1090	Manganese	µg/L	1476	1500	1280 - 1720	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-1.02	1540	62.7	meh
1100	Molybdenum	µg/L	70	79.9	62.8 - 95.9	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-2.34	79.2	3.94	meh
1105	Nickel	µg/L	1756	1710	1510 - 1910	Acceptable	EPA 200.8 5.4 1994	1/31/2020	0.255	1740	75.5	meh
1140	Selenium	µg/L	497	510	434 - 586	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.440	508	24.0	meh
1150	Silver	µg/L	597	578	491 - 665	Acceptable	EPA 200.8 5.4 1994	2/5/2020	0.412	583	34.5	meh
1160	Strontium	µg/L	282	288	245 - 331	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.796	291	11.3	meh
1165	Thallium	µg/L	660	662	549 - 764	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-0.133	665	33.9	meh
1185	Vanadium	µg/L	565	598	508 - 688	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-1.18	592	23.0	meh



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 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: 03/02/20
Study Dates: 01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Trace Metals (cat# 586, lot# P300-500) (Continued)

1190	Zinc	µg/L	1700	1600	1360 - 1840	Acceptable	EPA 200.8 5.4 1994	2/5/2020	1.27	1610	74.4	meh
------	------	------	------	------	-------------	------------	--------------------	----------	------	------	------	-----



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Trace Metals (cat# 586, lot# P300-500)

1000	Aluminum	µg/L	1891	1880	1560 - 2160	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.295	1920	109	meh
1005	Antimony	µg/L	243	257	198 - 307	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.617	253	15.5	meh
1010	Arsenic	µg/L	731	772	654 - 880	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.430	744	30.3	meh
1015	Barium	µg/L	877	840	714 - 966	Acceptable	EPA 6020A 1 2007	2/4/2020	1.03	845	31.5	meh
1020	Beryllium	µg/L	350	313	266 - 360	Acceptable	EPA 6020A 1 2007	2/4/2020	2.80	310	14.2	meh
1025	Boron	µg/L	1176	936	796 - 1080	Not Acceptable	EPA 6020A 1 2007	2/6/2020	4.47	938	53.1	meh
1030	Cadmium	µg/L	855	851	723 - 979	Acceptable	EPA 6020A 1 2007	2/4/2020	0.356	843	33.1	meh
1040	Chromium	µg/L	553	533	453 - 613	Acceptable	EPA 6020A 1 2007	2/4/2020	0.754	537	20.9	meh
1050	Cobalt	µg/L	112	110	93.5 - 126	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.472	115	5.46	meh
1055	Copper	µg/L	337	296	252 - 340	Acceptable	EPA 6020A 1 2007	2/4/2020	2.86	297	14.0	meh
1070	Iron	µg/L	3328	3350	2850 - 3850	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.292	3370	140	meh
1075	Lead	µg/L	673	648	551 - 745	Acceptable	EPA 6020A 1 2007	2/4/2020	0.655	654	29.8	meh
1090	Manganese	µg/L	1526	1500	1280 - 1720	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.226	1540	62.7	meh
1100	Molybdenum	µg/L	70.1	79.9	62.8 - 95.9	Acceptable	EPA 6020A 1 2007	2/4/2020	-2.31	79.2	3.94	meh
1105	Nickel	µg/L	1934	1710	1510 - 1910	Not Acceptable	EPA 6020A 1 2007	2/4/2020	2.61	1740	75.5	meh
1140	Selenium	µg/L	469	510	434 - 586	Acceptable	EPA 6020A 1 2007	2/4/2020	-1.61	508	24.0	meh
1150	Silver	µg/L	585	578	491 - 665	Acceptable	EPA 6020A 1 2007	2/6/2020	0.0640	583	34.5	meh
1160	Strontium	µg/L	292	288	245 - 331	Acceptable	EPA 6020A 1 2007	2/4/2020	0.0888	291	11.3	meh
1165	Thallium	µg/L	681	662	549 - 764	Acceptable	EPA 6020A 1 2007	2/4/2020	0.486	665	33.9	meh
1185	Vanadium	µg/L	587	598	508 - 688	Acceptable	EPA 6020A 1 2007	2/4/2020	-0.220	592	23.0	meh



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





WP-300 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Trace Metals (cat# 586, lot# P300-500) (Continued)

1190	Zinc	µg/L	1545	1600	1360 - 1840	Acceptable	EPA 6020A 1 2007	2/6/2020	-0.808	1610	74.4	meh
------	------	------	------	------	-------------	------------	------------------	----------	--------	------	------	-----

