

2008 North American Environmental Field Conference and Exposition

ENVIRONMENTAL MONITORING TRACK

MONDAY, JANUARY 14, 2008

THE CONFERENCE

8:00 a.m. – Noon

KEYNOTE ADDRESS:

Title to be Announced

- *Speaker to be Announced, US Environmental Protection Agency, Washington, DC*

Session I: Advances in Environmental Site Characterization Technology

Comparison of Conventional and Enhanced Site Investigations at a Service Station Site

- *Gary Robbins, University of Connecticut, Department of Natural Resources Management and Engineering, Storrs, CT; Christine Gadaleta, SSG-Barco Inc., Monmouth Junction, VT*

Application of Multifaceted High-Resolution Data to Conceptual and Numerical Model Development in an Alluvial Ground-Water Basin

- *Ken Stelman, Geomatrix Consultants, Inc., Oakland, CA*

Break

Aquifer Characterization Data Collection in Support of Ground-Water Modeling Activities at the Former Naval Ammunition Depot in Hastings, Nebraska

- *Kevin Keller, Shaw Environmental and Infrastructure Inc., Overland Park, KS*

Site Assessment Using Laser-Induced Fluorescence (LIF) at Hydrocarbon Contaminated Sites

- *Jason Kirwin and Joann Dyson, West Central Environmental Consultants, Morris, MN*

Defining Source Areas for Direct Injection Using a Membrane Interface Probe (MIP)

- *Aleisa Bloom and George DeLong, Oak Ridge National Lab, Oak Ridge, TN; Bob Lyon, Laurie Steinberg, Bert Buell and Scott Pitz, URS Corp, Baltimore, MD*

Improving Environmental Site Assessments Through the Use of Multiple Lines of Evidence

- *Dennis Waslenchuk, Environ International Corp, Hartford, CT*

INDOOR WORKSHOPS

8:30 a.m. – Noon

Best Management Practices for Efficient Sampling Program Design (Part 1 of an 8-Hour Workshop)

- *Deana Crumbling, US Environmental Protection Agency, Washington, DC*

Noon – 1:00 p.m.

LUNCH BREAK

1:00 p.m. – 7:30 p.m.

EXPOSITION OPEN (Indoor Exhibit Hall and Outdoor Exhibit Area)

THE CONFERENCE

1:00 p.m. – 5:30 p.m.

Session II: Advances in Data Management and Data Visualization

Empowering Field Analysis With Real-Time Data Management Support

- *John Sohl and Ned Tillman, Columbia Technologies LLC, Baltimore, MD*

Automated Environmental Monitoring and Data Visualization

- *Mark Kram, Groundswell Technologies Inc., Santa Barbara, CA; E. Edward Beighley, San Diego State University Department of Civil Engineering; Sanya Sirivithayapakorn, Kasetsart University Environmental Engineering Department; Michael Lamar, Abbaroo.com; Hugo Loaiciga, University of California Santa Barbara Geography Department*

Visualization of LNAPL Distribution and Recovery Model Results Using Arc GIS

- *Kendall Wilson, Brett Milburn and Dennis Law, Langan Engineering and Environmental Services, Doylestown, PA*

The Use of Markup Languages to Organize and Understand Data: A View of the Future – EMS and XML

- *Richard Hammond, US Environmental Protection Agency, Region 4, Atlanta, GA*

BREAK

Session III: Advances in Field Hydraulic Conductivity Measurement

Comparing Slug Tests in Co-Located Direct Push and Conventional Monitoring Wells

- *Wesley McCall, Geoprobe Systems, Salina, KS; Louise Parker and Nathan Mulherin, US Army Cold Regions Research and Engineering Laboratory, Hanover, NH*

Modeling Assessment of the Direct-Push Permeameter for High-Resolution Characterization of Spatial Variations in Hydraulic Conductivity

- *Gaisheng Liu, Geoff Bohling and James Butler, Jr., Kansas Geological Survey, Lawrence, KS; Peter Dietrich, UFZ Centre for Environmental Research, Leipzig, Germany*

Evaluation of the Effective Saturated Thickness in Pumping Tests

- *Willis Weight, Montana Tech of the University of Montana, Butte, MT; Robert Schreiber, CDM, Cambridge, MA; Keith Halford, US Geological Survey, Sacramento, CA*

Determining Soil Air Permeability From a One-Well Steady-State Pumping Test

- *Gary Robbins, University of Connecticut Department of Natural Resources Management and Engineering, Storrs, CT; Bruce Olmstead, Connecticut Department of Transportation, Newington, CT*

INDOOR WORKSHOPS

1:00 p.m. – 5:30 p.m.

Best Management Practices for Efficient Sampling Program Design (Part 2 of an 8-Hour Workshop)

- *Deana Crumbling, US Environmental Protection Agency, Washington, DC*

5:30 p.m. – 7:30 p.m.

