

NORTH DAKOTA STATE DEPARTMENT OF HEALTH RECOGNITION OF CERTIFICATION OR ACCREDITATION

The North Dakota State Department of Health recognizes the certification or accreditation of

Energy Laboratories, Inc. - Casper - 2393 Salt Creek HWY - Casper, WY

by

State of Florida Department of Health, Bureau of Laboratories

for

All Clean Water Act, Resource Conservation and Recovery Act, Safe Drinking Water Act
chemical parameters by the methods on the accompanying list of certified parameters for this laboratory

Certification Number: R-125

Date of Issue: July 25, 2017

Expiration Date: June 30, 2018

Covers: 7/1/2017 - 6/30/2018

This certificate remains the property of the North Dakota State Department of Health and may be recalled, for cause, at any time, by the Department. Recognition of an out-of-state laboratory's certification or accreditation from another state certification or accreditation program by the North Dakota State Department of Health is neither an endorsement of the results reported by the laboratory nor a guarantee of the validity or accuracy of the results reported by the laboratory.

Director, Laboratory Services Chemistry Division

Certification Officer

**Certified Parameters for
Energy Laboratories, Inc. - Casper
2393 Salt Creek HWY, Casper, WY**

**Issued by
North Dakota Department of Health
Laboratory Services Division - Chemistry
July 25, 2017**

Certification Period: July 01, 2017 through June 30, 2018

Lab Certification No: R-125

Based on Certificate No: E87641-44

From the State of Florida Department of Health, Bureau of Laboratories

Program	Parameter	Method	Source #	Status
Clean Water Act	Oil and Grease	EPA 1664 A	72	Certified
	Aluminum	EPA 200.7	2	Certified
	Antimony	EPA 200.7	2	Certified
	Arsenic	EPA 200.7	2	Certified
	Barium	EPA 200.7	2	Certified
	Beryllium	EPA 200.7	2	Certified
	Boron	EPA 200.7	2	Certified
	Cadmium	EPA 200.7	2	Certified
	Calcium	EPA 200.7	2	Certified
	Chromium	EPA 200.7	2	Certified
	Cobalt	EPA 200.7	2	Certified
	Copper	EPA 200.7	2	Certified
	Iron	EPA 200.7	2	Certified
	Lead	EPA 200.7	2	Certified
	Magnesium	EPA 200.7	2	Certified
	Manganese	EPA 200.7	2	Certified
	Molybdenum	EPA 200.7	2	Certified
	Nickel	EPA 200.7	2	Certified
	Potassium	EPA 200.7	2	Certified
	Selenium	EPA 200.7	2	Certified
	Silica	EPA 200.7	2	Certified
	Silver	EPA 200.7	2	Certified
	Sodium	EPA 200.7	2	Certified
	Vanadium	EPA 200.7	2	Certified
	Zinc	EPA 200.7	2	Certified
	Aluminum	EPA 200.8	2	Certified
	Antimony	EPA 200.8	2	Certified
	Arsenic	EPA 200.8	2	Certified
	Barium	EPA 200.8	2	Certified
	Beryllium	EPA 200.8	2	Certified
	Cadmium	EPA 200.8	2	Certified
	Chromium	EPA 200.8	2	Certified

