

## **APPENDIX B**

### **TEST PIT LOGS**



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT TP-101</b>			
DATE: <u>11/4/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.3'	FOREST DUFF	In-situ Density Test @ 1.9' ± bgs w % = 17.0 γ <sub>d</sub> (pcf) = 115.1 γ <sub>w</sub> (pcf) = 134.7  Thermal Resistivity (rho) @ 1.9' ± bgs See Report Table for rho values
	1.5'	BROWN SILTY SAND, SOME GRAVEL WITH COBBLES AND ROOTS	
S-1	3.5'	GRAY-BROWN GRAVELLY SILTY SAND WITH COBBLES (GLACIAL TILL)	
	7.5'		
	8.0'	WEATHERED BEDROCK	
		REFUSAL @ 8.0' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>8.0' REFUSAL</u>		DEPTH TO WATER: <u>SOILS MOIST BELOW 3' +/-</u>	

<b>TEST PIT TP-102</b>			
DATE: <u>11/4/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.2'	FOREST DUFF	
	0.8'	BROWN SILTY SAND, SOME GRAVEL WITH ROOTS AND ORGANICS	
	2.4'	BROWN SILTY GRAVELLY SAND WITH COBBLES (GLACIAL TILL)	
		REFUSAL @ 2.4' PROBABLE BEDROCK	
		NOTE: REFUSAL DEPTH VARIES FROM 0.4' TO 2.4' IRREGULAR BEDROCK SURFACE	
COMPLETION DEPTH: <u>2.4' REFUSAL</u>		DEPTH TO WATER: <u>ALL SOILS MOIST</u>	





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PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT <u>TP-105</u></b>			
DATE: <u>11/4/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF	
	1.6'	BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
S-1	4-5'	GRAY-BROWN GRAVELLY SANDY SILT WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	7.5'	REFUSAL @ 7.5' PROBABLE BEDROCK	
		COMPLETION DEPTH: <u>7.5' REFUSAL</u>	DEPTH TO WATER: <u>ALL SOILS MOIST</u>

<b>TEST PIT <u>TP-106</u></b>			
DATE: <u>11/4/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF	
	1.8'	BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
	4.9'	GRAY-BROWN SILT, SOME GRAVEL WITH COBBLES (GLACIAL TILL)	
		REFUSAL @ 4.9' PROBABLE BEDROCK	
		COMPLETION DEPTH: <u>4.9' REFUSAL</u>	DEPTH TO WATER: <u>ALL SOILS MOIST</u>



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PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT <u>TP-107</u></b>			
DATE: <u>11/4/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
NO.	DEPTH	(FT)	
		1.0'	FOREST DUFF / TOPSOIL WITH STUMPS
		2.6'	ORANGE-BROWN SILTY SAND, SOME GRAVEL WITH COBBLES AND ROOTS
		5.5'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)
			REFUSAL @ 5.5' PROBABLE BEDROCK
			In-situ Density Test @ 3.1' ± bgs w % = 11.3 γ <sub>d</sub> (pcf) = 117.2 γ <sub>w</sub> (pcf) = 130.4  Thermal Resistivity (rho) @ 3.1' ± bgs See Report Table for rho values
COMPLETION DEPTH: <u>5.5' REFUSAL</u>		DEPTH TO WATER: <u>ALL SOILS MOIST</u>	

<b>TEST PIT <u>TP-108</u></b>			
DATE: <u>11/4/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
NO.	DEPTH	(FT)	
		0.5'	FOREST DUFF
		1.2'	ORANGE-BROWN SILTY SAND, SOME GRAVEL WITH ROOTS
			REFUSAL @ 1.2' PROBABLE BEDROCK
COMPLETION DEPTH: <u>1.2' REFUSAL</u>		DEPTH TO WATER: <u>ALL SOILS DAMP</u>	



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PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

