

Detterman, Mark, Env. Health

From: Xinggang Tong [xtong.otg@gmail.com]
Sent: Wednesday, February 03, 2016 4:33 PM
To: Detterman, Mark, Env. Health
Cc: Nancy Humphrey
Subject: field sampling on January 29 at RO#61, City of Emeryville Fire Station #2
Attachments: 20160129_143742.jpg

Mark,

Here is a summary of field sampling at the City of Emeryville Fire Station #2 (RO#61) site:

Based on the original investigation in 1995, we thought we would encounter groundwater at between 10 to 15 ft below groundwater surface (bgs). We drilled the first borehole SB-17 with continuous cores down to 15 ft, all core samples were relatively dry, no free water. We then continued to 20 ft bgs, inserted 1"-diameter PVC screen into the borehole and waited for about 5 hrs, completely dry.

The second borehole SB-18 was drilled down to 25 ft bgs, and then we inserted PVC screen. After about 3 hrs, was also completely dry.

The third borehole SB-19 was drilled to 20 ft bgs and was also dry after 2 hrs. The County drilling inspector Jose Ambriz didn't think we'd have groundwater and recommended to seal back. So we grouted all three boreholes around 4:00 pm. As a result, we were unable to collect any groundwater samples in this round of investigation.

It had moderate rain in the afternoon. The area where the exiting monitoring well MW-1 is located is under water. Please see the attached photo. It is located in heavy traffic area where fire engines drive through and the surface appears to have sunken around 3 to 4 inches, resulting in rain water pooling in the well location area. We removed surface water in the well area and opened the well cap, water inside the well is at about 2.9 ft bgs. I believe the water inside the well casing is from the surface water infiltration, not true groundwater. The area around the well has sunken about 3 to 4 inches, and I think the well seal is not water-tight anymore. Kleinfelder redeveloped the well back on April 5, 2010. It stated in its report that after surging the well and after removing 82 gallons of water (30 casing volumes), the turbidity of the water was still over 400 NTU (out of scale, the instrument can only measure up to 400 NTU). I think this is an indication that the well seal was broken even back in 2010.

I'll have an investigation report to you after receiving laboratory data on the soil samples collected.

Thanks,

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