

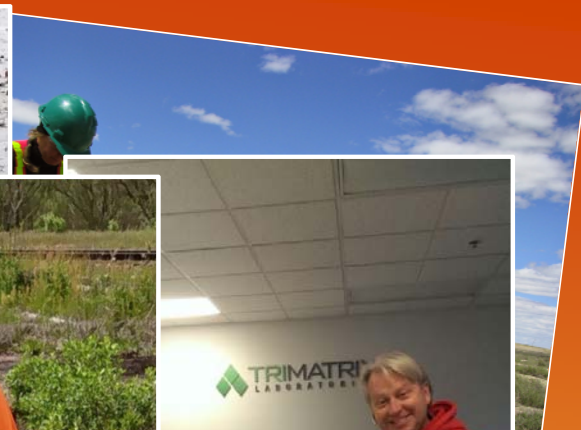


# SampleServe

## The Future of Data Collection and Environmental Reporting

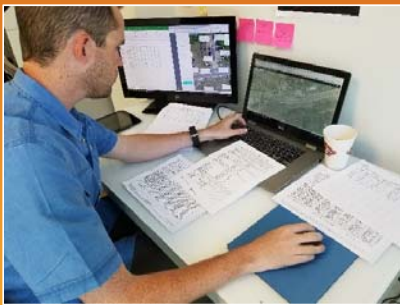
Russell Schindler  
231-218-7955  
[russell@sampleserve.com](mailto:russell@sampleserve.com)







# Current Industry Status – Disconnected Desktop Software And Paper.



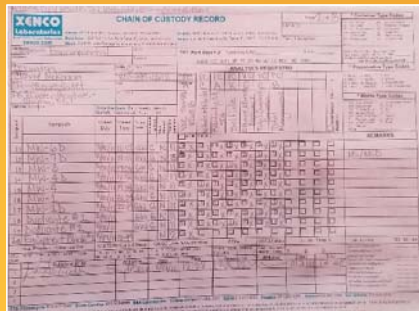
**Project Management -  
Work Scope Details**



**Hand Written Data  
& Field Notes**



**Handwritten Sample  
Bottle Labels**



**Handwritten Chain-of-  
Custody and Lab Instructions**

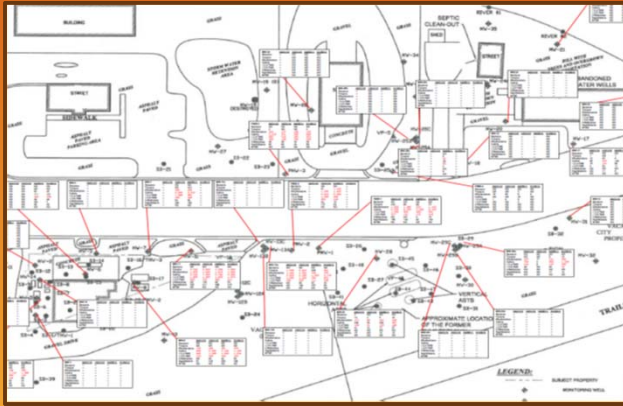


**Manual Data Entry**

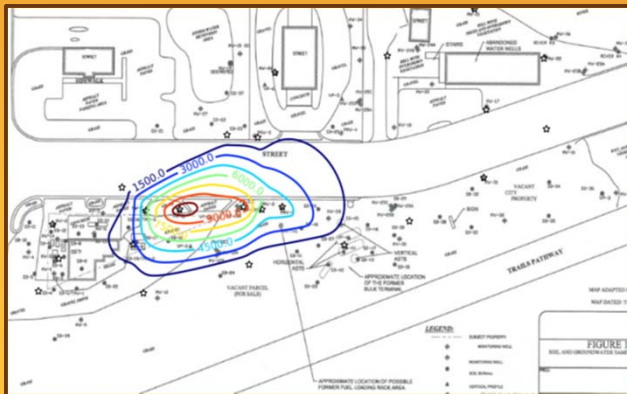




# Reports Take Days and Are Billed By The Hour!



Analytical Box Maps



Iso-Chemical Contour Maps

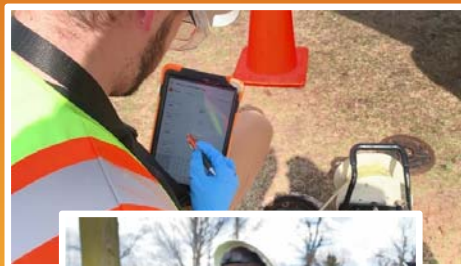
Analytical Data Results Table											
Well	Depth	Parameter	Unit	Value	Method	Notes	Parameter	Unit	Value	Method	Notes
MW-1	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-2	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-3	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-4	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-5	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-6	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-7	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-8	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-9	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-10	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-11	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-12	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-13	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-14	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-15	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-16	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-17	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-18	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-19	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-20	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-21	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-22	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-23	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-24	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-25	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-26	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-27	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
MW-28	0.00-0.25	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.25-0.50	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.50-0.75	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	
	0.75-1.00	1.00E-1.00E-1	mg/L	1.00	1		1.00E-1.00E-1	mg/L	1.00	1	



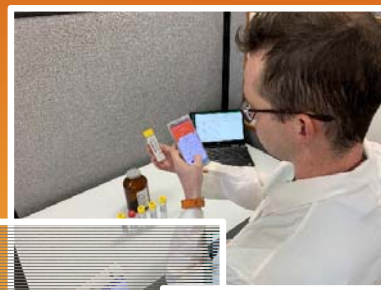
# The Future of Environmental Data Management - Mobile Applications And Connected Software



