



Petroleum Restoration Program Guidance

Author:
C. Bayliss, P.G.

Scoping Contingent Borings for Soil Sampling

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During initial soil investigation, a contractor may install a large number of soil borings to collect OVA data. To determine locations for collection of laboratory samples, OVA data collected over several days may be reviewed and compared. Additional (contingent) Section 5 soil boring pay items may be scoped in the same event to allow the ATC's to install a boring immediately adjacent to the boring location(s) identified with high/medium/low OVA for collection of laboratory samples. Contingent collection borings must be documented in a separate boring log, complete with lithology and OVA measurements recorded for the sample interval only if using machinery (DPT, Drill Rig, etc). However, when installing collection borings via hand auger, lithology should be collected for the entire depth of the boring to the sample interval.

During a supplemental site assessment, when the Contractor is stepping out to delineate the soil plume, initial assessment data should be used to identify soil boring/sampling locations and depths as part of the scope of work. The Contractor will collect samples as tasked and therefore no additional (contingent) soil boring pay items should be necessary.

Examples of scoping contingent collection borings for soil sampling:

Hand Augers

When using hand augers to collect soil samples, include additional hand auger pay items for each laboratory sample needed.

Example SOW: Install ten soil borings (to 10 feet BLS), collect high/medium/low OVA samples for laboratory analysis.

SOIL BORING (SB) and WELL INSTALLATION TABLE									
SOIL BORING DETAILS					Screening/Split Spoon Intervals				
TASK #	Installation Method	Quantity	Depth (ft bls)	Total Boring Footage (ft)	Screening Depth Interval 1 & Spacing	Screening Depth Interval 2 & Spacing	Screening Depth Interval 3 & Spacing	Quantity	Well Type
1	Hand Auger	10	10	100	2ft				
1	Hand Auger	3	10	30	Contingent, collect at high/medium/low OVA depth				
TOTALS				130					

Scope three additional contingent collection hand auger pay item 5-2. (Hand Auger Boring ≥ 10 foot total depth) for collection from high, medium and low OVA locations.

Direct Push Technology (DPT)

When using DPT, include footage for the additional soil borings, for soil sampling, when determining how many daily rate pay items are needed. Scope in the full depth of each additional boring when determining the footage. If the footage proposed exceeds the average daily rate (~200 feet), an additional day of DPT may be scoped.

Example #1 SOW: Install ten soil borings (to 20 feet BLS), collect high/medium/low OVA samples for laboratory analysis.

Any blank fields are not applicable to the scope of work.

SOIL BORING (SB) and WELL INSTALLATION TABLE									
SOIL BORING DETAILS					Screening/Split Spoon Intervals				
TASK #	Installation Method	Quantity	Depth (ft bls)	Total Boring Footage (ft)	Screening Depth Interval 1 & Spacing	Screening Depth Interval 2 & Spacing	Screening Depth Interval 3 & Spacing	Quantity	Well Type
1	DPT	10	20	200	2ft				
1	DPT	3	20	60	Contingent, collect at high/medium/low OVA depth				
TOTALS				260					

Scope two days of DPT pay item 5-3.a (Direct Push Technology (DPT) Rig and Equipment).

Example #2 SOW: Install six soil borings (to 20 feet BLS), collect high/medium/low OVA samples for laboratory analysis.

Any blank fields are not applicable to the scope of work.

SOIL BORING (SB) and WELL INSTALLATION TABLE									
SOIL BORING DETAILS					Screening/Split Spoon Intervals				
TASK #	Installation Method	Quantity	Depth (ft bls)	Total Boring Footage (ft)	Screening Depth Interval 1 & Spacing	Screening Depth Interval 2 & Spacing	Screening Depth Interval 3 & Spacing	Quantity	Well Type
1	DPT	6	20	120	2ft				
1	DPT	3	20	60	Contingent, collect at high/medium/low OVA depth				
TOTALS				180					

Scope one day of DPT pay item 5-3. a (Direct Push Technology (DPT) Rig and Equipment).