WELCOME RECEPTION (In the Indoor Exhibit Hall)

TUESDAY, JANUARY 15, 2008

THE CONFERENCE

8:00 a.m. – Noon

Session IV: Profiling Techniques for Soil, Soil Gas and Ground Water

Modified Active Gas Survey: A Novel Method of Assessment for NAPL Volatiles in Soil

- *Nicholas Albergo, HSA Engineers & Scientists, Fort Myers, FL*

Vertical Profiling of BTEX in Ground Water and Soil Gas Using a New Passive Diffusion Sampling Technique

- *Cynthia Paul, Dominic DiGiulio, John T. Wilson and Ken Jewell, US Environmental Protection Agency, National Risk Management Research Laboratory, Ada, OK*

Applications of Dynamic Yield and Water Chemistry Profiling to Hydraulic Manipulation of Ground-Water Production and Remediation Wells

- *Noah Heller, BESST, Inc., San Rafael, CA*

Simple In-Well Baffles with Snap Samplers for Multilevel Sampling in Traditional Monitoring Wells

- *Sanford Britt, ProHydro Inc., Fairport, NY*

BREAK

Session V: New Tools for Characterization of Geology and Ground Water

A New Direct-Push Tool System for Lithologic and Contaminant Logging

- *Thomas Christy, Geoprobe Systems, Salina, KS*

A New Tool for Ground-Water Velocity Measurement and Its Applications

- *J.F. Devlin, University of Kansas Department of Geology, Lawrence, KS*

Evaluation of Various Monitoring Well Development Techniques and a New Tool for Use in Small-Diameter Wells

- *Thomas Kwader, URS Corp, Tallahassee, FL*

INDOOR WORKSHOPS

8:00 a.m. – Noon

Advanced Design Application and Data Analysis for FP-XRF in Soil Matrices (Part 1 of an 8-Hour Workshop)

- *Deana Crumbling, US Environmental Protection Agency, Washington, DC; Speaker to be Announced, New Jersey Dept of Environmental Protection, Trenton, NJ*

8:00 a.m. – 10:00 a.m.

Barometric Effects on Ground-Water Level Data

- *David Wardwell, In-Situ, Inc., Fort Collins, CO*

OUTDOOR WORKSHOPS AND EQUIPMENT DEMONSTRATIONS

9:00 a.m. – Noon

Field Site 1

9:00 a.m. – 10:00 a.m.

Taking the Obstacles Out of Remote Water-Level Monitoring

- *Tricia Lane, Solinst Canada Ltd, Georgetown, ON*

Field Site 2

10:00 a.m. – 11:00 a.m.

Using the HydraSleeve: How to Collect Ground-Water Samples for All Contaminants Without Purging

- *Kent Cordry, GeoInsight, Inc., Las Cruces, NM*

11:00 am. – Noon

Twelve-Volt DC Pumping Technologies

- *Jassen Savoie, Geotech Environmental Equipment Inc., Denver, CO*

Noon – 1:00 p.m.

LUNCH BREAK – LUNCH PROVIDED IN THE INDOOR EXHIBIT HALL

Noon – 7:30 p.m.

EXPOSITION OPEN (Indoor Exhibit Hall and Outdoor Exhibit Area)

THE CONFERENCE

1:00 p.m. – 5:30 p.m.

Session VI: Advances in Sampling and Field Analysis of Soil

The AquaLock Sediment Sampler – Saturated Sediment Sampling with Sonic Technology

- Mike Casey, Sonic Sampling and Supply, Woodacre, CA

Quantifying DNAPL Compounds in the Subsurface at Contaminated Sites as Affected by Sampling Method Attributes and Environmental Conditions

- *Ryan Oestereich and Robert Siegrist, Colorado School of Mines, Environmental Science and Engineering Department; Michele Crimi, Eastern Tennessee State University*

Applications of a Humidity-Resistant PID in Soil Screening for VOCs

- *Geoff Hewitt, Ion Science Americas, Waterbury, VT*

Cost-Effective Soil Characterization in the Field Using XRF

- *Andrew Danzig, Malcolm Pirnie Inc., Middletown, CT*

BREAK

Session VII: Advances in Sampling and Field Analysis of Ground Water

Influence of Dissolved Oxygen Convection on Well Sampling

- *Don Vroblesky, Clifton Casey and Mark Lowery, US Geological Survey, Columbia, SC*

Variability Introduced by Field Procedure: The Snap Sampler vs. Traditional Purge Sampling

- *Sanford Britt, ProHydro Inc., Fairport, NY*

Results From Recent Studies Evaluating the Snap Sampler

- *Louise Parker and Nathan Mulhern, US Army Cold Regions Research and Engineering Laboratory, Hanover, NH*

Field Measurement of Turbidity: Clearing Up a Murky Issue

- *Linda Hoffman, HSW Engineering, Inc., Tampa, FL*

INDOOR WORKSHOPS

1:00 p.m. – 5:30 p.m.

