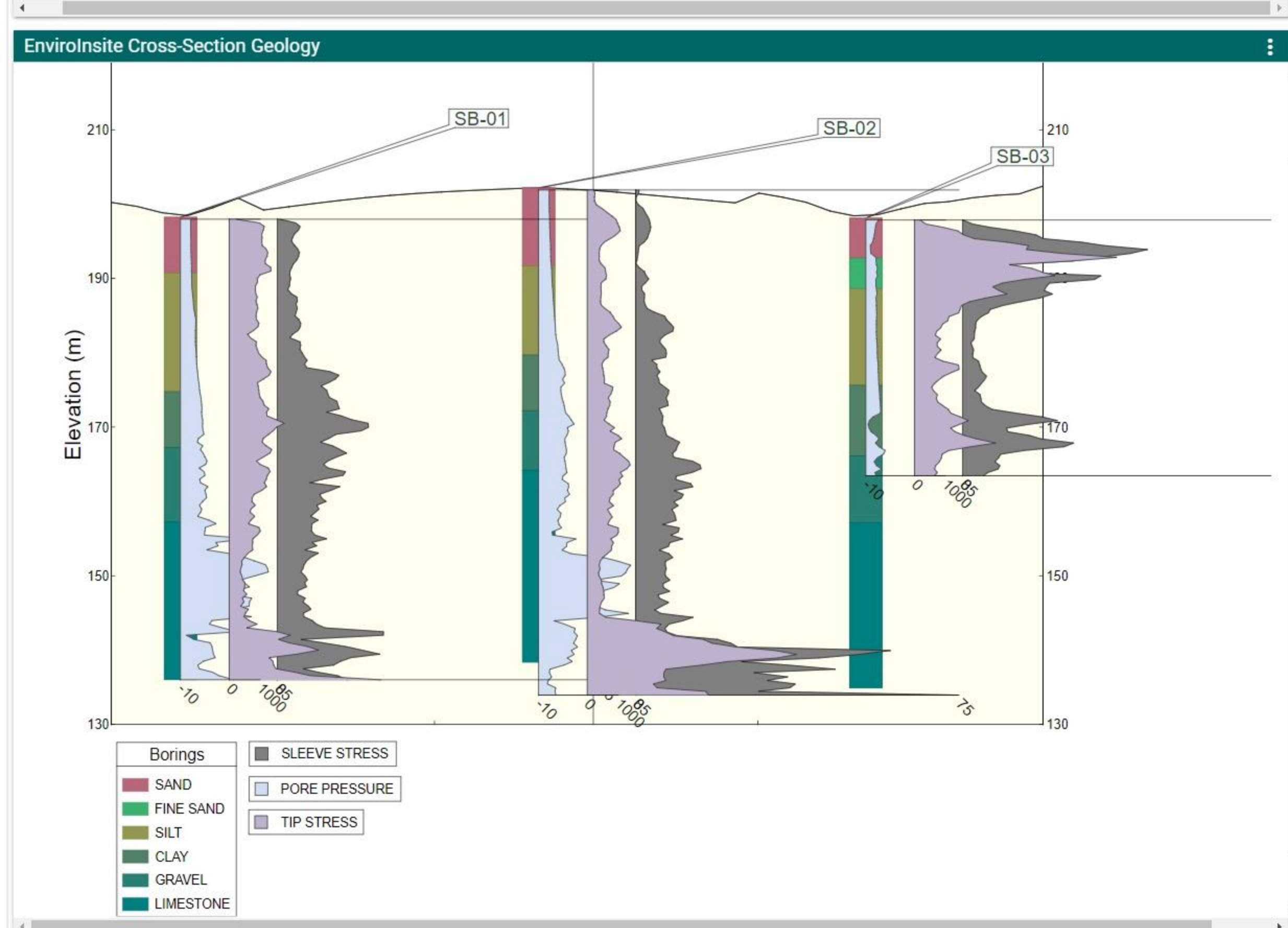


Boring Log

B-10 Page 1 of 1

CLIENT: Spangrud Remediation PROJECT NAME: Spangrud Metal Plating Facility
 PROJECT NUMBER: 201 PROJECT LOCATION: Spangrud
 DATE STARTED: 02/28/2007 09:00 COMPLETED: 04/28/2009 09:00 GROUND ELEVATION: 201.7 HOLE SIZE: 2.0 in.
 DRILLING CONTRACTOR: GROUNDWATER LEVELS
 DRILLING METHOD: Hollow Stem Auger 2" AT TIME OF DRILLING
 LOGGED BY: Graham West CHECKED BY: Josh Hagan GROUNDWATER AT END OF DRILLING
 NOTES: AFTER DRILLING