WP Hexavalent Chromium (cat# 898, lot# P300-984)

1045	Hexavalent Chromium	µg/L	761	852	718 - 974	Acceptable	SM3500Cr B 22nd ED 2011	2/6/2020	-2.15	842	37.8	dmb
------	---------------------	------	-----	-----	-----------	------------	-------------------------	----------	-------	-----	------	-----

WP Tin & Titanium (cat# 573, lot# P300-517)

1175	Tin	µg/L		835	584 - 1090	Not Reported				826	49.9	
1180	Titanium	µg/L	174	171	145 - 197	Acceptable	EPA 6010B 2 1996	2/5/2020	0.614	169	7.65	jcg

WP Tin & Titanium (cat# 573, lot# P300-517)

1175	Tin	µg/L		835	584 - 1090	Not Reported				826	49.9	
1180	Titanium	µg/L	179	171	145 - 197	Acceptable	EPA 200.7 4.4 1994	2/3/2020	1.27	169	7.65	jcg

WP Tin & Titanium (cat# 573, lot# P300-517)

1175	Tin	µg/L	858	835	584 - 1090	Acceptable	EPA 200.8 5.4 1994	1/31/2020	0.648	826	49.9	meh
1180	Titanium	µg/L	149	171	145 - 197	Acceptable	EPA 200.8 5.4 1994	1/31/2020	-2.65	169	7.65	meh

WP Tin & Titanium (cat# 573, lot# P300-517)

1175	Tin	µg/L	861	835	584 - 1090	Acceptable	EPA 6020A 1 2007	2/4/2020	0.708	826	49.9	meh
1180	Titanium	µg/L	139	171	145 - 197	Not Acceptable	EPA 6020A 1 2007	2/4/2020	-3.96	169	7.65	meh

WP Uranium (cat# 4400, lot# P300-4402)

3055	Uranium (Nat) mass	µg/L	60.8	61.5	45.5 - 72.4	Acceptable	EPA 200.8 5.4 1994	1/28/2020	-0.468	62.3	3.24	meh
------	--------------------	------	------	------	-------------	------------	--------------------	-----------	--------	------	------	-----

WP Uranium (cat# 4400, lot# P300-4402)

3055	Uranium (Nat) mass	µg/L	60.2	61.5	45.5 - 72.4	Acceptable	EPA 6020A 1 2007	1/30/2020	-0.652	62.3	3.24	meh
------	--------------------	------	------	------	-------------	------------	------------------	-----------	--------	------	------	-----



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
WP Silica (cat# 890, lot# P300-775)												
1990	Silica as SiO2	mg/L	171	176	132 - 220	Acceptable	EPA 6010B 2 1996	1/30/2020	-0.255	174	10.2	jcg
WP Silica (cat# 890, lot# P300-775)												
1990	Silica as SiO2	mg/L	179	176	132 - 220	Acceptable	EPA 200.7 4.4 1994	2/3/2020	0.527	174	10.2	jcg
WP Silica (cat# 890, lot# P300-775)												
1990	Silica as SiO2	mg/L	136	176	132 - 220	Acceptable	EPA 6020A 1 2007	2/4/2020	-3.68	174	10.2	meh
WP Sulfide (cat# 891, lot# P300-071)												
2005	Sulfide	mg/L	6.24	5.72	2.48 - 8.31	Acceptable	SM 4500-S2 F-2011 2011	1/20/2020	1.43	4.86	0.963	dmb
WP Sulfide (cat# 891, lot# P300-071)												
2005	Sulfide	mg/L	4.52	5.72	2.48 - 8.31	Acceptable	SM 4500-S2 D-2011 2011	1/20/2020	-0.354	4.86	0.963	dmb
WP Acidity (cat# 885, lot# P300-915)												
1500	Acidity as CaCO3	mg/L	704	739	665 - 813	Acceptable	SM2310B 22nd ED 2011	1/22/2020	-0.564	723	33.5	dmb
WP Bromide (cat# 887, lot# P300-769)												
1540	Bromide	mg/L	8.96	8.78	7.49 - 10.1	Acceptable	EPA 300.0 2.1 1993	1/22/2020	-0.0259	8.97	0.520	ljl



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





Final Evaluation Report

Study: **WP-300**

ERA Customer Number: **E772828**

Laboratory Name: **Energy Laboratories**

Microbiology Results





A Waters Company

WP-300 Final Evaluation 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
03/02/20
01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP WasteWatR™ Coliform MicrobE™ (cat# 576, lot# P300-083)

