

**From:** [Konrad Quast](#)  
**To:** [Ash, Margaret; TOM MELLAND;](#)  
**CC:**  
**Subject:**  
**Date:** Monday, December 11, 2006 4:20:16 PM  
**Attachments:** [Raton\\_Baseline\\_GW\\_SAP\\_12-11-06.pdf](#)

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Margaret:

After reviewing your comments and state regulations I added the chlorine disinfection procedure as outlined by the state which is comprised of a bleach solution and specified contact time.

I did review rules 6 and 7 and they do not apply to us unless we are removing a "well seal". Rules 6 and 7 refer to licensing for "Every individual, before engaging in the business of contracting for and performing either the construction and/or the repair of wells, the installation and/or repair of pumping equipment, or the installation and/or repair of cisterns shall obtain a license for one or more methods of well construction or pump installation from the Board." We are not constructing or repairing wells, repairing or installing pumps or cisterns and therefore do not belong under this distinction (i.e. no license required to sound a well or take a sample). Additionally Rule 7 states "Prior to the initial issuance or renewal of any license, the applicant or licensee shall file with the Board, on a form provided by the Board, evidence of financial responsibility by means of a corporate surety bond or alternative funds as provided for by section 37-91-107" which is related to obtaining or renewing a license which we do not need. I am not sure Margaret knows the rules very well or has not read them thoroughly. In the case where we will be pulling a pump to obtain a water level, if found necessary in the future, we would fall under these regulations and would by default be using a water well contractor to pull the pump in any case. However for the work we are planning we fall under Rule 13.4 and do not need a licensed water well contractor. **"13.4 Measuring, Sampling and Test Pumping** - Registered professional engineers, professional geologists or hydrologists, or anyone directly employed by or under the supervision of a registered professional engineer, professional geologist or hydrologist may measure, sample or test-pump holes/wells for scientific, engineering and regulatory purposes. Such activities shall be limited to measuring water levels, collecting water samples and the installation of pumps dedicated solely to scientific, engineering or regulatory purposes, provided this work complies with the standards in these Rules."

I have also changed the plan to address the fact that we will not be field filtering

samples. According to EPA and the lab it is acceptable to sample and have the dissolved metals samples filtered at the lab.

Also, we will be calculating cation/anion balance as a QA/QC.

Konrad

Konrad W. Quast, Ph.D.

*Hydrogeologist/Geochemist*

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Konrad, I have not checked out the links yet. -twm

>>> "Ash, Margaret" <Margaret.Ash@state.co.us> 12/4/2006 1:25 PM >>>

Tom,

Peter Gintautas the new EPS for southeastern Colorado reviewed the work plan submitted by Norwest Applied Hydrology and made a few comments. I have forwarding those to you. Also, as discussed I feel that the DWR rules require persons who conduct work on domestic and or public water wells to have a special license and to provide evidence of financial security. I've provided hyperlinks to the rules and regulations I feel apply. Norwest may not agree with my interpretation. At a minimum the disinfecting procedure does not appear to be consistent with DWR requirements.

[http://water.state.co.us/boe/rulesregs/constructionrules05\\_basis.pdf](http://water.state.co.us/boe/rulesregs/constructionrules05_basis.pdf) see rule 15

<http://water.state.co.us/boe/rulesregs/boerules.pdf> see rules 6 and 7

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**From:** Gintautas, Peter  
**Sent:** Monday, December 04, 2006 12:19 PM  
**To:** Ash, Margaret  
**Subject:** Petroglyph Baseline

I did not see mention of use of licensed water well drillers or plumbers to do any work on domestic water wells. There is a cleaning procedure for equipment but just soap and water and rinse between each use. Each Domestic well may need to be chlorinated if well head is opened to ascertain water levels or as part of the water sampling process.

Also they state that all samples from domestic wells will be 'field filtered'. I assume they are referring to samples for metals or common anion analysis not for methane or other VOC's.

There is a basic QAPP in the document. The calculation of anion-cation balance should also be a requested parameter from the lab or Norwest Applied Hydrology should calculate for basic QA/QC interest.

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