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9 Case Studies

Case Study #	Case Study	ASCT Type	Technology
9.1	MIP Boring Data Allow On-Site Decisions to Fill Data Gaps and Reduce Uncertainty during Triad Approach Evaluation at Five South Dakota Sites	Direct Sensing	MIP
9.2	MIP Allows Real-Time Identification and Delineation of DNAPL Plume at a Former Naval Air Station in California	Direct Sensing	MIP
9.3	OIP-Green Probe Delineates Extent of Coal Tar NAPL at a Former Gas Manufacturing Plant in Kansas	Direct Sensing	OIP-G
9.4	LIF Survey with UVOST® Provides More Accurate Representation of LNAPL Plume at a Former Bulk Petroleum Storage Facility in New Hampshire	Direct Sensing	LIF-UVOST®
9.5	UVOST® Differentiates LNAPL Types to Allocate Financial Liabilities at a Retail Petroleum Facility in Tennessee	Direct Sensing	LIF-UVOST®
9.6	TarGOST Determines DNAPL Extent and HPT Confirms Site Lithology at a Former Creosote Facility in Louisiana	Direct Sensing	LIF-TarGOST and HPT
9.7	9.7 CPT Borings and Hydropunch Sampler Optimize Site Characterization at an Aviation Industrial Complex in California	Direct Sensing	CPT and Hydropunch
9.8	Waterloo APS, CPT, and LIF Data Update CSM and Help Optimize Selected Remedy at a Former Refinery in Oklahoma	Direct Sensing	Waterloo APS, CPT, and LIF
9.9	Conceptual Site Model Development Using Borehole Geophysics at the Savage Municipal Water Supply Superfund Site in New Hampshire	Borehole Geophysics	Borehole caliper, fluid temperature/ resistivity, natural gamma, OTV, ATV, and HPFM
9.10	ERI Provides Data to Improve Groundwater Flow and Contaminant Transport Models at Hanford 300 Facility in Washington	Surface Geophysics	ERI
9.11	Surface and Borehole Geophysical Technologies Provide Data to Pinpoint and Characterize Karst Features at a Former Retail Petroleum Facility in Kentucky	Borehole and Surface Geophysics	ER, FDEM, GPR
9.12	GPR Data Show Location of Buried Debris and Piping Associated with a Former Gas Holder in Minnesota	Surface Geophysics	GPR
9.13	Resistivity, Seismic Exploration, and GPR Provide Data to Evaluate Clay Reserves at a Commercially Mined Pit	Surface Geophysics	ERI, GPR
9.14	Seismic Refraction, Electric Resistivity, and Multichannel Analysis of Seismic Waves Provide Data to Locate Potential Monitoring Well Locations in a Mixed-Use Area in Northern Virginia	Surface Geophysics	Seismic Refraction, ER, MASW

Case Study #	Case Study	ASCT Type	Technology
9.15	Surface Geophysical Methods Provide Data to Identify Prospective Utility Waste Landfill Sites in Karst Terrain in Missouri	Surface Geophysics	ERI, MASW
9.16	Airborne Time-Domain Electromagnetic Method Mappings Sand Distribution along the Illinois Lake Michigan Shore	Surface Geophysics	TDEM
9.17	Drone Technology Expedites and Streamlines Site Characterization at a Former Golf Course in Missouri	Remote Sensing	Orthoimagery
9.18	High-Resolution and Thermal Aerial Images Identify Mine Openings at an Abandoned Colorado Mine	Remote Sensing	High resolution imagery, Thermal aerial imagery
9.19	RPAS Collects Water Samples to Avoid Safety Concerns at Montana Tunnels Mine	Remote Sensing	Water quality monitoring samples

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