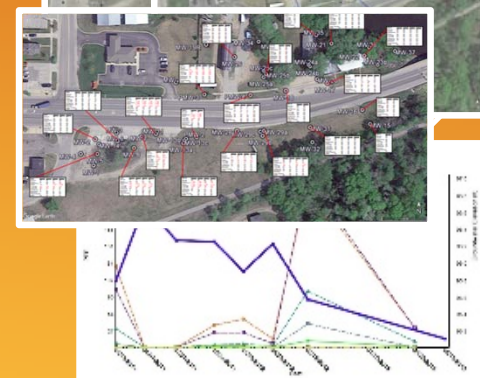
**Connected Project  
Management**



**Mobile Data Entry &  
Bar-Code & QR Code  
Labels**



**Lab Sample  
Bottle Scanning**



**Automated  
Reports**





# Data Capture Using Mobile Applications





# Digital Chain-Of-Custody



*C. R. M. Schindler*

**Russell Schindler**

03/26/2019 9:26

44.5678, -85.4532

Transfer History			
Confirmed By	Sample ID MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20		
Requisitioned By	John Cade	Received By	Harry Lafferty
Confirmed By	Sample ID MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20		
Requisitioned By	Russell Schindler	Received By	Harry Lafferty
Confirmed By	Sample ID MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20		
Requisitioned By	Russell Schindler	Received By	Harry Lafferty



## User Authentication

Patents #10,198,676 and #10,281,367



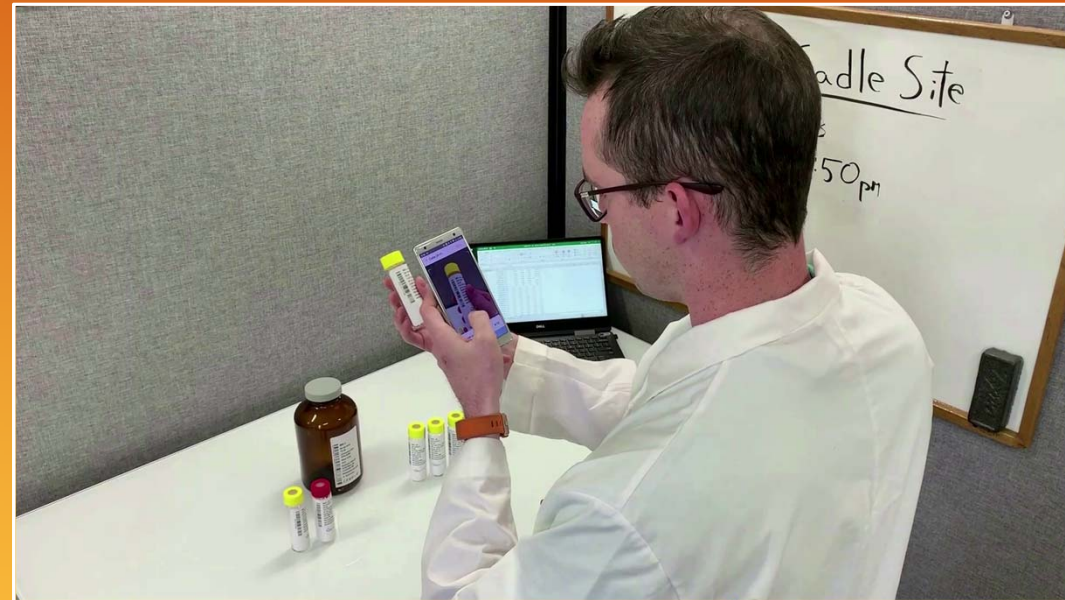
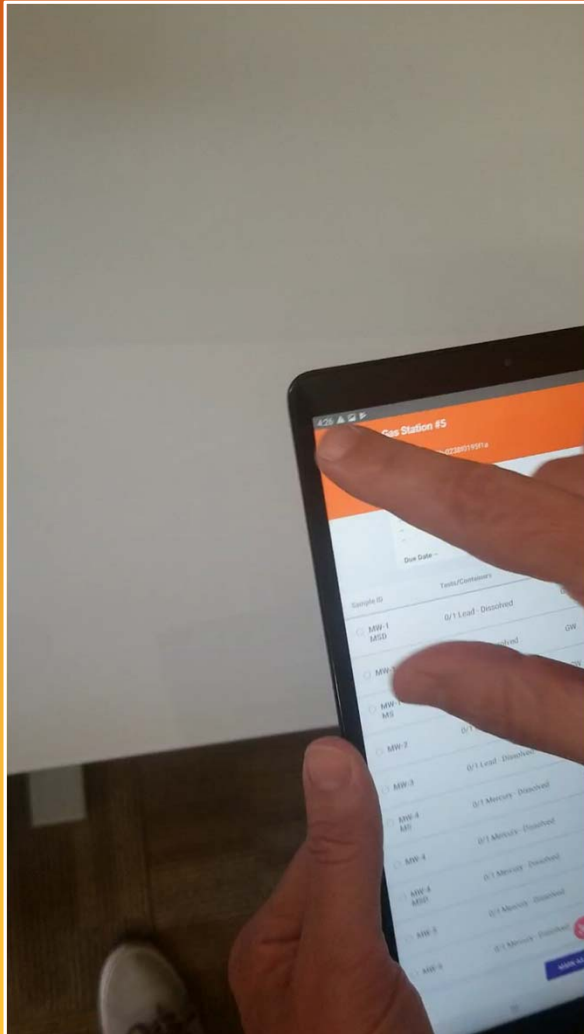