TEST PIT <u>TP-109</u>			
DATE: <u>11/4/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.0'	FOREST DUFF / TOPSOIL	In-situ Density Test @ 2.2' ± bgs w % = 19.7 $\gamma_d(\text{pcf}) = 108.9$ $\gamma_w(\text{pcf}) = 130.4$  Thermal Resistivity (rho) @ 2.2' ± bgs See Report Table for rho values
S-1	4-4.5'	GRAY-BROWN GRAVELLY SANDY SILT WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	9.5'	BOTTOM OF EXPLORATION @ 9.5' NO REFUSAL	
COMPLETION DEPTH: <u>9.5'</u>		DEPTH TO WATER: <u>ALL SOILS WET TO SATURATED</u>	

TEST PIT <u>TP-110</u>			
DATE: <u>11/5/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.3'	FOREST DUFF	
S-1	1-1.5'	BROWN SILTY GRAVEL AND SAND WITH COBBLES AND ROOTS (FILL)	
	3.5'	RED-BROWN SILT AND SAND, SOME GRAVEL WITH ROOTS	
	12.0'	BROWN SILT AND SAND SOME, GRAVEL WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		REFUSAL @ 12.0' PROBABLE BOULDERS OR BEDROCK	
COMPLETION DEPTH: <u>12.0' REFUSAL</u>		DEPTH TO WATER: <u>SOILS MOIST @ 1.5', SEEPAGE @ 10.5'</u>	



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PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT <u>TP-111</u></b>			
DATE: <u>11/5/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.2'	VEGETATION / TOPSOIL	
	2.2'	BROWN GRAVEL AND SAND, SOME SILT WITH COBBLES, ROOTS, LOGS, AND ORGANICS (FILL)	
	11.0'	GRAY-BROWN SILT AND SAND, SOME GRAVEL AND CLAY WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 11.0' NO REFUSAL	
COMPLETION DEPTH: <u>11.0'</u>		DEPTH TO WATER: <u>SATURATED BELOW 3', SEEPAGE @ 4'</u>	

<b>TEST PIT <u>TP-112</u></b>			
DATE: <u>11/5/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.0'	FOREST DUFF /TOPSOIL	
	11.0'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 11.0' NO REFUSAL	
COMPLETION DEPTH: <u>11.0</u>		DEPTH TO WATER: <u>ALL SOILS SATURATED, SEEPAGE @ 4'</u>	







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PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT TP-115</b>			
DATE: <u>11/5/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.9'	FOREST DUFF / TOPSOIL / SLASH	
	2.0'	ORANGE-BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
	7.0'	GRAY-BROWN GRAVELLY SILTY SAND WITH COBBLES AND BEDROCK FRAGMENTS (GLACIAL TILL)	
		REFUSAL @ 7.0' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>7.0' REFUSAL</u>		DEPTH TO WATER: <u>ALL SOILS MOIST</u>	

<b>TEST PIT TP-116</b>			
DATE: <u>11/5/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.1'	VEGETATION / FOREST DUFF / TOPSOIL	
	2.5'	ORANGE-BROWN GRAVELLY SILTY SAND WITH ROOTS	
	12.5'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 12.5' NO REFUSAL	
COMPLETION DEPTH: <u>12.5'</u>		DEPTH TO WATER: <u>SEEPAGE @ 9'</u>	



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PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT <u>TP-117</u></b>			
DATE: <u>11/5/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.4'	VEGETATION / FOREST DUFF	
	1.5'	BROWN GRAVELLY SAND, SOME SILT TRACE ORGANICS (FILL)	
	3.0'	DARK BROWN SILTY SAND WITH ORGANICS (RELIC TOPSOIL)	
	12.0'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 12.0' NO REFUSAL	
COMPLETION DEPTH: <u>12.0'</u>		DEPTH TO WATER: _____	SEEPAGE @ 1.5'

<b>TEST PIT <u>TP-118</u></b>			
DATE: <u>11/5/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.2'	VEGETATION / FOREST DUFF / TOPSOIL	
	1.5'	ORANGE-BROWN GRAVELLY SILTY SAND WITH ROOTS AND ORGANICS	
	11.5'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 11.5' NO REFUSAL	
COMPLETION DEPTH: <u>11.5'</u>		DEPTH TO WATER: _____	SEEPAGE @ 8'



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PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