DEPTH (ft)	SAMPLE TYPE	RECOVERY %	BLOW COUNT (BLOW/FOOT)	TESTS	U.C.C.A.	GRAPHIC	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0							Asphalt		
1							Well graded sand with all silty sand, 10 to 20% fines, well rounded, sub-angular to rounded, fine to medium most very loose trace chert		
2							Well graded sand with all silty sand, 3W-UM, A-2-4, 10 to 20% light brownish gray and light brown chert, well rounded fine to medium dry moist trace chert, with chert and coal trace coarse gravel no weak hydrocarbon weak aluminum silty some comments		
3							Well graded sand with all silty sand, 3W-UM, A-2-4, 10 to 20% brown and olive well graded well rounded fine to medium moist medium dense trace clay silty ferruginous nodules and chert hydrocarbon strong iron oxide weak more comments		
4							Sandy lean clay sandy clay, CL, A-4, 10 to 25% brown and green, moist trace medium to coarse sand some ferruginous nodules and mica chemical strong hydrocarbon weak comments about the clay		
5							Sandy fat clay sandy clay, CH, gray hard high		
6							Sandy fat clay sandy clay, CH, S 25 to 30 gray dry moist hard, fissured high no high trace clayey silty clay, coal release, hydrocarbon moderate hydrocarbon moderate PWR more comments		