# In The Field Label Printing w/ Barcodes and QR Codes



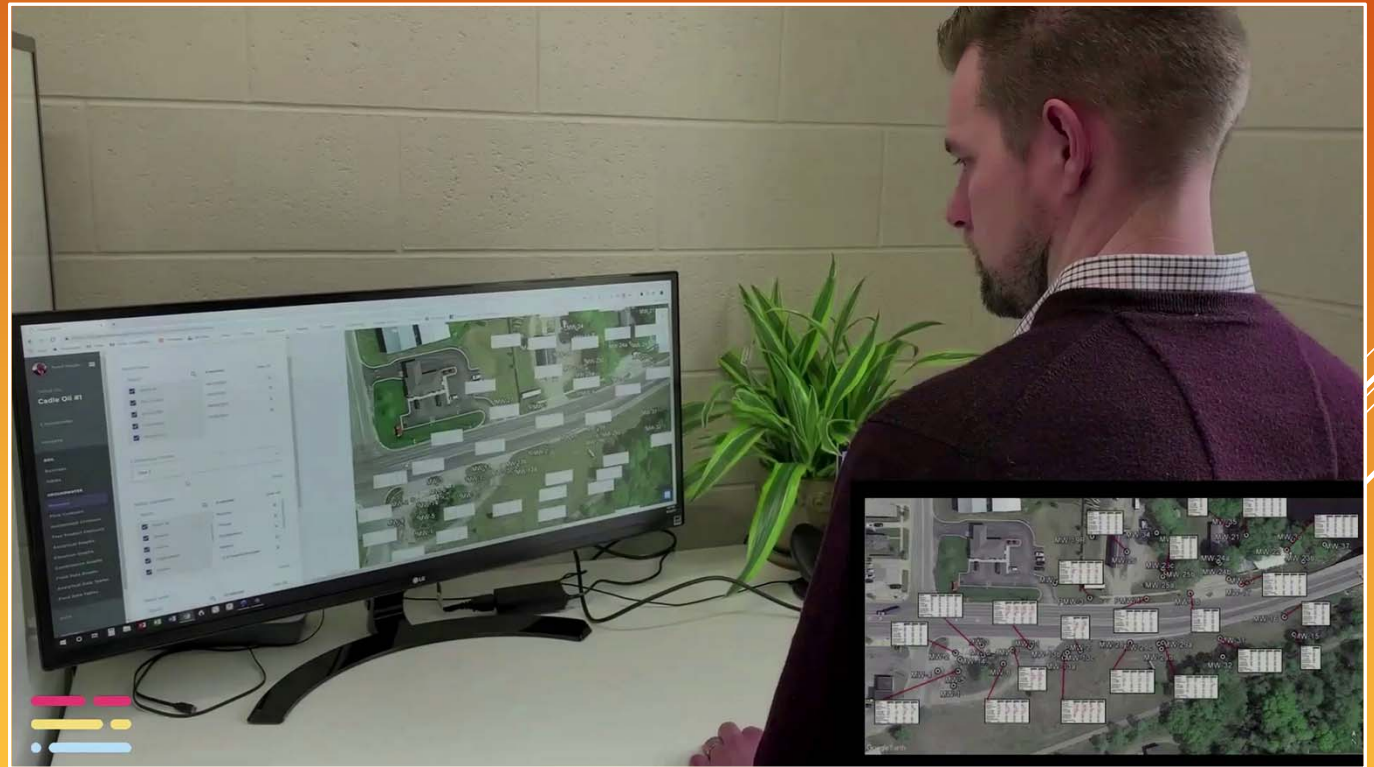
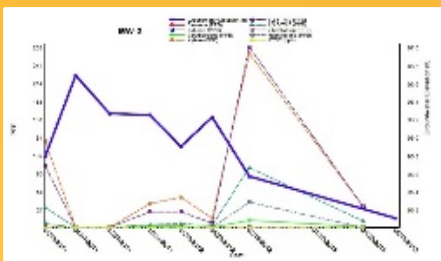
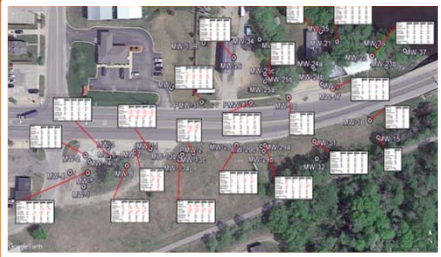


# Laboratory Mobile Applications For Logging Samples





# Info-graphic Reports Generated Instantly From Data





# Other Products/Services – Hydraulic Conductivity

ground  
water

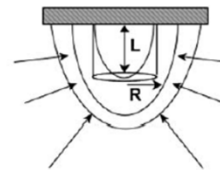
## Determining Hydraulic Conductivity Using Pumping Data from Low-Flow Sampling

by Gary A. Robbins<sup>1</sup>, Alejandra T. Aragon-Jose<sup>2</sup>, and Andres Romero<sup>2</sup>

### Abstract

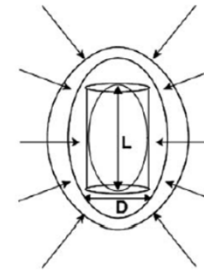
Hydraulic conductivity values computed using the steady-state discharge and drawdown attained while low-flow sampling were evaluated to determine if they were equivalent to those determined from slug testing. Based on testing 12 wells, it was found that the results were statistically equivalent. Conductivity values computed using low-flow sampling parameters were also evaluated as to their reproducibility in actual practice by analyzing consultant data for three wells sampled over three quarterly monitoring periods by four field technicians. The results were found to be reproducible within about a factor of 2 or better. Since the method is based on only one pair of parameters, diligence is required in attaining steady state and in accurately measuring the flow rate and drawdown. Conductivity values computed using this approach can enhance the use of low-flow data gathered in water quality sampling, avoid the need for slug testing in a subsequent phase of investigation, and help reduce the cost of characterizing sites when multilevel samplers are used. Given the practical range of discharge in low-flow sampling, the method was found to be applicable at conductivity values somewhat greater than  $10^{-6}$  cm/s. Given the typical accuracy of water level meters and pressure transducers and a maximum discharge of 1 L/min, as mandated by regulatory guidance, the method has a calculated upper conductivity limit in the range of  $10^{-3}$  to  $10^{-2}$  cm/s.

