

5 day training Course

Low-Flow Groundwater Sampling

February 19—23, 2011

Holiday Inn Corniche
Al-Khobar, Saudi Arabia

Organized by:



Instructors:



Linebach ■ Funkhouser
International LLC
environmental consulting & education



Purpose: The purpose of the training is to provide training for groundwater sampling techniques with emphasis placed on low-flow (micropurge) sampling. The goal of the training is that, at its completion, training attendees will be sufficiently proficient in the use of low-flow sampling equipment to conduct low-flow sampling independently, without further field oversight from the training instructor.

Scope: The training scope will consist of a classroom presentation of basic principles of groundwater sampling strategies, procedures and equipment as well as time spent in the field operating the equipment. During the training an access to at least one groundwater monitoring well will be arranged that can be used for the field training component. Transportation to and from the field training site/(s) will be arranged for participants. Five sets of field meters and equipment will be available for the participants to be used through groundwater monitoring well sampling..

Following topics will be discussed.:

- Field Documentation
- Field Equipment Decontamination
- Field QA/QC
- Sample Handling and Shipment
- Health & Safety
- Groundwater Sampling Strategies and Procedures
 - General Information
 - Review of Purging Strategies
 - Selection and Operation of Purging and Sampling Devices
 - Sample Collection Procedures
 - Low-Flow Purging (Micropurging)

Training material :

- Copies of the PowerPoint slides used in the classroom presentation
- Reference information from the manufacturers regarding calibration and use of the equipment used in the class
- Select technical references

Course registration fee

ETMA member	\$ 2,000	Non-ETMA member	\$ 2,200
-------------	----------	-----------------	----------

Saturday Feb 19, 2011

- Introduction
- Field Documentation
- Field Equipment Decontamination
- Groundwater Sampling Strategies and Procedures: General Information
- Groundwater Sampling Strategies and Procedures: Review of Purging Strategies
- Introduction of Sampling Equipment

Sunday Feb 20, 2011

- Groundwater Sampling Strategies and Procedures: Selection and Operation of Purging and Sampling Devices
- Groundwater Sampling Strategies and Procedures: Sample Collection Procedures
- Field QA/QC
- Health & Safety
- Sample Handling and Shipment
- Introduction of Sampling Equipment

Monday Feb 21, 2011

- Field Training I – Low-Flow Sampling
- Field Trip – Inspectorate Laboratory Visit

Tuesday Feb 22, 2011

- Field Training II – Low-Flow Sampling
- Field Training III – Low-Flow Sampling

Wednesday Feb 23, 2011

- Equipment Calibration Review
- Review/Discussion of GCMP update and changes
- Course Review and Feedback
- Presentation of Certificates

Meeting your Course Instructors:

Jack Wilhoit, P.G., will be the primary instructor. He is a Senior Hydrogeologist based in LFI's Louisville, Kentucky, USA, office. He will personally lead the classroom and field instruction. He is an expert on low-flow groundwater sampling and has provided classroom and field instruction on this topic in the past. He has an M.S. in Geology (Hydrogeology Specialization) from the University of South Florida, over 10 years of experience, and is a registered Professional Geologist in Kentucky, Tennessee, and Florida.

Bashar Masri, P.E., will be the assistant instructor/interpreter. He will assist Mr. Wilhoit, as needed, with logistics, course organization, and the dissemination of classroom and field equipment and materials. He is fluent in Arabic, as well as English, and will assist, as needed, as an interpreter. He is LFI's Managing Director for Operations in Saudi Arabia. He has an M.S. in Civil Engineering from the University of Louisville, over 25 years of engineering experience, and is a registered Professional Engineer in Kentucky.

Four easy ways to register

Contact Mr. Syed Imran Qaudri

☎: +966 3 860 7295, 📠: +966 501837158, 📠: +966 3 860 1205,

✉: etma@kfupm.edu.sa,

✉: ETMA, Saudi Aramco, P.O. Box 839, Dhahran 31311, Saudi Arabia

Methods of payment

You can directly deposit in our following bank account

S.A. Section of Air & W. M. Assoc.

(Bank Name: National Commercial Bank

Account Number: 05 3221 2300 0200

Or, You can make out a cheque to;

S.A. Section of Air & W. M. Assoc.

And send to following address:

James Findley

Saudi Aramco

P.O. Box 839, Dhahran 31311, Saudi Arabia

Interested applicant can fill out this form and fax or email

Name of applicant: _____

Company: _____

ETMA Id No.: _____

Mailing address: _____

Postal Code/ City: _____

Country: _____

Mobile: _____

Fax: _____

Email: _____