Two Concurrent Workshops

Advanced Design Application and Data Analysis for FP-XRF in Soil Matrices (Part 2 of an 8-Hour Workshop)

- *Deana Crumbling, US Environmental Protection Agency, Washington, DC; Speaker to be Announced, New Jersey Dept of Environmental Protection, Trenton, NJ*

Practical Karst Hydrogeology With Emphasis on Ground-Water Monitoring

- *Ralph Ewers and Peter Idstein, Ewers Water Consultants, Richmond, KY*

OUTDOOR WORKSHOPS AND EQUIPMENT DEMONSTRATIONS

Field Site 1

2:00 p.m. – 3:00 p.m.

Low-Flow Sampling Made Easy: The Micropurge Sampling System

- *David Kaminski, QED Environmental Systems Inc., Clayton, CA*

Field Site 2

1:00 p.m. – 2:00 p.m.

Improving Data Acquisition and Making Sense of Your Field Data – The Latest Innovation in Ground-Water Monitoring Networks

- *Peter Westerhuis, Van Essen Instruments; Eric Coulombe, Schlumberger Water Services, Waterloo, ON*

3:00 p.m. – 4:00 p.m.

Installation and Operation of Real-Time Environmental Monitoring Systems

- *Gregg Gustafson, Instrumentation Northwest, Kirkland, WA*

4:00 p.m. – 5:00 p.m.

Quick-to-Deploy Sensor Mesh Networks With Retriever

- *Dave Fischer, QED Environmental Systems, Ann Arbor, MI*

5:30 p.m. – 7:30 p.m.

SOCIALIZER (In the Indoor Exhibit Hall)

WEDNESDAY, JANUARY 16, 2008

8:00 a.m. – Noon

EXPOSITION OPEN (Indoor Exhibit Hall and Outdoor Exhibit Area)

INDOOR WORKSHOPS

9:00 a.m. – 10:00 a.m.

Mass Flux Distribution Using the High-Resolution Piezocone and GMS and Innovative Cost-Effective Ground-Water Monitoring Well Design

- *Mark Kram, US Navy, Port Hueneme, CA; Norm Jones, Brigham Young University; Jessica Chau, Gary Robbins and Amvrossios Bagtzoglou, University of Connecticut; Jeff Farrar, US Bureau of Reclamation; Tom Dalzell, AMS*

10:00 a.m. – Noon

Wireless Telemetry Made Easy

- *Gregg Gustafson, Instrumentation Northwest, Kirkland, WA*

OUTDOOR WORKSHOPS AND EQUIPMENT DEMONSTRATIONS

Field Site 1

9:00 a.m. – 11:00 a.m.

Low-Flow Ground-Water Sampling – Digital Field and Data Management Practices

- *David Wardwell, In-Situ Inc., Fort Collins, CO*

Field Site 2

9:00 a.m. – 10:00 a.m.

Using a Flow Cell and Submersible Pump for Ground-Water Sampling Studies

- *Jassen Savoie, Geotech Environmental Equipment, Denver, CO; Laura St. Pierre, YSI, Yellow Springs, OH*

10:00 a.m. – 11:00 a.m.

Passive Sampling: An Effective, Cost-Saving Approach to Long-Term Ground-Water Monitoring

- *Sanford Britt, ProHydro Inc., Fairport, NY*

11:00 a.m. – Noon

Low-Flow Sampling with Optical Dissolved Oxygen Technology

- *Jassen Savoie, Geotech Environmental Equipment, Denver, CO; Laura St. Pierre, YSI, Yellow Springs, OH*

THE CONFERENCE

10:00 a.m. – Noon

Session IX: Real-Time and Continuous Monitoring in Environmental Media

Sensors: A New Way to Collect Environmental Data for Regulatory Decision Making?

- *Stuart Nagourney, New Jersey Dept of Environmental Protection, Office of Quality Assurance, Trenton, NJ*

Using Continuous Monitoring in Coordination with Grab Sampling to Study River Eutrophication as Part of a Dissolved Oxygen TMDL

- *William Stringfellow, Jeremy Hanlon and Sharon Barglin, University of the Pacific Environmental Engineering Research Program, Stockton, CA*

Real-Time Monitoring in Blue-Green Algae Contents in Some Land and Sea Areas in Southwestern Finland

- *Juha Kaaria and Olli Loisa, Turku University of Applied Sciences, Turku, Finland*

Investigation of the Origin and Consequences of Caspian Sea Pollution

- *S. Amaneh Sajjadi, Azad University Department of Meteorology, Rasht, Iran*

Noon – 12:30 p.m.

CLOSING SESSION AND CONFERENCE ADJOURNMENT