HALF ELLIPSOID  
Dachler (1936)



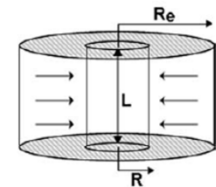
$$Q = \frac{2\pi LKH}{2.303 \log \left[ \frac{L}{R} + \sqrt{1 + \left( \frac{L}{R} \right)^2} \right]}$$

FULL ELLIPSOID  
Hvorslev (1951)



$$Q = \frac{2\pi LKH}{2.303 \log \left[ \frac{L}{D} + \sqrt{1 + \left( \frac{L}{D} \right)^2} \right]}$$

RADIAL FLOW  
Muskat (1937)



$$Q = \frac{2\pi LKH}{2.303 \log [R_e/R]}$$

Where:

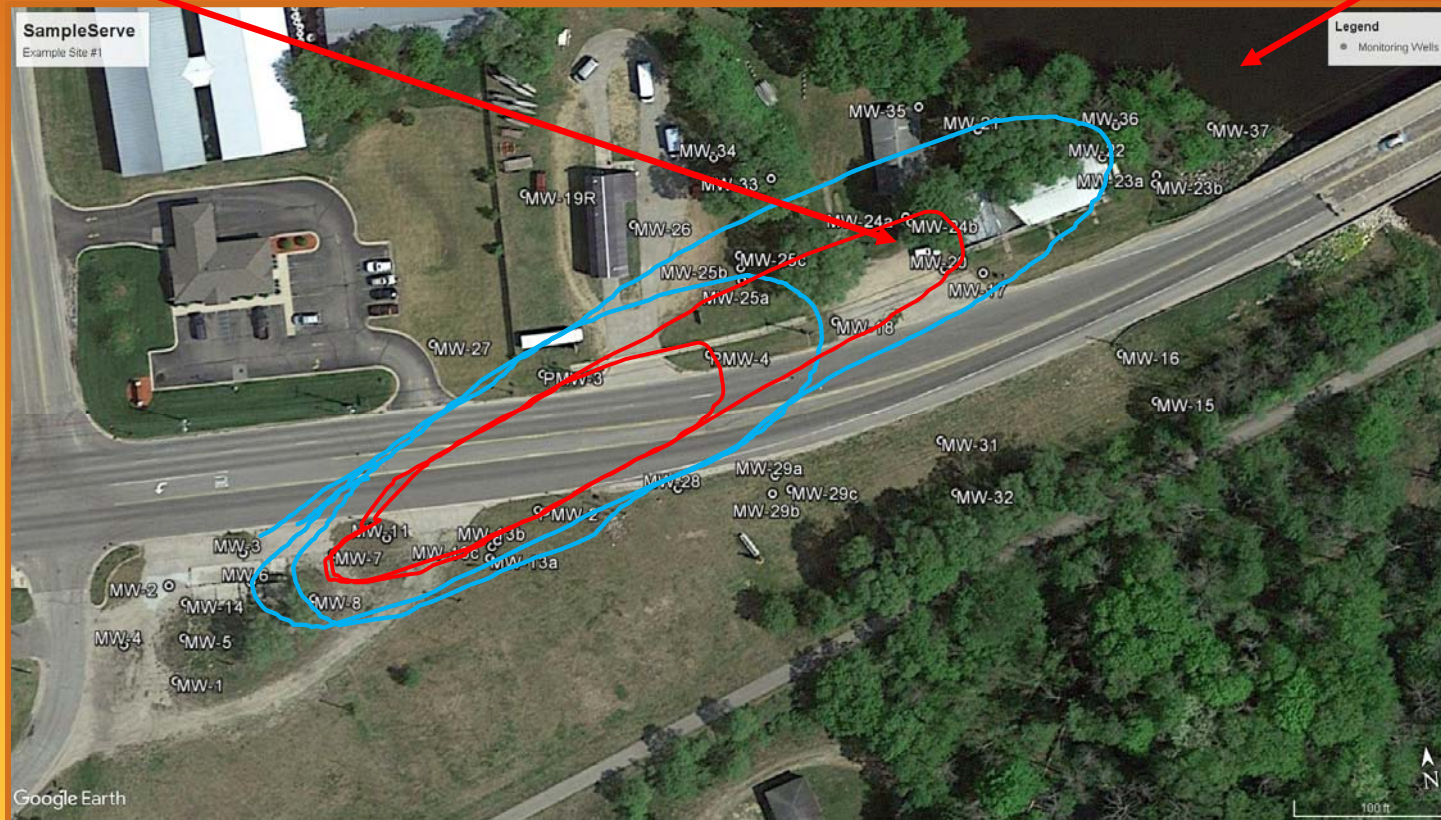
Q = steady state flow rate  
L = intake length  
K = hydraulic Conductivity  
H = steady state drawdown  
R = intake radius  
D = intake diameter  
R<sub>e</sub> = radius of influence