Program
Clean Water Act

Parameter	Method	Source #	Status
Cobalt	EPA 200.8	2	Certified
Copper	EPA 200.8	2	Certified
Lead	EPA 200.8	2	Certified
Magnesium	EPA 200.8	2	Certified
Manganese	EPA 200.8	2	Certified
Molybdenum	EPA 200.8	2	Certified
Nickel	EPA 200.8	2	Certified
Potassium	EPA 200.8	2	Certified
Selenium	EPA 200.8	2	Certified
Silver	EPA 200.8	2	Certified
Sodium	EPA 200.8	2	Certified
Thallium	EPA 200.8	2	Certified
Uranium	EPA 200.8	2	Certified
Vanadium	EPA 200.8	2	Certified
Zinc	EPA 200.8	2	Certified
Mercury	EPA 245.1	2	Certified
Bromide	EPA 300.0	9	Certified
Chloride	EPA 300.0	9	Certified
Fluoride	EPA 300.0	9	Certified
Sulfate	EPA 300.0	9	Certified
Total Kjeldahl Nitrogen (TKN)	EPA 351.2	9	Certified
Nitrate + Nitrite	EPA 353.2	9	Certified
Nitrate as N	EPA 353.2	9	Certified
Orthophosphate	EPA 365.1	9	Certified
Phosphorus (Total)	EPA 365.1	9	Certified
1,1,1-Trichloroethane	EPA 624	65	Certified
1,1,1,2-Tetrachloroethane	EPA 624	65	Certified
1,1,2-Trichloroethane	EPA 624	65	Certified
1,1-Dichloroethane	EPA 624	65	Certified
1,1-Dichloroethene	EPA 624	65	Certified
1,2-Dichlorobenzene	EPA 624	65	Certified
1,2-Dichloroethane	EPA 624	65	Certified
1,2-Dichloropropane	EPA 624	65	Certified
1,3-Dichlorobenzene	EPA 624	65	Certified
1,4-Dichlorobenzene	EPA 624	65	Certified
2-Chloroethyl vinyl ether	EPA 624	65	Certified
Acrolein	EPA 624	65	Certified
Acrylonitrile	EPA 624	65	Certified
Benzene	EPA 624	65	Certified
Bromodichloromethane	EPA 624	65	Certified
Bromoform	EPA 624	65	Certified
Bromomethane	EPA 624	65	Certified
Carbon Tetrachloride	EPA 624	65	Certified
Chlorobenzene	EPA 624	65	Certified
Chloroethane	EPA 624	65	Certified
Chloroform	EPA 624	65	Certified
Chloromethane	EPA 624	65	Certified
Cis-1,3-Dichloropropene	EPA 624	65	Certified
Dibromochloromethane	EPA 624	65	Certified

Program
Clean Water Act

Parameter

Method

Source # Status

Ethylbenzene	EPA 624	65	Certified
Methylene chloride	EPA 624	65	Certified
Tetrachloroethylene	EPA 624	65	Certified
Toluene	EPA 624	65	Certified
Trans-1,2-Dichloroethene	EPA 624	65	Certified
Trans-1,3-Dichloropropene	EPA 624	65	Certified
Trichloroethene	EPA 624	65	Certified
Trichlorofluoromethane	EPA 624	65	Certified
Vinyl chloride (chloroethene)	EPA 624	65	Certified
Gross Alpha	EPA 900.0	15	Certified
Gross Beta	EPA 900.0	15	Certified
Chemical Oxygen Demand (COD)	Hach 8000	45	Certified

Resource Conservation and Recovery Act

Ignitability	SW846 1010	69	Certified
** Toxicity Characteristic Leaching Procedure (TCLP)	SW846 1311	81	Certified
Aluminum	SW846 6010	69	Certified
Arsenic	SW846 6010	69	Certified
Barium	SW846 6010	69	Certified
Beryllium	SW846 6010	69	Certified
Boron	SW846 6010	69	Certified
Cadmium	SW846 6010	69	Certified
Calcium	SW846 6010	69	Certified
Chromium	SW846 6010	69	Certified
Cobalt	SW846 6010	69	Certified
Copper	SW846 6010	69	Certified
Iron	SW846 6010	69	Certified
Lead	SW846 6010	69	Certified
Magnesium	SW846 6010	69	Certified
Manganese	SW846 6010	69	Certified
Molybdenum	SW846 6010	69	Certified
Nickel	SW846 6010	69	Certified
Phosphorus (Total)	SW846 6010	69	Certified
Potassium	SW846 6010	69	Certified
Selenium	SW846 6010	69	Certified
** Silica	SW846 6010	69	Certified
Silicon	SW846 6010	69	Certified
Silver	SW846 6010	69	Certified
Sodium	SW846 6010	69	Certified
Strontium	SW846 6010	69	Certified
** Tin	SW846 6010	69	Certified
Titanium	SW846 6010	69	Certified
Vanadium	SW846 6010	69	Certified
Zinc	SW846 6010	69	Certified
Aluminum	SW846 6020	82	Certified
Antimony	SW846 6020	82	Certified
Arsenic	SW846 6020	82	Certified
Barium	SW846 6020	82	Certified
Beryllium	SW846 6020	82	Certified

