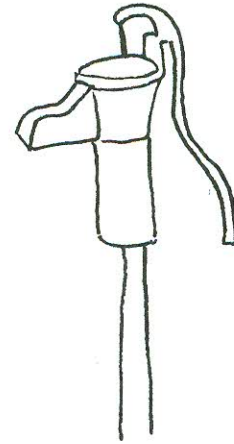


SHERIDAN COUNTY CONSERVATION DISTRICT BASELINE GROUNDWATER SAMPLING PROGRAM

Rural water users have expressed concerns about the effects on water supply from oil field activities such as:

- Hydraulic fracturing and related activities (chemical storage, frack water injection, & production water disposal)
- Waste management accidents at well-head pits and injection wells
- Accidents and spills that occur during transportation of chemicals and product
- Large withdrawals of groundwater for consumptive use.



The purpose of the baseline sampling program is to establish baseline groundwater quality and availability in advance of oil and gas activity and in areas currently at risk from oil field activities. The program will characterize well water and aquifers currently used for domestic or stock water.

How to Participate

Through SHERIDAN COUNTY, domestic and stockwater wells will be evaluated for baseline conditions. Well selection priority is based on:

- Proximity to a potential source of contamination such as an active or abandoned oil/gas well, injection well, waste management area, or chemical management area.
- Landowner interest and cooperation
- Well accessibility for sampling.
- Well registration on the Montana Bureau of Mines and Geology Groundwater Information Center (GWIC) database

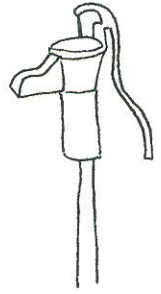
Each well selected in this program will be evaluated on-site for field parameters and water availability. Well samples will be analyzed for drinking water quality and for indicators of contamination specific to energy development activities.

Well sampling and lab fees total approximately \$1,200 per well. Sheridan County CD requires a match payment of \$100.00 and a signed participation agreement from the well-owner for every evaluated well.

If interested in participating in this baseline groundwater sampling program, please contact:

Melissa Opsahl, District Administrator
Sheridan County Conservation District
119 North Jackson
Plentywood, MT 59254
406-765-1801 Ext 101
sheridancd@macdnet.org

**PARTICIPANT APPLICATION
SHERIDAN COUNTY CONSERVATION DISTRICT
BASELINE GROUNDWATER SAMPLING PROGRAM**



Well Owner name, address, phone number:

Well User contact information (if different):

Well Ground Water Information Center (GWIC) Number _____

Well location

Township, Range, Section, $\frac{1}{4}$ Section _____

Latitude and Longitude or other location information: _____

Estimated age of well _____

Depth of well _____

Well use

Stockwater? Domestic? Monitoring? _____

How often? _____

Why are you concerned about contamination from oil field activities to this well?

Limitations to well access such as locked gates or other information needed to access well:

Provide a photo of the well location and nearest hydrant if access into the well will be difficult or impossible.

This baseline sample program evaluates groundwater for constituents that indicate impact from oil field activities. In addition to these indicator parameters, you may add a test for two drinking water indicators (nitrate and coliform) at your own cost. The results of these analyses will be sent directly to the well-owner and not added to the State's database for oil and gas development baseline samples.

Amount paid to the conservation district:

\$100.00 Participation Fee

Bottles and sampling instructions will be provided for the well owner to submit samples personally for nitrate and coliform/bacteria. There is a very short holding time between sampling and testing that is difficult to accomplish when the Contracted Sampler is sampling multiple wells in one week. This is voluntary, at well owners expense and not covered by the grant.

Please return completed form to:

Melissa Opsahl, District Administrator
Sheridan County Conservation District
119 North Jackson
Plentywood, MT 59254
406-765-1801 Ext 101
sheridancd@macdnet.org

Data collected during sampling and laboratory analysis will be entered into a public database: the Groundwater Information Center database at the Montana Bureau of Mines and Geology.

I, the undersigned, consent to allow the Department of Natural Resources and Conservation or its representative to enter my property on a one-time basis to access the well referenced in Page 1 of this application. The purpose of the entry is restricted to sampling water for water quality and quantity. I understand that access must be preceded with an agreed upon date and time between myself and the DNRC representative and that all testing results, with the exception of coliform bacteria and nitrate, will be available to the public through the website maintained by the Groundwater Information Center at the Montana Bureau of Mines and Geology. If I no longer wish to have DNRC enter my property for the purposes specified herein, I must contact the conservation district I applied to for testing in writing stating that I have withdrawn my consent and that I do not wish to participate.

Well owner signature

date

Map showing well location on property - Use the example Well Site Map as a guideline for preparing detailed instructions to access the well. Include a local road map for the most direct route to the section with the well.



APPENDIX B

Information Collected at the Well Head

GPS coordinates

Site information

Date, Time and Weather

Well condition

Water Use

Casing description

Total depth

Static Water Level

Rate and Volume of Flow

Pumping water level

Water characteristics (clarity, smell)

Sampling location and description

pH, dissolved oxygen, specific conductivity, temperature

Comments about well location and accessibility

Analyte	Method	Reporting Limit, mg/l
Calcium	200.8	0.02
Potassium	200.8	
Magnesium	200.8	0.005
Sodium	200.8	0.05
Bromide	300	
Fluoride	300	0.1
Chloride	300	1
Sulfate	300	5
Carbonate	2320B	5
bicarbonate	2320B	
BTEX (Benzene, Toluene, Ethylbenzene, Xylene)	8260	0.001 to 0.003
Gasoline Range Organics	8015	0.1
Diesel Range Organics	8015	0.5
Total Dissolved Solids	2540C	10
Specific Conductance	2310C	10 umhos/cm
Methane, Ethane, Ethene	RSK-175	0.010 (approx)
Iron	200.8	0.05
Manganese	200.8	0.0005
Strontium	200.8	0.0005
Barium	200.8	0.0003
Selenium	200.8	0.0005