# Other Products/Services – Fate And Transport Modeling

**Drinking  
Water Well!**

**Surface  
Water!**



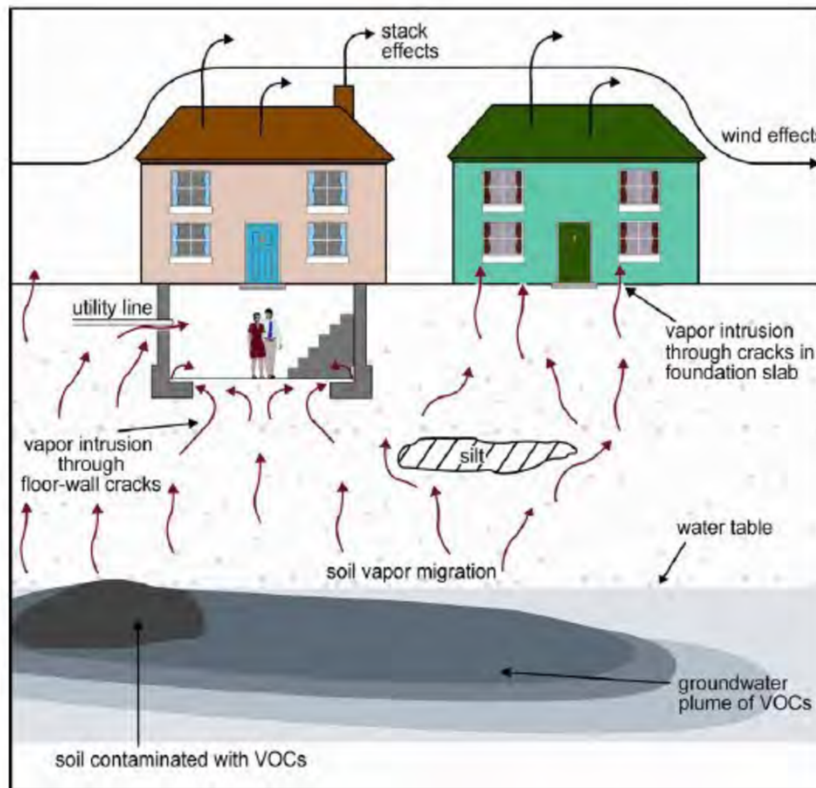
Where And  
How Far Is The  
Contaminant  
Going To  
Travel 2, 5, 10  
Years From  
Now?

Determines  
Future  
Liability!





# Other Products/Services – Soil Vapor Intrusion Evaluation



The following equation can be used to calculate the Henry's Law Constant at a groundwater temperature of 25 degrees Celsius:

$$H'_{25} = \frac{Hc_{25} \times \left(\frac{1000 L}{m^3}\right)}{R \times (298.15 K)}$$

where:

- $H'_{25}$  = Dimensionless Henry's Law Constant at 25 degrees Celsius
- $Hc_{25}$  = Henry's Law Constant at 25 degrees Celsius (atm-m<sup>3</sup> per mole)
- $R$  = Universal gas constant (0.082057 L-atm/mol-degrees Kelvin)

For groundwater temperatures other than 25 degrees Celsius, the following equation is used to calculate Henry's Law Constant:

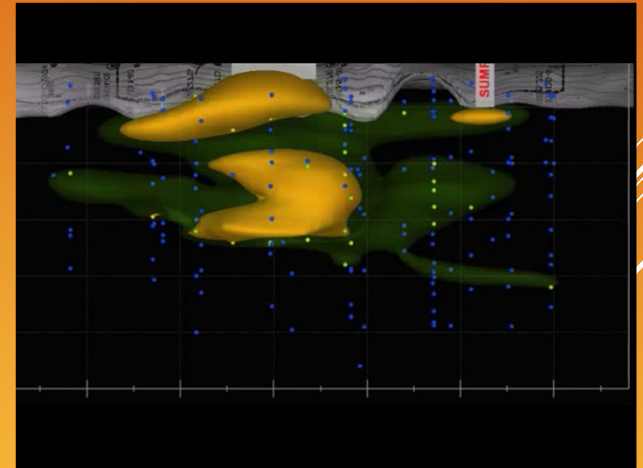
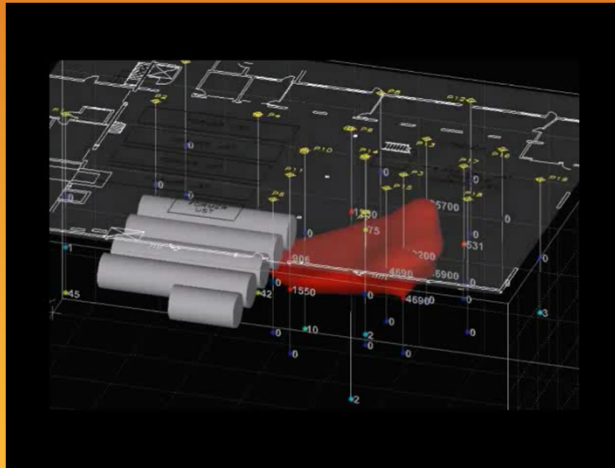
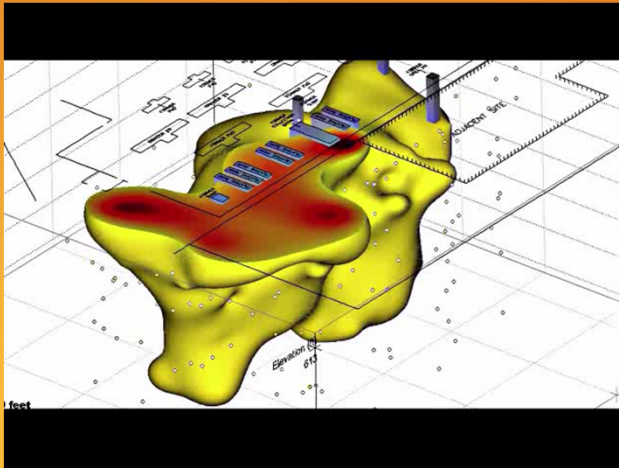
$$H'T_{gw} = Hc_{25} \times \exp \left[ \left( \frac{DH_{v,b}}{RC} \right) \times \left( \frac{1 - \frac{T_{gw}}{T_{crit}}}{1 - \frac{T_{boil}}{T_{crit}}} \right)^n \times \left[ \left( \frac{1}{T_{gw}} \right) - \left( \frac{1}{298.15 K} \right) \right] \right]$$

where:

