Continuing Education Information Certificate

Participant Name: _____
Program Sponsor: Colorado Groundwater Association
Date of Activity: Wednesday March 20, 2024
Location: Virtual
BOE CE Course Number: 2024-01-030-A

Time: 12:00 - 1:00 pm **Total CE Hours Awarded:** One hour

Title: Multi-port Monitoring and Sampling - Options, Techniques, and Lessons Learned

Description of Activity:
This cast provides an introduction to the use, advantages, and limitations of Multi-Level Groundwater Sampling Systems; including deep systems for assessing groundwater hydraulics and quality. Case studies of applications will be provided, covering how the systems are installed, how they work, and options for sampling.

Multi-port monitoring and sampling can provide multiple types of data resulting in a valuable base of hydrogeologic information such as:

Pressure Profiles – information on vertical gradients and permeability contrasts.
Pressure vs. Time – information on long or short-term water level trends, frequency effects (such as earth tides and sea tides), and observation of pumping tests.
Hydraulic Tests – perform single-zone tests through measurement and/or pumping ports, vertical-interference tests between zones, and pulse-interference tests along or between wells.

Test results can be used to calculate permeability and construct a profile of permeability vs. depth which can be valuable for modeling. Water quality data can be plotted as a vertical profile of concentration vs. depth and can also be plotted vs. time, providing important insight into the hydrogeologic behavior of the site.

Multi-port well data has been demonstrated to be solidly defensible, providing the best foundation for predictive modeling related to remedial or resource management decisions.

Speaker: John Sankey, Solutions Engineer, True Blue Technologies

Speaker Biography:
John Sankey is a solutions engineer for True Blue Technologies. He holds a degree in Mechanical Engineering from Queen's University in Kingston, Ontario. He sits on the steering committee for groundwater Sampling & Monitoring Symposiums, which focuses on monitoring groundwater so that in situ remediation is planned well. He has been in the groundwater industry for 26 years and in 2003 started True Blue Technologies, a business dedicated to providing engineering, technical support and business development for technologies in groundwater remediation and characterization. After work, John is the "snowboard" trainer for the Disabled Skiing Association of BC and co-coordinates a small adult co-ed hockey league.

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Certification By Provider/Presenter:

This is to certify that the above named individual attended and/or participated in the activity in the manner as described above.

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Sponsor Representative	Date	Organization & Title