

## Wickham, Jerry, Env. Health

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**From:** Wickham, Jerry, Env. Health  
**Sent:** Thursday, October 29, 2009 2:10 PM  
**To:** 'Schliewen, Katrin'  
**Cc:** Cover, Lee (San Ramon) NA  
**Subject:** RE: RO#2941 - Hanson Radum - Question re Additional Invest scope of work

Hi Katrin,

Direct push drilling will also be acceptable.

Regards,

**Jerry Wickham**

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**From:** Schliewen, Katrin [mailto:[Katrin.Schliewen@lfr.com](mailto:Katrin.Schliewen@lfr.com)]  
**Sent:** Thursday, October 29, 2009 1:43 PM  
**To:** Wickham, Jerry, Env. Health  
**Cc:** Cover, Lee (San Ramon) NA  
**Subject:** RO#2941 - Hanson Radum - Question re Additional Invest scope of work

Hello Jerry,

We are planning to conduct the additional investigation at 3000 Busch Rd, Pleasanton, CA, in the AOC #1, in accordance with your letter dated 10/14/09. The scope of work was defined in LFR's Work Plan dated 9/15/08 and LFR's Addendum to the WP dated 12/5/08, and ACEH letters dated 10/7/08 and 1/29/09. In the scope of work, we specified that we would use hollow stem auger (HSA) drilling technology to advance the borings to 8 feet bgs. I am considering using a direct push drilling rig which has the advantages of generating less waste soil and may be less expensive for this effort. Although HSA is generally a better technology for this site to advance borings while collecting continuous soil samples for relatively deeper borings, a review of boring logs from direct push drilling that we conducted at this site in 2006 shows that we achieved approximately 75-100% recovery to approximately 20 feet bgs (relatively higher recovery in the top 10 feet bgs). Please let me know if you approve us using direct push instead of HSA. Assuming that you approve this change in scope, driller availability and cost will differentiate the technology used.

Thanks, Katrin.

**Katrin Schliewen, PG** | Senior Hydrogeologist | [katrin.schliewen@lfr.com](mailto:katrin.schliewen@lfr.com)

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