- $H'T_{gw}$  = Dimensionless Henry's Law Constant at the groundwater temperature
- $Hc_{25}$  = Henry's Law Constant at 25 degrees Celsius (atm-m<sup>3</sup> per mole)
- $DH_{v,b}$  = Enthalpy of vaporization at the normal boiling point (cal/mol)
- $RC$  = Universal gas constant (1.9872 cal/mol-K)
- $T_{gw}$  = Groundwater temperature (degrees Kelvin)
- $T_{crit}$  = Critical temperature (degrees Kelvin)
- $T_{boil}$  = Normal boiling point (degrees Kelvin)
- $n$  = If  $(T_{boil}/T_{crit} < 0.57)$ ,  $n = 0.3$   
 If  $(T_{boil}/T_{crit} > 0.71)$ ,  $n = 0.41$   
 If  $(0.57 < T_{boil}/T_{crit} \leq 0.71)$ ,  $n = (0.74 \times T_{boil}/T_{crit} - 0.116)$

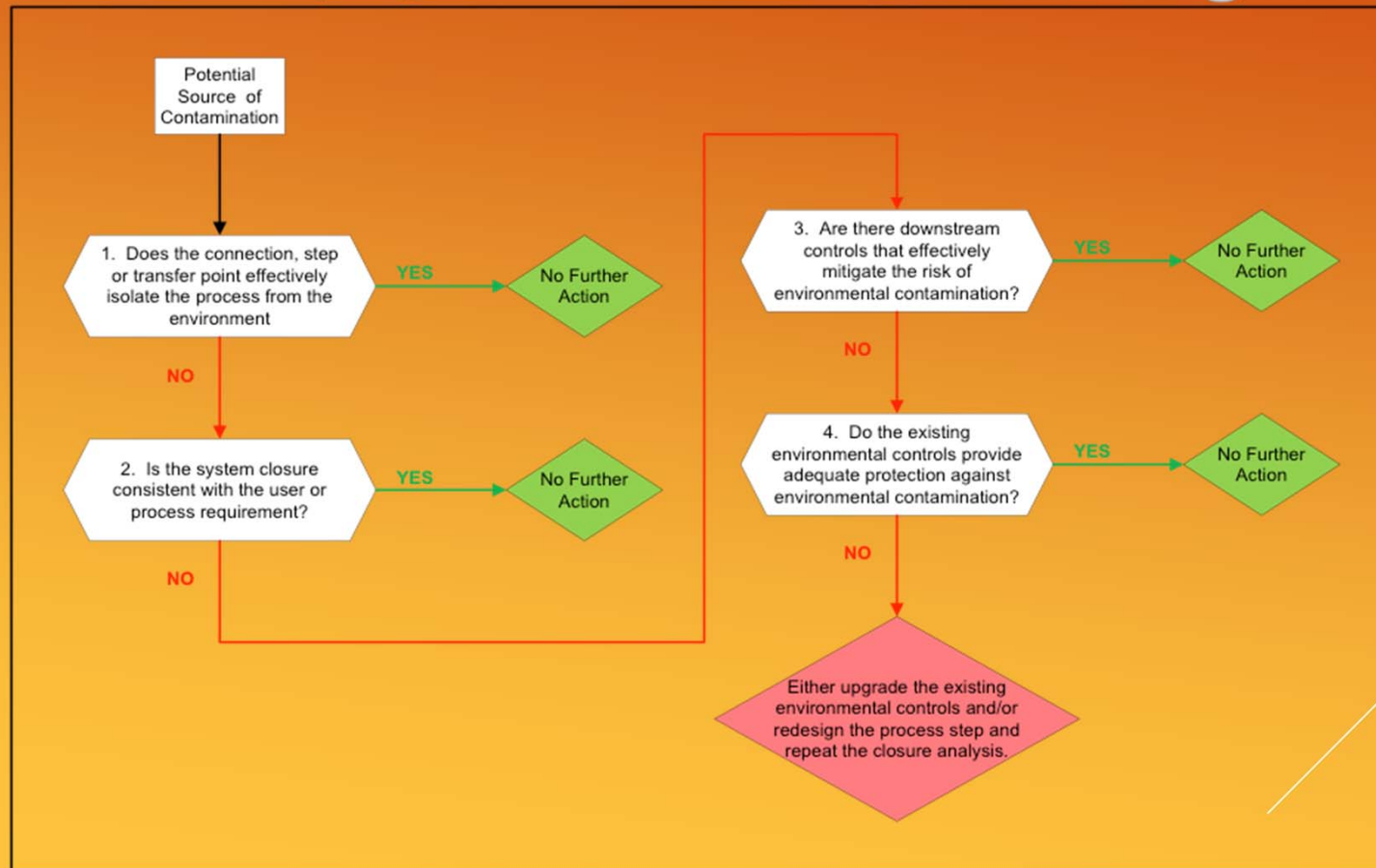


## Other Products/Services – 3-D Plume Rendering





# Other Products/Services – Artificial Intelligence (AI) and Machine Learning





# How Digital Chain-Of-Custody Works

Sample



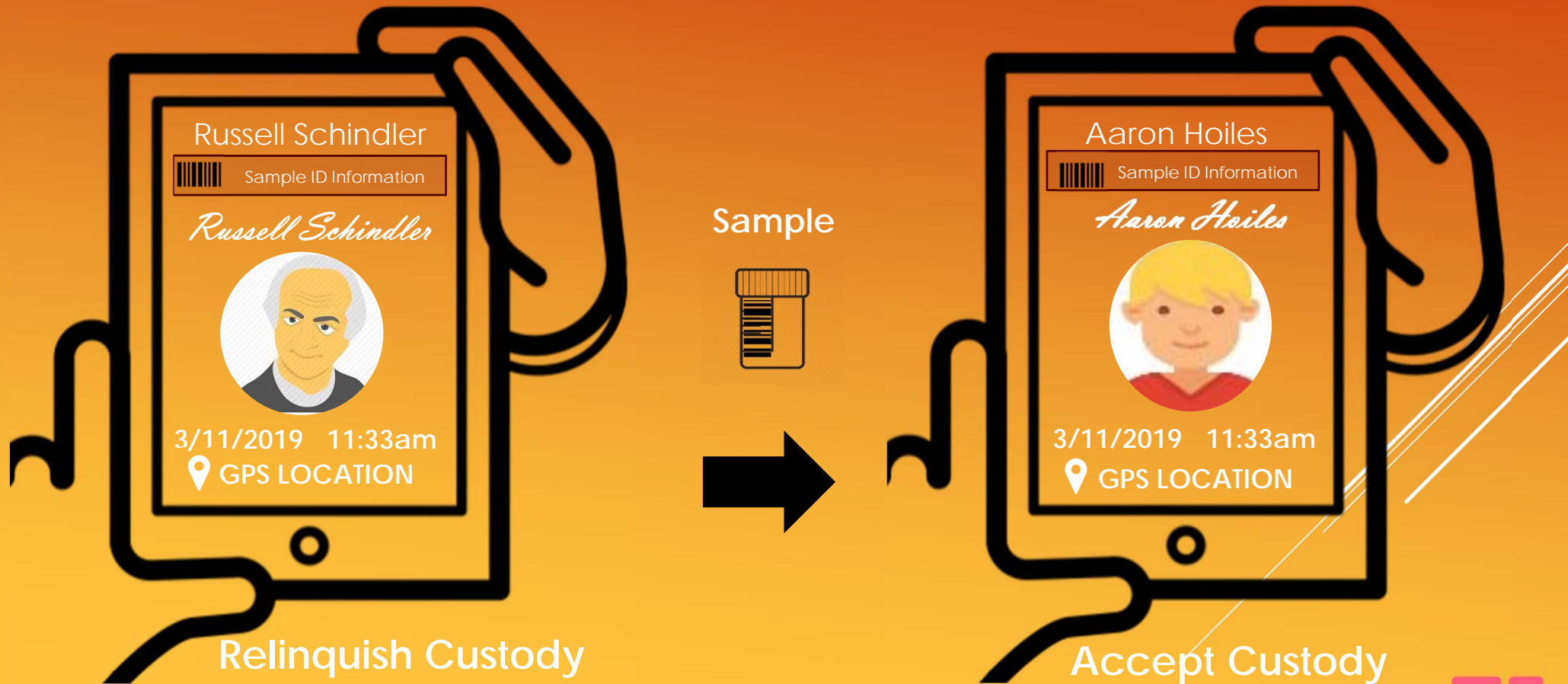
- Username and Password
- Signature
- Selfie
- Date/Time & GPS Location
- Print Label w/ Bar-Code and/or QR-Code
- Patents Include Other Bio-metrics

**Patents #10,198,676 and #10,281,367**






# How Digital Chain-Of-Custody Works





# Digital COC

 **SampleServe**

Chain of Custody

Sign Digital COC at [sampleserve.com/labapp](https://sampleserve.com/labapp)