TEST PIT <u>TP-119</u>			
DATE: <u>11/5/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF / TOPSOIL	In-situ Density Test @ 4.1' ± bgs w % = 10.5 γ <sub>d</sub> (pcf) = 122.5 γ <sub>w</sub> (pcf) = 135.4
	1.2'	GRAY-BROWN GRAVELLY SILTY SAND WITH ROOTS (FILL)	
	2.0'	DARK BROWN SILTY SAND WITH ORGANICS (RELIC TOPSOIL)	
	3.0'	ORANGE-BROWN SILT AND SAND, SOME GRAVEL	
	12.0'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 12.0' NO REFUSAL	
COMPLETION DEPTH: <u>12.0'</u>		DEPTH TO WATER: <u>SEEPAGE/FREE WATER @ 4'</u>	

TEST PIT <u>TP-120</u>			
DATE: <u>11/6/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	VEGETATION / TOPSOIL	In-situ Density Test @ 2.8' ± bgs w % = 4.2 γ <sub>d</sub> (pcf) = 122.6 γ <sub>w</sub> (pcf) = 127.7
	2.0'	BROWN GRAVELLY SILTY SAND WITH COBBLES AND ROOTS	
S-1	3-4'	BROWN GRAVEL AND SAND, SOME SILT WITH COBBLES AND BOULDERS	
	6.0'	PROBABLE WEATHERED BEDROCK	
	7.0'	REFUSAL @ 7.0' PROBABLE BEDROCK	Thermal Resistivity (rho) @ 2.8' ± bgs See Report Table for rho values
COMPLETION DEPTH: <u>7.0' REFUSAL</u>		DEPTH TO WATER: <u>HEAVY SEEPAGE @ 6'</u>	



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PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT <u>TP-121</u></b>			
DATE: <u>11/6/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	2.5'	FOREST DUFF / TOPSOIL	
	12.0'	GRAY-BROWN GRAVELLY SAND AND SILT WITH COBBLES AND BOULDERS  (GLACIAL TILL)	
		REFUSAL @ 12.0' PROBABLE BOULDER OR BEDROCK  NOTE: STANDING WATER IN TEST PIT AREA	
COMPLETION DEPTH: <u>12.0' REFUSAL</u>		DEPTH TO WATER: _____	SEEPAGE @ <u>3'</u>

<b>TEST PIT <u>TP-122</u></b>			
DATE: <u>11/6/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	VEGETATION / FOREST DUFF / TOPSOIL	
	2.0'	BROWN SILT AND SAND, SOME GRAVEL WITH ROOTS AND ORGANICS	
	12.1'	GRAY-BROWN GRAVELLY SAND AND SILT WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		REFUSAL @ 12.1' PROBABLE BOULDER OR BEDROCK	
COMPLETION DEPTH: <u>12.1' REFUSAL</u>		DEPTH TO WATER: _____	ALL SOILS SATURATED HEAVY SEEPAGE @ <u>11.5'</u>



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PROJECT NO.: 10-0014.3  
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<b>TEST PIT <u>TP-123</u></b>			
DATE: <u>11/6/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
NO.	DEPTH	(FT)	
	0.5'	FOREST DUFF / TOPSOIL	In-situ Density Test @ 1.9' ± bgs <b>w % = 13.4</b> $\gamma_d(\text{pcf}) = 112.2$ $\gamma_w(\text{pcf}) = 127.2$  Thermal Resistivity (rho) @ 1.9' ± bgs See Report Table for rho values
	1.8'	ORANGE-BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
	4.8'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	5.0'	WEATHERED BEDROCK	
		REFUSAL @ 5.0' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>5.0' REFUSAL</u>		DEPTH TO WATER: <u>ALL SOILS MOIST</u>	

<b>TEST PIT <u>TP-124</u></b>			
DATE: <u>11/6/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
NO.	DEPTH	(FT)	
	0.5'	VEGETATION / TOPSOIL	
	2.8'	ORANGE-BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
		BROWN GRAVELLY SILTY SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	13.0'	BOTTOM OF EXPLORATION @ 13.0' NO REFUSAL	
COMPLETION DEPTH: <u>13.0'</u>		DEPTH TO WATER: <u>ALL SOILS DAMP</u>	



