

## Smith, Ralph N - DNR

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**From:** Dave Larsen <dlarsen@reiengineering.com>  
**Sent:** Tuesday, May 30, 2017 4:18 PM  
**To:** Smith, Ralph N - DNR  
**Cc:** Robinson, John H - DNR  
**Subject:** Falun Work  
**Attachments:** 1160\_001.pdf; 7679 GP Change Order.pdf; 7367 GP change order.pdf



**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Ralph and John, REI has completed the drilling at Falun (Bob's and Hedlund) last week and we expanded the work at Hedlund due to unanticipated impacts.

Bob's approval was for 10 probes to 15' and we advanced 10 probes to 15'.

Hedlund approval was for 1 probe to 15' and we advanced 5 probes to 15'. The old tank bed appeared to be clean soil in backfill and also in samples we collected in native soils near tank bed, but groundwater was impacted. We did find additional soil and groundwater impact on Bob's property east of the Hedlund pump island. Initially it looked like Bob's was the source, but additional borings make it appear that the source was actually Hedlund. We haven't drawn up figures yet, but the additional borings were advanced near B-2 on the attached Ayres figure. Ralph – REI will need to modify the extent of soil impact figure provided in SIR. We will complete revision after we receive lab report. REI is still proposing a soil excavation as the preferred remedial option.

Additional work for Hedlund included the following:

- 45' soil boring
- 1 additional GW sample
- Temp well installation. There were too much sediment in open borehole and we had to install 1" temp wells to screen out sediment.
- 1 additional soil sample each for PVOC/N and lead
- Borehole abandonment charges

Additional charges for Bob's Service:

- Temp well installation. There were too much sediment in open borehole and we had to install 1" temp wells to screen out sediment.
  - Only collected 5 water samples (had approval for 10).

**Bobs soil and groundwater appeared to be clean. Will have to wait until we get lab results, but we did not report any significant impact in either the soil or groundwater. Only real impact on Bob's property appeared to have migrated over from the Hedlund release.**

Let me know if you have any questions or concerns.

Thank you,  
*David N. Larsen P.G*  
*Hydrogeologist / Professional Geologist*

# Usual and Customary Standardized Invoice #21

## January 2017 - June 2017



RR-068A

PECFA #: 54810-9999-00  
 BRRT's #: 03-07-000151  
 Site Name: Hedlund DX  
 Site Address: 10557 Hwy 70, Falun

Vendor Name: REI  
 Invoice #:  
 Invoice Date: 5/30/17 change order  
 Check #:

U&C Total \$ 1,477.93  
 Variance to U&C Total \$ -  
 Grand Total \$ 1,477.93

TASK	TASK DESCRIPTION	SERVICES	ACTIVITY CODE	ACTIVITY REFERENCE CODE DESCRIPTION	UNIT	MAX UNIT COST	UNITS	TOTAL MAX
12	Direct Push	Consultant	DP05	0 - 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 5.36	45	\$ 241.20
12	Direct Push	Consultant	DP20	GW Sample Collection	Each	\$ 36.10	1	\$ 36.10
12	Direct Push	Consultant	DP25	Temporary Well Installation	Each	\$ 49.90	2	\$ 99.80
12	Direct Push	Commodity	DP35	0 - 24 ft bgs W/ Continuous Soil Sampling	Ft	\$ 6.93	45	\$ 311.85
12	Direct Push	Commodity	DP50	GW Sample Collection (cost for tubing)	Ft	\$ 0.42	40	\$ 16.80
12	Direct Push	Commodity	DP60	Borehole Abandonment	Ft	\$ 1.26	60	\$ 75.60
12	Direct Push	Commodity	DP70	GW Sample Collection	Each	\$ 39.27	2	\$ 78.54
12	Direct Push	Commodity	DP75	Temporary Well Installation	Ft	\$ 5.25	30	\$ 157.50
33	Schedule Of Laboratory Maximums	Commodity		Laboratory (see task 33 total on Lab Schedule)	Lab Schedule		1	\$ 78.76
36	Change Order Request		COR05	Change Order Request (cost cap exceedance requests)	Change Order	\$ 381.78	1	\$ 381.78