2500	Total Coliforms (MF)	CFU/100mL		833	392 - 1050	Not Reported				641	109	
2530	Fecal Coliforms (MF)	CFU/100mL		548	93.0 - 1040	Not Reported				312	159	
2525	E.coli (MF)	CFU/100mL		833	104 - 1700	Not Reported				421	266	
2500	Total Coliforms (MPN)	MPN/100mL	866	780	489 - 2170	Acceptable	SM 9223 B (Colilert-18 Quanti-Tray)-2004 2004	1/27/2020	-0.0308	1030	280	
2530	Fecal Coliforms (MPN)	MPN/100mL	613	566	180 - 1430	Acceptable	Colilert®-18 (Fecal Coliforms) 2010	1/27/2020	0.0353	508	208	
2525	E.coli (MPN)	MPN/100mL	866	780	513 - 2160	Acceptable	SM 9223 B (Colilert-18 Quanti-Tray)-2004 2004	1/27/2020	-0.0349	1050	275	

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.

WP WasteWatR™ Coliform MicrobE™ (cat# 576, lot# P300-083)

2500	Total Coliforms (MF)	CFU/100mL		833	392 - 1050	Not Reported				641	109	
2530	Fecal Coliforms (MF)	CFU/100mL		548	93.0 - 1040	Not Reported				312	159	
2525	E.coli (MF)	CFU/100mL		833	104 - 1700	Not Reported				421	266	
2500	Total Coliforms (MPN)	MPN/100mL	866	780	489 - 2170	Acceptable	SM 9223 B (Colilert Quanti-Tray)-2004 2004	1/27/2020	-0.0308	1030	280	
2530	Fecal Coliforms (MPN)	MPN/100mL		566	180 - 1430	Not Reported				508	208	
2525	E.coli (MPN)	MPN/100mL	866	780	513 - 2160	Acceptable	SM 9223 B (Colilert Quanti-Tray)-2004 2004	1/27/2020	-0.0349	1050	275	

Per Section 6.4.3 a of the 2009 TNI Standard, "The assigned values for quantitative microbiology analytes shall be equal to the mean of the assigned value verification and/or homogeneity testing per Sections 7.1 and 7.2". The final acceptance limits are derived from the calculated study mean and study standard deviation from laboratory-reported results. Disagreement between the assigned values and study means/acceptance limits are due to the inherent variability of microbiology methods and differences in the methods used by ERA and participant laboratories. For quantitative microbiology analytes, the assigned value is not used in the evaluation of laboratories.

This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.





Final Evaluation Report

Study: **WP-300**

ERA Customer Number: **E772828**

Laboratory Name: **Energy Laboratories**

Organic Results





A Waters Company

WP-300 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: 03/02/20
Study Dates: 01/13/20 - 02/27/20

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
------------------	---------	-------	----------------	----------------	-------------------	------------------------	--------------------	---------------	---------	------------	--------------------------	--------------

WP Diesel Range Organics (DRO) in Water (cat# 641, lot# P300-764)

9369	Diesel Range Organics (DRO)	µg/L	3173	4270	1130 - 5330	Acceptable	EPA 8015C 3 2007	1/21/2020	0.0291	3150	744	bah
------	-----------------------------	------	------	------	-------------	------------	------------------	-----------	--------	------	-----	-----

WP Total Petroleum Hydrocarbons (TPH) in Water (cat# 642, lot# P300-642)

1853	TPH (Gravimetric)	mg/L	64.6	91.0	42.6 - 131	Acceptable	EPA 1664A 1999	1/31/2020	-0.531	69.3	8.90	
1853	TPH (IR)	mg/L		112	53.0 - 162	Not Reported				93.4	4.53	



This report is scored by the criteria in the 2016 TNI Standard, Volume 3, instead of by the criteria in the 2009 TNI Standard to which the Proficiency Testing Provider is accredited. This is a planned change and is endorsed by the TNI Proficiency Testing Program Executive Committee for transition to the 2016 TNI Standard.



CERTIFICATE OF RECOGNITION

ERA congratulates
Energy Laboratories
WP-300

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	Hexavalent Chromium	Minerals	Nitrite
Oil & Grease Concentrate	pH	Silica	Simple Nutrients
Solids	Sulfide	Total Petroleum Hydrocarbons (TPH) in Water	Uranium

WasteWatR™
Coliform MicrobE™



Matthew Seebeck
Quality Officer