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<b>TEST PIT TP-125</b>			
DATE: <u>11/6/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	VEGETATION / FOREST DUFF	
	1.8'	BROWN SILTY SAND SOME, GRAVEL WITH ORGANICS	
	8.2'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		REFUSAL @ 8.2' PROBABLE BOULDER	
COMPLETION DEPTH: <u>8.2' REFUSAL</u>		DEPTH TO WATER: _____	SEEPAGE @ 5'

<b>TEST PIT TP-126</b>			
DATE: <u>11/6/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF / TOPSOIL / SLASH	In-situ Density Test @ 3.5' ± bgs w % = 14.1 γ <sub>d</sub> (pcf) = 124.4 γ <sub>w</sub> (pcf) = 141.9  Thermal Resistivity (rho) @ 3.5' ± bgs See Report Table for rho values
	2.6'	BROWN SILTY GRAVELLY SAND WITH COBBLES AND ROOTS	
	11.5'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 11.5' NO REFUSAL	
COMPLETION DEPTH: <u>11.5'</u>		DEPTH TO WATER: <u>SOILS WET BELOW 3', SEEPAGE @ 8'</u>	



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TEST PIT <u>TP-127</u>			
DATE: <u>11/6/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF / TOPSOIL	
	1.5'	BROWN GRAVELLY SILTY SAND WITH ROOTS	
	12.0'	GRAY-BROWN SAND AND SILT, SOME GRAVEL WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 12.0' NO REFUSAL	
COMPLETION DEPTH: <u>12.0</u>		DEPTH TO WATER: _____	SEEPAGE @ 3'

TEST PIT <u>TP-128</u>			
DATE: <u>11/7/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF / TOPSOIL	In-situ Density Test @ 2.3' ± bgs w % = 15.9 $\gamma_d(\text{pcf}) = 108.1$ $\gamma_w(\text{pcf}) = 125.3$
	1.5'	ORANGE-BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
S-1	3-4'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES (GLACIAL TILL)	
	5.4'	REFUSAL @ 5.4' PROBABLE BEDROCK	Thermal Resistivity (rho) @ 2.3' ± bgs See Report Table for rho values
COMPLETION DEPTH: <u>5.4' REFUSAL</u>		DEPTH TO WATER: _____	ALL SOILS DAMP



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 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT <u>TP-129</u></b>			
DATE: <u>11/7/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.8'	FOREST DUFF / TOPSOIL / SLASH	
	2.5'	GRAY-BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
S-1	4-5'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	12.0'		
		BOTTOM OF EXPLORATION @ 12.0' NO REFUSAL	
COMPLETION DEPTH: <u>12.0'</u>		DEPTH TO WATER: _____	SEEPAGE @ <u>5'</u>

<b>TEST PIT <u>TP-130</u></b>			
DATE: <u>11/7/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.0'	VEGETATION / FOREST DUFF / TOPSOIL	
	2.5'	BROWN GRAVELLY SILTY SAND (FILL)	
	3.0'	DARK BROWN AND GRAY SILTY SAND WITH ORGANICS (RELIC TOPSOIL)	
	9.5'	GRAY-BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 9.5' NO REFUSAL	
COMPLETION DEPTH: <u>9.5'</u>		DEPTH TO WATER: _____	SEEPAGE @ <u>5'</u>





# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT TP-131</b>			
DATE: <u>11/7/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.7'	VEGETATION / TOPSOIL	
	3.0'	BROWN GRAVELLY SILT AND SAND	
	10.0'	GRAY GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 10.0' NO REFUSAL	
COMPLETION DEPTH: <u>10.0</u>		DEPTH TO WATER: _____	SEEPAGE @ <u>3'</u>

<b>TEST PIT TP-132</b>			
DATE: <u>11/8/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.0'	FOREST DUFF / STUMPS / TOPSOIL	
	1.5'	BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
	2.3'	BROWN GRAVELLY SILT AND SAND WITH COBBLES (GLACIAL TILL)	
		REFUSAL @ 2.3' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>2.3' REFUSAL</u>		DEPTH TO WATER: _____	ALL SOILS DAMP



