

Water Quality Testing in Areas of Oil & Gas Development

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The following table includes testing laboratories and their associated prices for water quality testing in areas of oil and gas development. Constituents are based on the 2011 National Groundwater Association Information Brief: *Water Wells in Proximity to Natural Gas or Oil Development*

Suggested analysis includes:

Major Ions: Alkalinity, Calcium, Chloride, Magnesium, Potassium, Sodium, and Sulfate

Minor and Trace Elements: Arsenic, Barium, Boron, Bromide, Chromium, Iron, Manganese, Selenium, and Uranium

WQ parameters: pH, Conductivity, TDS, and Turbidity

Organic Chemicals: BTEX, DRO, GRO, TPH, and Oil/Grease

For more information and resources on hydraulic fracturing in Region 8, please visit the Northern Plains and Mountains Regional Water Program at http://region8water.colostate.edu/fracking_resources.shtml

There are many other labs within Region 8 and this listing is not intended to be all-inclusive or in any way exclusive. Any lab that wishes to be included can contact Julie Kallenberger at julie.kallenberger@colostate.edu or 970-491-5124. No endorsement of services/products mentioned or demonstrated is intended nor is criticism implied of services/products not mentioned.

Laboratory/State	Major Ions	Metals Analysis	WQ Parameters	Organic Parameters	Individual Testing	Website
ACZ Laboratories (CO)	Alkalinity \$11 Calcium \$9 Chloride \$13 Magnesium \$9 Potassium \$9 Sodium \$9 Sulfate \$13	Arsenic \$17 Selenium \$17 Uranium \$17 Chromium \$17 each Barium \$9 Boron \$9 Iron \$9 Manganese \$9 Bromide \$13	pH \$8 Conductivity \$8 TDS \$11 Turbidity \$11	BTEX-GRO \$130 DRO \$68 Methane \$80 Oil & Grease \$80	Available for most parameters.	www.acz.com
Colorado Dept. of Public Health and Environment (CO)	Deluxe CO Package \$250: Alkalinity, Arsenic, Cadmium, Calcium, Coliform bacteria, Chloride, Conductivity, Copper, Corrosivity, Fluoride, Hardness, Iron, Lead, Magnesium, Manganese, Nitrate/Nitrite, pH, Sodium, SAR, Sulfate, TDS, Uranium, Zinc	Inorganic Mandatory Package \$225: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Fluoride, Mercury, Nickel, Selenium, Silver, Sodium, Thallium	Expanded Annual Colorado Pkg \$50: Coliform bacteria, Nitrate/Nitrite, pH, TDS Turbidity an additional \$15	Drilling Baseline Package \$250: Volatile Organic Compound screen, pH, TDS, Chloride, Fluoride, Alkalinity, Sulfate, Arsenic, Barium, Chromium, Sodium, Calcium, Magnesium	Available for most parameters.	http://www.cdphe.state.co.us/lr/water.htm
CSU Soil Water & Plant Lab (CO)	Routine Package \$47: Specific Conductance, Calcium, Magnesium, Sodium, pH, Potassium, Carbonate, Bicarbonate, Sulfate, Nitrate, Chloride, Boron, Hardness, Alkalinity, TDS	Selenium \$18.50 Arsenic \$18.50 Barium \$6 Chromium \$6 Iron \$6 Manganese \$6				http://www.soiltestinglab.colostate.edu/
Stewart Environmental Consultants, LLC (CO)	Alkalinity, Calcium, Chloride, Magnesium, Potassium, Sodium, Sulfate \$105	Arsenic, Barium, Boron, Bromide, Chromium, Iron, Manganese, Selenium, Uranium \$150	pH, Specific Conductance, TDS, Turbidity \$65	Gas Range \$78 Diesel Range \$94 Oil & Grease \$60 BTEX \$80	Available for most parameters.	http://www.stewartenv.com/

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Weld County Dept. of Public Health and Environment Lab (CO)	Alkalinity \$11.50 Calcium \$11.50 Chloride \$11.50 Magnesium \$5.25 Potassium \$19 Sodium \$16 Sulfate \$14	Arsenic \$19 Barium \$19 Chromium \$19 Iron \$19 Manganese \$19 Selenium \$19	Specific Conductance \$10 TDS \$13 Turbidity \$10	baseline drilling packages to be determined by lab manager depending on needs	Available for most parameters.	http://www.co.weld.co.us/Departments/HealthEnvironment/EnvironmentalHealth/Laboratory/LabTesting.html
City of Fargo Public Health Dept (ND)	Complete Water Chemistry Package \$75: pH, conductivity, TDS, Turbidity, Iron, Calcium, Sodium, Magnesium, Potassium, Iron, Manganese, Hardness, Chloride, Fluoride, Nitrate, Sulfate, Alkalinity	Trace Metals: 1 element \$20 2 elements \$30 3 elements \$45 4 or more \$60	See Complete Water Chemistry Package \$75	None		http://www.cityoffargo.com/CityInfo/Departments/WaterTreatment/WaterTesting.aspx
MVTL Laboratories, Inc (ND)	Alkalinity, Calcium, Chloride, Magnesium, Potassium, Sodium, Sulfate, \$89	Metals individually priced \$17-\$24 each	pH, Specific Conductance, TDS \$55, Turbidity \$13	BTEX \$70 GRO \$70 DRO \$70		http://www.mvttl.com/water.htm
Energy Laboratories, Inc (WY, MT and SD)	Domestic Water Analysis Package \$120: Potassium, Sodium, Calcium, Magnesium, Sulfate, Chloride, Hardness, TDS, Alkalinity, Conductivity, pH, Nitrate + Nitrate as N	Safe Drinking Water Act Package \$100: Antimony, Arsenic, Barium, Beryllium, Cadmium, Sodium, Chromium, Mercury, Nickel, Selenium, Thallium	See Domestic Water Analysis Package \$120 Turbidity an additional \$10	Safe Drinking Water Act Continued Package \$130: Benzene, Toluene, Ethyl Benzene, Xylene TPH an additional \$60 Oil and Grease an additional \$75	Available for most parameters.	http://www.energylab.com/PricingGuide.aspx