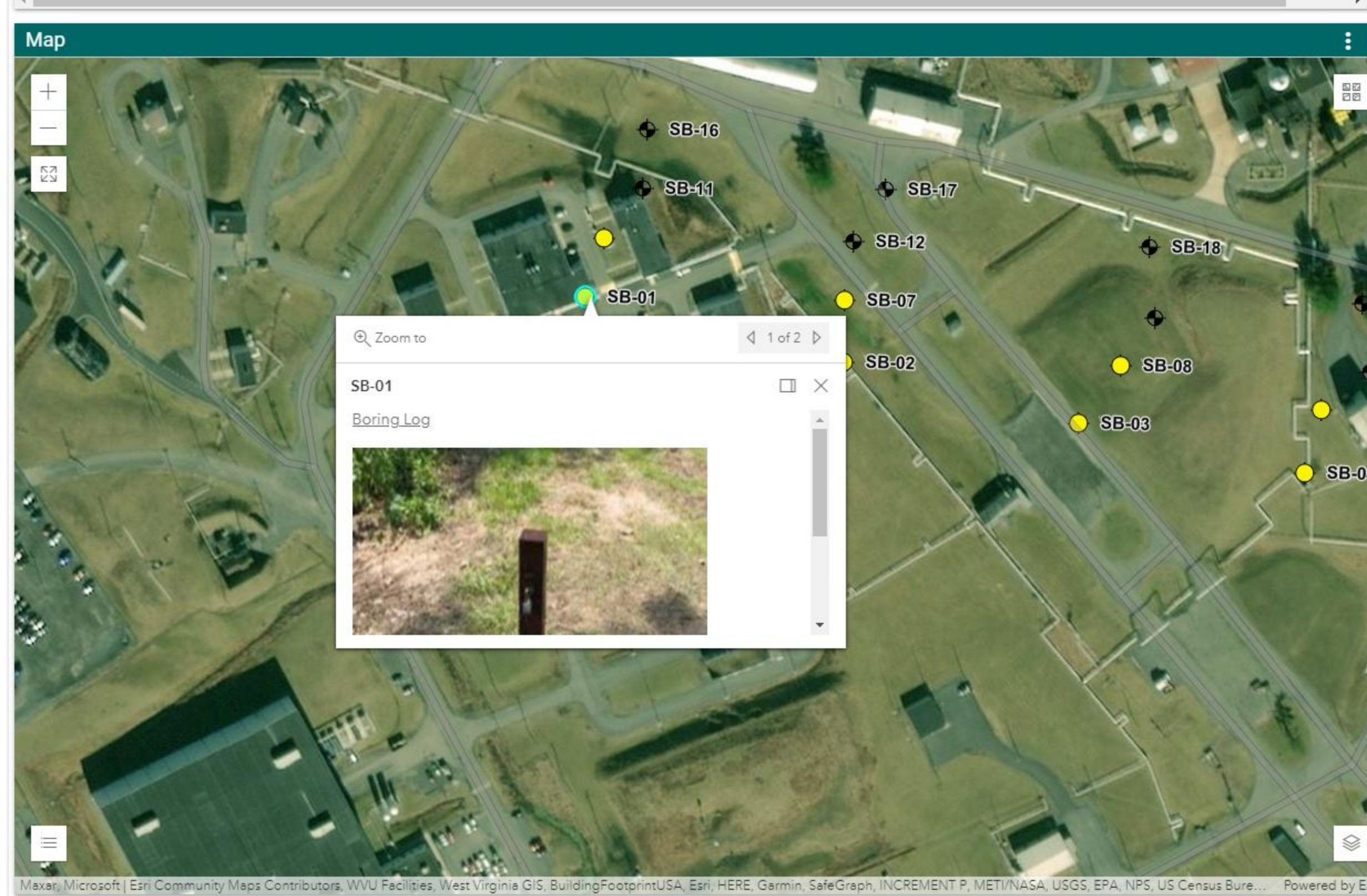


Boring Log

SB-01

Longitude: -78.8357 Type: SOIL BORING Owner: A. Walker
 Latitude: 39.5632 Drill Rig: Geologist: S. Hankman
 Elevation: 198.2 Install Date: 15/5/2007 Driller: J. Henkel
 Phase: Env Borehole Well Depth (m): 62.2 Inspector: Jim Neal
 Permit: Top of Casing (m): 62.5 Contractor:

Depth (m)	Soil Description	Lithology	Tip Stress	Sleeve Stress	Friction Ratio	Pressure	Free
0	light olive gray to olive gray with some mod. brown		0.000	0.000	0.0	0.00	
5	moderate brown to very pale orange, abundant calcite						
10	very fine-grained, very well sorted, sub-rounded, approximately 2% porous, argillaceous cement, slightly to non friable						



Boring Log

B-10 Page 1 of 1

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 DRILLING METHOD: Hollow Stem Auger 2" AT TIME OF DRILLING
 LOGGED BY: Graham West CHECKED BY: Josh Hagan GROUNDWATER AT END OF DRILLING
 NOTES: AFTER DRILLING

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE	GRAVIC	LIQ	MOISTURE CONTENT (%)	PLASTIC LIMIT (%)	SHRINKAGE (%)	ATTEMPTED LABS
0	Asphalt							
1	Well graded sand with all silty sand, 10 to 20% fines, well rounded, sub-angular to rounded, fine to medium most very loose trace chert				10.8	17	75	
2	Well graded sand with all silty sand, 3W-UM, A-2-4, 10 to 20% light brownish gray and light brown chert, well rounded fine to medium dry moist trace chert, with chert and coal trace coarse gravel no weak hydrocarbon weak aluminum silty some comments				10.8	15	65	
3	Well graded sand with all silty sand, 3W-UM, A-2-4, 10 to 20% brown and olive well graded well rounded fine to medium moist medium dense trace clay silty ferruginous nodules and chert hydrocarbon strong iron oxide weak more comments				10.8	17		
4	Sandy lean clay sandy clay, CL, A-4, 10 to 25% brown and green, moist trace medium to coarse sand some ferruginous nodules and mica chemical strong hydrocarbon weak comments about the clay				10.8	15	11	
5	Sandy fat clay sandy clay, CH, gray hard high				10.8	17		
6	Sandy fat clay sandy clay, CH, S 25 to 30 gray dry moist hard, fissured high no high trace clayey silty clay, coal release, hydrocarbon moderate hydrocarbon moderate PWR more comments				10.8	17		