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

TEST PIT <u>TP-133</u>			
DATE: <u>11/8/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF / TOPSOIL	In-situ Density Test @ 2.5' ± bgs w % = 10.5 $\gamma_d(\text{pcf}) = 122.1$ $\gamma_w(\text{pcf}) = 134.9$  Thermal Resistivity (rho) @ 2.5' ± bgs See Report Table for rho values
	2.5'	ORANGE-BROWN GRAVELLY SILTY SAND WITH ROOTS	
	8.0'	GRAY-BROWN GRAVELLY SILTY SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		REFUSAL @ 8.0' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>8.0' REFUSAL</u>		DEPTH TO WATER: <u>ALL SOILS MOIST</u>	

TEST PIT <u>TP-134</u>			
DATE: <u>11/8/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF / STUMPS / TOPSOIL	
	1.4'	ORANGE-BROWN SILTY SAND, SOME GRAVEL WITH ROOTS	
	12.0'	GRAY-BROWN GRAVELLY SILTY SAND WITH COBBLES (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 12.0' NO REFUSAL	
COMPLETION DEPTH: <u>12.0'</u>		DEPTH TO WATER: <u>ALL SOILS MOIST</u>	





# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: EMW

<b>TEST PIT TP-137</b>			
DATE: <u>11/8/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.8'	FOREST DUFF / STUMPS / TOPSOIL	In-situ Density Test @ 3.1' ± bgs <b>w % = 12.5</b> $\gamma_d(\text{pcf}) = 111.4$ $\gamma_w(\text{pcf}) = 125.3$  Thermal Resistivity (rho) @ 3.1' ± bgs See Report Table for rho values
	2.2'	ORANGE-BROWN SILTY SAND, SOME GRAVEL WITH COBBLES AND ROOTS	
S-1	3.5-4'	GRAY-BROWN GRAVELLY SILTY SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	6.5'	REFUSAL @ 5.0 - 6.5' (VARIES) PROBABLE BEDROCK	
COMPLETION DEPTH: <u>5.0' - 6.5' REFUSAL (VARIES)</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	

<b>TEST PIT TP-138</b>			
DATE: <u>11/8/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.3'	VEGETATION / FOREST DUFF / TOPSOIL	
	5.2'	GRAY-BROWN GRAVELLY SILTY SAND WITH COBBLES (GLACIAL TILL)	
		REFUSAL @ 5.2' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>5.2' REFUSAL</u>		DEPTH TO WATER: <u>ALL SOILS DAMP</u>	





# TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-141</u>			
DATE: <u>11/11/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
	0.4'	FOREST DUFF /TOPSOIL	In-situ Density Test @ 2.2' ± bgs $w\% = 17.3$ $\gamma_d(\text{pcf}) = 112.0$ $\gamma_w(\text{pcf}) = 131.4$  Thermal Resistivity ( $\rho$ ) @ 2.2' ± bgs See Report Table for $\rho$ values  Atterberg Limits @ 6-8' $w_L = 23$ $w_P = 16$  @ 6-8' $w\% = 14$
	1.0'	BROWN SANDY SILT WITH ROOTS	
S-1	6-8'	GRAY GRAVELLY SANDY SILT WITH COBBLES (GLACIAL TILL)	
	12.2'	BOTTOM OF EXPLORATION @ 12.2' NO REFUSAL	
COMPLETION DEPTH: <u>12.2'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	

TEST PIT <u>TP-142</u>			
DATE: <u>11/11/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
	0.3'	FOREST DUFF/TOPSOIL	
	1.3'	BROWN SILT, TRACE SAND WITH ROOTS	
S-1	14.5'	GRAY-BROWN SILT, SOME GRAVEL AND CLAY WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	18.8'	REFUSAL @ 18.8' POSSIBLE BOULDER OR BEDROCK	
COMPLETION DEPTH: <u>REFUSAL @ 18.8'</u>		DEPTH TO WATER: <u>SEEPAGE @ 10.3'</u>	

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# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-143</u>			
DATE: <u>11/11/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.8'	FOREST DUFF /TOPSOIL	
	2.0'	BROWN SILT WITH ROOTS	
		BROWN SILT SOME SAND AND GRAVEL TRACE CLAY WITH BOULDERS (GLACIAL TILL)	
S-1	8.5'		
	10.6'	BOTTOM OF EXPLORATION @ 10.6' NO REFUSAL	
COMPLETION DEPTH: <u>10.6'</u>		DEPTH TO WATER: _____	SEEPAGE @ 5.2'