**Client Information**  
**Ford Motor Company**  
123 Main St., Coalville MI 49631  
(630) 784 78390  
user@examplecompany.com  
Due Date **03/27/2019 16:00**

**Project Information**  
Report to **Aston Marder**  
Copy to **Jill ExampleLady**  
Purchase Order **---**  
Project Name **Example Company 1**  
Project Number **392307123**

**Invoice Information**  
Attn **Shelly Homer**  
Comp. Name **Arcadis**  
110 Main St., Traverse City, MI 49684  
(269) 784 8568  
Purchase Order **12345689**

**Turn Around Time**  
**Rush?** (Lab MUST Be Notified)  
☐ Same Day ☐ Three Day  
☐ Next Day ☐ Five Day  
☐ Two Day ☒ Standard  
Chain of Custody ID: 1149145

Item #	Sample ID	Date Collected		Matrix	Analytical Parameters, Number of Containers, and Preservatives										Comments
		Date	Time		Filtered (Y/N)	N	N	N	N						
1	MW-1	03/24/2019	08:00	GW	1	1	3	3							Comments
2	MW-2	03/24/2019	08:34	GW	1	1	3	3							Comments
3	MW-3	03/24/2019	09:15	GW	1	1	3	3							Comments
4	MW-4	03/24/2019	09:15	GW	1	1	3	3							Comments
5	MW-5	03/24/2019	10:26	GW	1	1	3	3							Comments
6	MW-5 MS	03/24/2019	10:26	GW	1	1	3	3							Comments
7	MW-5 MSD	03/24/2019	11:00	GW	1	1	3	3							Comments
8	MW-7	03/24/2019	11:44	GW	1	1	3	3							Comments
9	MW-8	03/24/2019	12:18	GW	1	1	3	3							Comments
10	MW-9	03/24/2019	12:48	GW	1	1	3	3							Comments

