USDA-ARS Kimberly, ID requires an automated push-probe soil sampler.

- Sampler must be able to collect soil cores to a depth of 3 ft.
- Sampler must be able to automatically separate a core into three discrete samples by depth (for example, 0-12, 12-24, and 24-36 inch increments) with no post processing.
- Sampler must be able to composite samples from multiple cores into one container.
- Sampling depth, sample interval, and number of discrete samples must be programable (for example, ability to collect two samples from one, 0-24 inch core).
- Samples should be freely collected into open containers (i.e., not collected in sleeves or tubes).
- Sample tube inside diameter must between ¾ inch and 1 inch.
- Sampler must include a hydraulic cylinder and hydraulic hammer.
- Cycle time for collecting one core should be less than 30 seconds.
- Sampler must be powered with a stand-alone engine, approximately 5 hp.
- Sampler must be able to be mounted on a side-by-side.
- Sampler total weight should not exceed 300 lbs.
- Sampler is GPS enabled to record sample locations.
- Controls for operating and programming the sampler must be accessible from the driver's seat of the side-by-side.