TEST PIT <u>TP-144</u>			
DATE: <u>11/11/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF/TOPSOIL	In-situ Density Test @ 3.5' ± bgs w % = 12.7 γ <sub>d</sub> (pcf) = 133.1 γ <sub>w</sub> (pcf) = 150.0  Thermal Resistivity (rho) @ 3.5' ± bgs See Report Table for rho values
	1.9'	BROWN SILT WITH ROOTS	
		BROWN GRAVELLY SANDY SILT AND CLAY WITH COBBLES AND BOULDERS (GLACIAL TILL)	
S-1	4-6'		
	13.2'		
S-2	14.1'	GRAY SILT SOME GRAVEL (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 14.1' NO REFUSAL	
COMPLETION DEPTH: <u>14.1'</u>		DEPTH TO WATER: _____	HEAVY SEEPAGE @ 5.9'





# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-145</u>			
DATE: <u>11/11/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.1'	FOREST DUFF/TOPSOIL	
S-1	6'	BROWN SILT, SOME GRAVEL TRACE CLAY WITH COBBLES (GLACIAL TILL)	
	17.0'	BOTTOM OF EXPLORATION @ 17.0' NO REFUSAL	
COMPLETION DEPTH: <u>17.0'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	

TEST PIT <u>TP-146</u>			
DATE: <u>11/12/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.4'	FOREST DUFF/TOPSOIL	
	2.0'	BROWN SANDY SILT WITH ROOTS	
S-1	4'	BROWN SANDY SILT, SOME GRAVEL WITH COBBLES AND BOULDERS (GLACIAL TILL)	In-situ Density Test @ 2.8' ± bgs w % = 11.1 γ <sub>d</sub> (pcf) = 121.6 γ <sub>w</sub> (pcf) = 135.1
	6.2'	GRAY SILTY GRAVEL WITH COBBLES (WEATHERED BEDROCK, BREAKS APART WHEN EXCAVATED)	Thermal Resistivity (rho) @ 2.8' ± bgs See Report Table for rho values
	11.2'	BOTTOM OF EXPLORATION @ 11.2' NO REFUSAL	
COMPLETION DEPTH: <u>11.2'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-147</u>			
DATE: <u>11/12/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF/TOPSOIL	
	2.4'	BROWN SILT, SOME SAND WITH ROOTS	
	4.3'	BROWN SILTY SAND AND GRAVEL (SATURATED)	
	12.5'	GRAY SILT, SOME SAND AND GRAVEL TRACE CLAY WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 12.5' NO REFUSAL	
COMPLETION DEPTH: <u>12.5'</u>		DEPTH TO WATER: _____	SEEPAGE @ <u>4.3'</u>

TEST PIT <u>TP-148</u>			
DATE: <u>11/12/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF/TOPSOIL	In-situ Density Test @ 3.0' ± bgs <b>w % = 11.2</b> <b>γ<sub>d</sub>(pcf) = 123.8</b> <b>γ<sub>w</sub>(pcf) = 137.7</b>  Thermal Resistivity (rho) @ 3.0' ± bgs See Report Table for rho values
	2.4'	BROWN SILTY SAND WITH ROOTS	
S-1	5'	GRAY-BROWN SANDY SILT, SOME GRAVEL WITH COBBLES (GLACIAL TILL)	
	10.9'	BOTTOM OF EXPLORATION @ 10.9' NO REFUSAL	
COMPLETION DEPTH: <u>10.9'</u>		DEPTH TO WATER: _____	HEAVY SEEPAGE @ <u>9.4'</u>



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

<b>TEST PIT TP-149</b>			
DATE: <u>11/12/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	2.4'	FOREST DUFF/TOPSOIL	
	3.7'	BROWN CLAYEY SILT, SOME SAND AND GRAVEL (GLACIAL TILL)	
		REFUSAL @ 3.7' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>REFUSAL @ 3.7'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	

