

Fwd: Re: Well screen length

TA 35

Subject: Fwd: Re: Well screen length

Date: Thu, 26 Sep 2002 13:36:17 -0600

From: Michael Dale <mdale@lanl.gov>

To: carolyn_cooper@nmenv.state.nm.us

CC: syanicak@lanl.gov, john young <john_young@nmenv.state.nm.us>

Carolyn, FYI:

The detection, or lack there of, of intermediate ground water/aquifer(s) in Pajarito Canyon during the drilling of R-20, R-23 and R-32 was probably a result of not collecting core at depths that would potentially transmit/hold ground water. For example, at R-15 perched water was encountered at a depth of about 650 feet (bgs) (perchlorate at 12 ppb). The maximum depth of core collected at R-20, 23, 32 was, I think, about 300 feet. We recommend, that when drilling R wells in these wet canyons (Pueblo, Los Alamos, Mortandad, Pajarito, Water Canyons) that they (LANL) first bring in an adequate small diameter coring rig capable of penetrating LANL-type strata to the regional top of saturation (1000' or so); after coring is complete, then bring in the big rig to drill the borehole for possible well monitoring well installation. Collecting and analyzing the core for contaminants, moisture/saturation, Kds, etc. will help in many ways such as determining vadose zone flow and transport/recharge/flow velocities, decrease modeling uncertainties, and the list goes on. I'll probably attend the upcoming QTR meeting, see you then.

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X-Mailer: QUALCOMM Windows Eudora Version 5.1.1

Date: Thu, 26 Sep 2002 12:34:41 -0600

To: Carolyn Cooper <carolyn_cooper@nmenv.state.nm.us>, bob enz <renz@doeal.gov>, dave broxton <broxton@lanl.gov>, David Cobrain <David_Cobrain@nmenv.state.nm.us>, john mccann <jmccann@lanl.gov>, John Young <john_young@nmenv.state.nm.us>, Michael Dale <mdale@lanl.gov>, stavert <stavert@lanl.gov>, tom whitacre <twhitacre@doeal.gov>, m johansen <mjohansen@doeal.gov>

From: Charles Nylander <nylander@lanl.gov>

Subject: Re: Well screen length

Cc: James Bearzi <James_Bearzi@nmenv.state.nm.us>, Greg Lewis <greg_lewis@nmenv.state.nm.us>

Carolyn: LANL and NMED have had numerous discussions about screen length during the past 4 years. I thought that we had come to a mutual understanding and agreement on the length of screens, dependent on their location in the well e.g. at the top of the regional aquifer versus deeper locations in the regional aquifer, etc. Since there is some misunderstanding regarding the topic, I will make sure that the subject is technically addressed at the upcoming October Quarerly Meeting, so we can ensure resolution. Thanks. Charlie

At 03:12 PM 9/25/2002 -0600, Carolyn Cooper wrote:

NMED would like to reiterate its concern regarding the length of well screen used in monitoring wells installed under the Hydrogeologic Workplan and other projects at LANL. NMED requires that screen lengths be limited to no more than 20 feet unless it is likely that drawdown occurring in the area will limit the useful life of the well (to less than 20 years). In all cases the screened interval should be kept to a minimum to limit the potential for crossing hydrostratigraphic boundaries. NMED acknowledges that many of the well screens installed thus far are less than 20 feet in length. However, NMED is concerned about field decisions that are being made, which have resulted in LANL



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installing excessively long screens in certain wells (for example, R-13; R-22; and R-23, which is currently under construction with a planned screen length of approximately 40 feet).