**Special Instructions or Notes**  
Level IV Reporting Dis. Metals = A5,A5,Ba,Cd, Cr, Pb, Se, H5 \*\*REFER TO TABLE\*\*

03/26/2019Example Company 1Page 1 of 3

PDF  
&  
CSV



# Digital COC



## Chain of Custody

Sign Digital COC at [sampleserve.com/labapp](https://sampleserve.com/labapp)

### Transfer History

Collected by



Jake Cadle

Sample ID

MW-1, MW-2, MW-3, MW-4, MW-5, MW-5 MS, MW-5MSD, MW-7, MW-8, MW-9, MW-10, MW-11, MW-13, MW-14, MW-14 MS, MW-14 MSD

#### Custody Transfer #1

Relinquished By



Jake Cadle  
03/25/2019 12:15  
44.5678, -85.4532

Received By



Russell Schindler  
03/26/2019 9:26  
44.5678, -85.4532

Received at the lab

Received By



Harry Labguy  
3/26/2019 10:06  
44.5678, -86.4444

Collected by



Russell Schind

Sample ID

MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, Duplicate #1, Duplicate #2, Field Blank #1, Equipment Blank #1, Equipment BLank #2, Trip Blanks

#### Custody Transfer #1

Relinquished By



Russell Schindler  
03/26/2019 9:26  
44.5678, -85.4532

Received at the lab

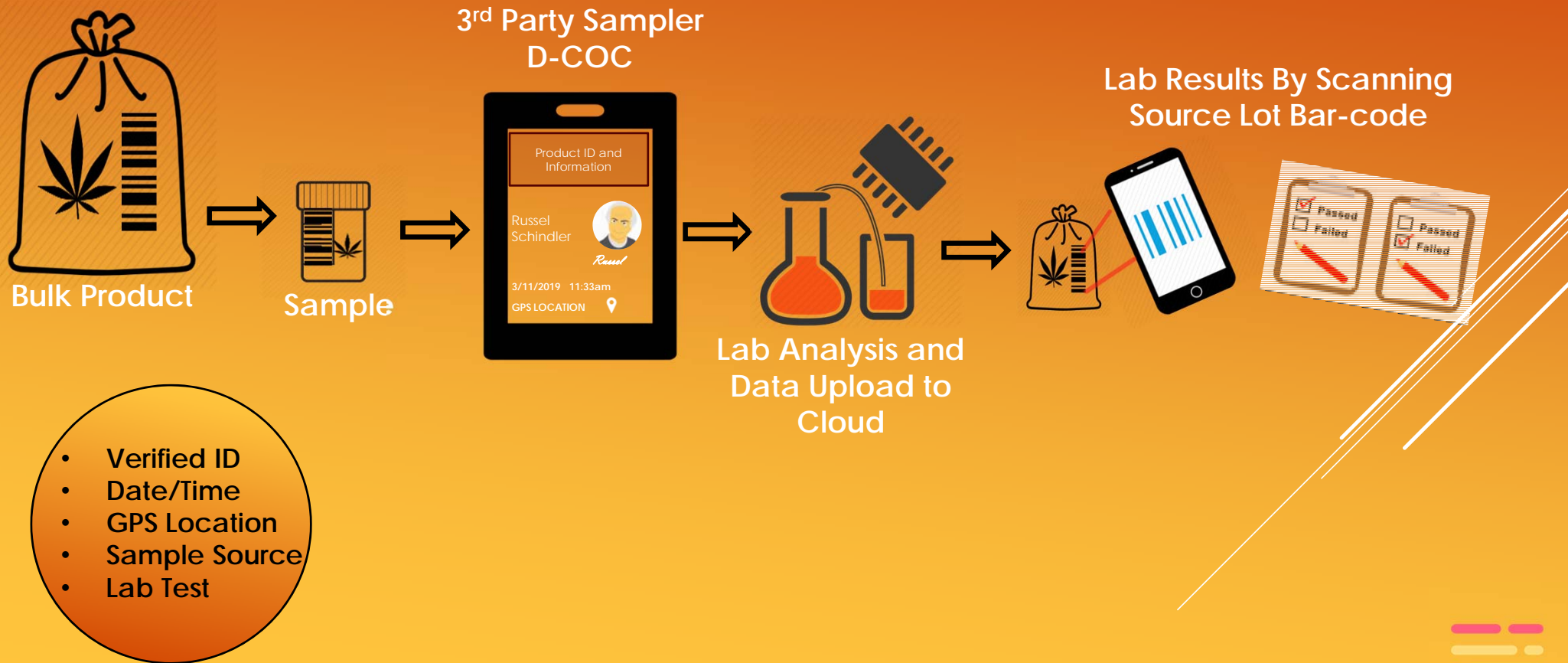
Received By



Harry Labguy  
3/26/2019 10:06  
44.5678, -86.4444



# Digital Chain-Of-Custody For Cannabis Lab Testing







# SampleServe

## Questions?

**Russell Schindler**  
**231-218-7955**  
**[russell@sampleserve.com](mailto:russell@sampleserve.com)**





# SampleServe

# Thank You!

**Russell Schindler**  
**231-218-7955**  
**[russell@sampleserve.com](mailto:russell@sampleserve.com)**