<i>Program</i>	<i>Parameter</i>	<i>Method</i>	<i>Source #</i>	<i>Status</i>
<i>Resource Conservation and Recovery Act</i>				
	Cadmium	SW846 6020	82	Certified
	Calcium	SW846 6020	82	Certified
	Chromium	SW846 6020	82	Certified
	Cobalt	SW846 6020	82	Certified
	Copper	SW846 6020	82	Certified
	Lead	SW846 6020	82	Certified
	Magnesium	SW846 6020	82	Certified
	Manganese	SW846 6020	82	Certified
	Molybdenum	SW846 6020	82	Certified
	Nickel	SW846 6020	82	Certified
	Potassium	SW846 6020	82	Certified
	Selenium	SW846 6020	82	Certified
	Silver	SW846 6020	82	Certified
	Sodium	SW846 6020	82	Certified
	Strontium	SW846 6020	82	Certified
	Thallium	SW846 6020	82	Certified
	Tin	SW846 6020	82	Certified
	Titanium	SW846 6020	82	Certified
	Uranium	SW846 6020	82	Certified
	Vanadium	SW846 6020	82	Certified
	Zinc	SW846 6020	82	Certified
	Diesel Range Organics	SW846 8015	69	Certified
	Gasoline Range Organics	SW846 8015	69	Certified
	1,1,1,2-Tetrachloroethane	SW846 8260	69	Certified
	1,1,1-Trichloroethane	SW846 8260	69	Certified
	1,1,2,2-Tetrachloroethane	SW846 8260	69	Certified
	1,1,2-Trichloroethane	SW846 8260	69	Certified
	1,1-Dichloroethane	SW846 8260	69	Certified
	1,1-Dichloroethene	SW846 8260	69	Certified
	1,1-Dichloropropene	SW846 8260	69	Certified
	1,2,3-Trichlorobenzene	SW846 8260	69	Certified
	1,2,3-Trichloropropane	SW846 8260	69	Certified
	1,2,4-Trichlorobenzene	SW846 8260	69	Certified
	1,2,4-Trimethylbenzene	SW846 8260	69	Certified
	1,2-Dibromo-3-Chloropropane (DBCP)	SW846 8260	69	Certified
	1,2-Dibromoethane	SW846 8260	69	Certified
	1,2-Dichlorobenzene	SW846 8260	69	Certified
	1,2-Dichloroethane	SW846 8260	69	Certified
	1,2-Dichloropropane	SW846 8260	69	Certified
	1,3,5-Trimethylbenzene	SW846 8260	69	Certified
	1,3-Dichlorobenzene	SW846 8260	69	Certified
	1,3-Dichloropropane	SW846 8260	69	Certified
	1,4-Dichlorobenzene	SW846 8260	69	Certified
	2,2-Dichloropropane	SW846 8260	69	Certified
	2-butanone	SW846 8260	69	Certified
	2-Chloroethyl vinyl ether	SW846 8260	69	Certified
	2-Chlorotoluene	SW846 8260	69	Certified
	2-hexanone	SW846 8260	69	Certified
	4-Chlorotoluene	SW846 8260	69	Certified

