

Get the Most Bang from Your High Resolution Buck

26th Annual Tanks Conference- Louisville KY - September 2018

No.1 - Think Big

No.2 – Plan for More LNAPL

**No. 3 – Require Robust Stakeholder
Communication**

No. 4 – Use the Right Direct Imaging Tool

No. 5 – Collect Representative Samples

No. 6 - Develop Useful Analysis

No. 1 – Think BIG

Clear Goals

Modern LNAPL Science

US EPA Triad Approach

Environmental Hydrogeology

Wise Allocation of Resources

No. 2 – Plan for More LNAPL

Assume Offsite Migration

Map Fuel Constituents over 1 ppm as LNAPL

Assume LNAPL up to 30 feet below GW

Know Geologic Setting

LNAPL Body Extent - Way Under Estimated

No. 3 – Require Robust Stakeholder Communication

**The LNAPL CSM will be Much Different than Planned
Schedule Daily Data Analysis Calls with All Stakeholders**

Leave the Field with No Questions

No. 4 – Use the Right Direct Imaging Tool

**Deploy an MIHPT System for Weathered Gasoline
LNAPL**

No. 5 – Collect Representative Samples

Sample Intervals of LNAPL Impact > 5 Feet Thick

Soil Cores No More than 6 Inches Long

Well Screens No More than 5 Feet Long

Screens Do Not Need to Cross GW Surface

Know the Hydrogeology

Onsite Chemical Analysis Improves Outcomes

No. 6 – Develop Useful Analysis

Combine Samples Results with Direct Imaging Data

High Rez. LNAPL Body Volume/Mass Estimates

High Rez. LNAPL Transmissivity Analysis

High Rez. Mass Flux Estimates

Dramatically Improve Project Outcomes

Thank You

Roger Lamb

rogerlambconsulting@gmail.com

615 406 0759