

Jim R

State of Wisconsin

CORRESPONDENCE/MEMORANDUM

DATE: May 4, 1994

FILE REF: 3320

TO: Rick

FROM:

SUBJECT: Arsenic water samples from Kewaunee DNR property area.

A site with arsenic contamination was recently discovered in the DNR's Buzz Besadny nature area in Kewaunee County. We did some arsenic sampling of private wells around the area.

I realize the data is sparse, but could you:

- Review the results and well construction information.
- Evaluate whether you think the arsenic results might be from the site or naturally occurring.
- Recommend further actions, if any.
- If you know more about the site--this is all I know--please inform me so that I can determine how best to word my letters to them.

Thanks!

All data presented here supports this arsenic in private wells to be from a natural source. Principally there are no high detections nor is there an occurrence pattern relative to likely gradient direction or discharge areas. Limited available well logs indicate wells are seated into bedrock with steel casings and exhibit clay overburden to a depth of 30-77 feet. However of equal importance is that the state lab of hygiene LOD is 1 ug/l while their LOQ is 4 ug/l as is printed on their laboratory report form. Therefore any detection between 1-4 ug/l should be viewed as just that, a detection between 1-4 not necessarily exactly the number reported. Thus even the highest detection here of 1.9 ug/l arsenic is a detection of arsenic below the laboratory limit of quantification (LOQ) and all other factors at this time suggest it to be of natural occurrence. On a national basis 1-30 ppb^(ug/l) arsenic in groundwater is normal. The Wisconsin NR 140 preventative action limit (PAL) for arsenic in groundwater is 5 ug/l.

CC: Bruce Urban - LMD

R. C. Stoll
S-20-94