<i>Program</i>	<i>Parameter</i>	<i>Method</i>	<i>Source #</i>	<i>Status</i>
<i>Resource Conservation and Recovery Act</i>	4-methyl 2-pentanone (MIBK)	SW846 8260	69	Certified
	Acetone	SW846 8260	69	Certified
	Acetonitrile	SW846 8260	69	Certified
	Acrolein	SW846 8260	69	Certified
	Acrylonitrile	SW846 8260	69	Certified
	Allyl Chloride	SW846 8260	69	Certified
	Benzene	SW846 8260	69	Certified
	Bromobenzene	SW846 8260	69	Certified
	Bromochloromethane	SW846 8260	69	Certified
	Bromodichloromethane	SW846 8260	69	Certified
	Bromoform	SW846 8260	69	Certified
	Bromomethane	SW846 8260	69	Certified
	Carbon Disulfide	SW846 8260	69	Certified
	Carbon Tetrachloride	SW846 8260	69	Certified
	Chlorobenzene	SW846 8260	69	Certified
	Chloroethane	SW846 8260	69	Certified
	Chloroform	SW846 8260	69	Certified
	Chloromethane	SW846 8260	69	Certified
	Chloroprene	SW846 8260	69	Certified
	Cis-1,2-Dichloroethene	SW846 8260	69	Certified
	Cis-1,3-Dichloropropene	SW846 8260	69	Certified
	Dibromochloromethane	SW846 8260	69	Certified
	Dibromomethane	SW846 8260	69	Certified
	Dichlorodifluoromethane	SW846 8260	69	Certified
	Diethyl Ether	SW846 8260	69	Certified
	Ethyl Acetate	SW846 8260	69	Certified
	Ethylbenzene	SW846 8260	69	Certified
	Hexachlorobutadiene	SW846 8260	69	Certified
	Iodomethane	SW846 8260	69	Certified
	Isobutyl Alcohol	SW846 8260	69	Certified
	Isopropylbenzene	SW846 8260	69	Certified
	Methyl tert butyl ether	SW846 8260	69	Certified
	Methylene chloride	SW846 8260	69	Certified
	m-Xylene	SW846 8260	69	Certified
	Naphthalene	SW846 8260	69	Certified
	n-Butylbenzene	SW846 8260	69	Certified
	N-Propylbenzene	SW846 8260	69	Certified
	o-xylene	SW846 8260	69	Certified
**	p-Dioxane	SW846 8260	69	Certified
	p-Isopropyltoluene	SW846 8260	69	Certified
	Propionitrile	SW846 8260	69	Certified
	p-Xylene	SW846 8260	69	Certified
	sec-Butylbenzene	SW846 8260	69	Certified
	Styrene	SW846 8260	69	Certified
	Tert-Butylbenzene	SW846 8260	69	Certified
	Tetrachloroethene	SW846 8260	69	Certified
	Toluene	SW846 8260	69	Certified
	Trans-1,2-Dichloroethene	SW846 8260	69	Certified
	Trans-1,3-Dichloropropene	SW846 8260	69	Certified

<i>Program</i>	<i>Parameter</i>	<i>Method</i>	<i>Source #</i>	<i>Status</i>
<i>Resource Conservation and Recovery Act</i>	trans-1,4-Dichloro-2-butene	SW846 8260	69	Certified
	Trichloroethene	SW846 8260	69	Certified
	Trichlorofluoromethane	SW846 8260	69	Certified
	Vinyl Acetate	SW846 8260	69	Certified
	Vinyl chloride (chloroethene)	SW846 8260	69	Certified
	Xylenes (Total)	SW846 8260	69	Certified
<i>Safe Drinking Water Act</i>	Filterable Residue (Total Dissolved Solids)	2540 C	6	Certified
	Fluoride	4500-F- C	6	Certified
	Uranium	7500-U C	91	Certified
	Aluminum	EPA 200.7	2	Certified
	Barium	EPA 200.7	2	Certified
	Beryllium	EPA 200.7	2	Certified
	Cadmium	EPA 200.7	2	Certified
	Copper	EPA 200.7	2	Certified
	Iron	EPA 200.7	2	Certified
	Manganese	EPA 200.7	2	Certified
	Silver	EPA 200.7	2	Certified
	Zinc	EPA 200.7	2	Certified
	Aluminum	EPA 200.8	2	Certified
	Antimony	EPA 200.8	2	Certified
	Arsenic	EPA 200.8	2	Certified
	Barium	EPA 200.8	2	Certified
	Beryllium	EPA 200.8	2	Certified
	Cadmium	EPA 200.8	2	Certified
	Chromium	EPA 200.8	2	Certified
	Copper	EPA 200.8	2	Certified
	Lead	EPA 200.8	2	Certified
	Manganese	EPA 200.8	2	Certified
	Selenium	EPA 200.8	2	Certified
	Silver	EPA 200.8	2	Certified
	Thallium	EPA 200.8	2	Certified
	Uranium	EPA 200.8	2	Certified
	Zinc	EPA 200.8	2	Certified
	Mercury	EPA 245.1	2	Certified
	Chloride	EPA 300.0	9	Certified
	Fluoride	EPA 300.0	9	Certified
	Sulfate	EPA 300.0	9	Certified
	Nitrate as N	EPA 353.2	9	Certified
	Orthophosphate	EPA 365.1	9	Certified
	1,2-Dibromo-3-Chloropropane (DBCP)	EPA 504.1	28	Certified
	1,2-Dibromoethane	EPA 504.1	28	Certified
	1,1,1-Trichloroethane	EPA 524.2	28	Certified
	1,1,2-Trichloroethane	EPA 524.2	28	Certified
1,1-Dichloroethene	EPA 524.2	28	Certified	
1,2-Dichlorobenzene	EPA 524.2	28	Certified	
1,2-Dichloroethane	EPA 524.2	28	Certified	
1,2-Dichloropropane	EPA 524.2	28	Certified	