HSA/Sonic

When using HSA/Sonic, scope in the full depth of each contingent collection boring, for soil sampling. Determining the footage using boring pay items (5-6 through 5-14 or 5-15 through 5-23), and only include ONE additional Split Spoon (5-1.a.1-3) or Sonic Core (5-1.b) pay item for the sample interval of each soil sample. The contingent boring footage should only be to the depth in which the laboratory soil sampling is being collected. If the sample depth is shallower than the total depth of the proposed borehole, the ATC should only invoice for the footage to the sample depth.

Example HSA/MR SOW: Install ten soil borings (to 30 feet BLS), collect high/medium/low OVA samples for laboratory analysis.

Any blank fields are not applicable to the scope of work.

SOIL BORING (SB) and WELL INSTALLATION TABLE									
SOIL BORING DETAILS					Screening/Split Spoon Intervals				
TASK #	Installation Method	Quantity	Depth (ft bls)	Total Boring Footage (ft)	Screening Depth Interval 1 & Spacing	Screening Depth Interval 2 & Spacing	Screening Depth Interval 3 & Spacing	Quantity	Well Type
1	HSA/MR	10	30	300	2ft				
1	HSA/MR	3	30	90	Contingent, collect at high/medium/low OVA depth				
TOTALS				390					

Scope 390 feet of pay item 5-9 (HSA or MR Boring, >6 to 10 inch diameter, <50 foot total depth), and 153 units of pay item 5-1.a.1 (Split Spoon Sampling – 2 foot (during boring) <50 feet). 153 units is calculated as 150 (300 ft/2 ft per split-spoon) plus 1 [2-foot] split-spoon each for the soil sampling location in the contingent collection borings. Only 1 split-spoon unit per sample is necessary since the rig will be drilling down to the chosen sample interval and not collecting split-spoons the entire depth of the boring.

If samples are collected from 3 separate borings at 10, 15, and 20 feet, the ATC should invoice for 45 feet of pay item 5-9 and 3 units of pay item 5-1.a.

If all 3 samples are collected in the same contingent collection boring at 8, 18, and 28 feet, the ATC should invoice for 28 feet of pay item 5-9 and 3 units of pay item 5-1.a.

Example Sonic SOW: Install ten soil borings (to 50 feet BLS), collect high/medium/low OVA samples for laboratory analysis.

Any blank fields are not applicable to the scope of work.

SOIL BORING (SB) and WELL INSTALLATION TABLE									
SOIL BORING DETAILS					Screening/Split Spoon Intervals				
TASK #	Installation Method	Quantity	Depth (ft bls)	Total Boring Footage (ft)	Screening Depth Interval 1 & Spacing	Screening Depth Interval 2 & Spacing	Screening Depth Interval 3 & Spacing	Quantity	Well Type
1	Sonic	10	50	500	2ft				
1	Sonic	3	50	150	Contingent, collect at high/medium/low OVA depth				
TOTALS				650					

Scope 650 feet of pay item 5-15 (Sonic Boring, ≤6 inch diameter, <50 foot total depth), and 53 units of pay item 5-1.b (Sonic Core Sampling – 5 or 10 foot (during boring)). 53 units is calculated as 50 (500 ft/10 ft per sonic core) plus 1 [10-foot] sonic core each for the soil sampling location in the contingent collection borings. Only 1 sonic core unit per sample is necessary since the rig will be drilling down to the chosen sample interval and not collecting sonic cores the entire depth of the boring.

If samples are collected from 3 separate contingent collection borings at 10, 15, and 20 feet respectively, the ATC should invoice for 45 feet of pay item 5-15 and 3 units of pay item 5-1.b.

If all 3 samples are collected in the same contingent collection boring at 8, 18, and 28 feet, the ATC should invoice for 28 feet of pay item 5-15 and 3 units of pay item 5-1.b.