Program
Safe Drinking Water Act

Parameter	Method	Source #	Status
1,4-Dichlorobenzene	EPA 524.2	28	Certified
Benzene	EPA 524.2	28	Certified
Carbon Tetrachloride	EPA 524.2	28	Certified
Cis-1,2-Dichloroethene	EPA 524.2	28	Certified
Dichloromethane	EPA 524.2	28	Certified
Ethylbenzene	EPA 524.2	28	Certified
Styrene	EPA 524.2	28	Certified
Tetrachloroethene	EPA 524.2	28	Certified
Toluene	EPA 524.2	28	Certified
Total Trihalomethanes	EPA 524.2	28	Certified
Trans-1,2-Dichloroethene	EPA 524.2	28	Certified
Trichloroethene	EPA 524.2	28	Certified
Xylenes (Total)	EPA 524.2	28	Certified
Carbofuran	EPA 531.1	28	Certified
Oxamyl (Vydate)	EPA 531.1	28	Certified
Glyphosate	EPA 547	26	Certified
Diquat	EPA 549.2	31	Certified
Bromoacetic Acid	EPA 552.2	28	Certified
Chloroacetic Acid	EPA 552.2	28	Certified
Dibromoacetic Acid	EPA 552.2	28	Certified
Dichloroacetic Acid	EPA 552.2	28	Certified
Trichloroacetic Acid	EPA 552.2	28	Certified
Gross Alpha	EPA 900.0	15	Certified
Gross Beta	EPA 900.0	15	Certified
Radium 226	EPA 903.0	15	Certified
Radium 228	EPA Ra-05	17	Certified

<i>Program</i>	<i>Parameter</i>	<i>Method</i>	<i>Source #</i>	<i>Status</i>
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Symbol Reference

** Limited to RCRA Solid Samples Only

Source Reference

- 2 "Methods for the Determination of Metals in Environmental Samples - Supplement I", EPA/600/R-94/111, May 1994
- 6 Standard Methods for the Examination of Water and Wastewater, 20th edition (1998), American Public Health Association
- 9 "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA/600/R-93-100, August 1993
- 15 "Prescribed Procedures for the Measurement of Radioactivity in Drinking Water", EPA 600/4-80-032, August 1980
- 17 "Radiochemistry Procedures Manual", EPA 520/5-84-006, December 1987
- 26 Methods for the Determination of Organic Compounds in Drinking Water - Supplement I, EPA/600-4-90-020, July 1990
- 28 Methods for the Determination of Organic Compounds in Drinking Water - Supplement III, EPA/600/R-95-131, August 1995
- 31 U.S. Environmental Protection Agency, National Exposure Research Laboratory (NERL) - Cincinnati, OH
- 45 Hach Handbook of Water Analysis, 1979, Hach Chemical Company, Loveland, CO
- 65 40 CFR Part 136, Appendix A
- 69 Test Methods for Evaluating Solid Waste Physical Chemical Methods (SW846) Third Edition, EPA-SW-846-03-03B, EPA Office of Solid Waste and Emergency Response
- 72 USEPA Office of Water, EPA-821-R-98-002, PB99-121949, February 1999
- 81 Test Methods for Evaluating Solid Waste Physical Chemical Methods (SW846) Third Edition, as amended by Update I, July 1992, EPA Office of Solid Waste and Emergency Response
- 82 Test Methods for Evaluating Solid Waste Physical Chemical Methods (SW846) Third Edition, as amended by Update II, September 1994, EPA Office of Solid Waste and Emergency Response
- 91 Standard Methods for the Examination of Water and Wastewater, 21st Edition (2005), American Public Health Association