<b>TEST PIT TP-150</b>			
DATE: <u>11/12/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.9'	FOREST DUFF/TOPSOIL	
	3.1'	GRAY SANDY SILT, SOME GRAVEL (GLACIAL TILL)	
		REFUSAL @ 3.1' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>REFUSAL @ 3.1'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-151</u>			
DATE: <u>11/12/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.6'	FOREST DUFF/TOPSOIL	In-situ Density Test @ 3.4' ± bgs w % = 12.9 $\gamma_d(\text{pcf}) = 126.0$ $\gamma_w(\text{pcf}) = 142.3$  Thermal Resistivity (rho) @ 3.4' ± bgs See Report Table for rho values
	2.0'	BROWN SANDY SILT, SOME GRAVEL WITH ROOTS	
S-1	7'	BROWN SILT, SOME SAND AND GRAVEL WITH COBBLES (GLACIAL TILL)	
	11.4'		
	16.4'	GRAY SILT, SOME SAND AND GRAVEL, TRACE CLAY (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 16.4' NO REFUSAL	
COMPLETION DEPTH: <u>16.4'</u>		DEPTH TO WATER: <u>SOILS WET, SEEPAGE @ 10.5'</u>	

TEST PIT <u>TP-152</u>			
DATE: <u>11/13/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.7'	FOREST DUFF/TOPSOIL	
	2.9'	BROWN SILT WITH ROOTS	
	4.5'	BROWN SILT, SOME SAND AND GRAVEL (GLACIAL TILL)	
	5.6'	GRAY SANDY SILT, SOME GRAVEL (GLACIAL TILL)	
		REFUSAL @ 5.6' POSSIBLE BEDROCK OR BOULDER	
COMPLETION DEPTH: <u>REFUSAL @ 5.6'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	









# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

<b>TEST PIT <u>TP-159</u></b>			
DATE: <u>11/14/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.1'	FOREST DUFF/TOPSOIL	In-situ Density Test @ 2.3' ± bgs w % = 16.7 γ <sub>d</sub> (pcf) = 113.7 γ <sub>w</sub> (pcf) = 132.7  Thermal Resistivity (rho) @ 2.3' ± bgs See Report Table for rho values
S-1	5-6'	BROWN GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	9.4'	BOTTOM OF EXPLORATION @ 9.4' NO REFUSAL	
COMPLETION DEPTH: <u>9.4'</u>		DEPTH TO WATER: _____	SEEPAGE @ <u>3.3'</u>

<b>TEST PIT <u>TP-160</u></b>			
DATE: <u>11/14/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.0'	FOREST DUFF/TOPSOIL	
	10.3'	GRAY-BROWN SILT, SOME GRAVEL AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 10.3' NO REFUSAL	
COMPLETION DEPTH: <u>10.3'</u>		DEPTH TO WATER: _____	SEEPAGE @ <u>7.7'</u>





# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-161</u>			
DATE: <u>11/14/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.3'	FOREST DUFF/TOPSOIL	
	1.2'	BROWN SILT SOME SAND	
		GRAY GRAVELLY SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL TILL)	
S-1	10-12'		
	13.1'	BOTTOM OF EXPLORATION @ 13.1' NO REFUSAL	Atterberg Limits @ 10-12' $w_L = 23$ $w_P = 16$  @ 10-12' $w \% = 11$
COMPLETION DEPTH: <u>13.1'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	

TEST PIT <u>TP-162</u>			
DATE: <u>11/14/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.4'	FOREST DUFF/TOPSOIL	
	1.3'	BROWN SILT TRACE CLAY WITH ROOTS	
		GRAY-BROWN SILT, SOME SAND AND GRAVEL WITH COBBLES AND BOULDERS (GLACIAL TILL)	
S-1	4.5'		
	11.4'	BOTTOM OF EXPLORATION @ 11.4' NO REFUSAL	In-situ Density Test @ 3.2' ± bgs $w \% = 15.0$ $\gamma_d(\text{pcf}) = 120.3$ $\gamma_w(\text{pcf}) = 138.3$  Thermal Resistivity (rho) @ 3.2' ± bgs See Report Table for rho values
COMPLETION DEPTH: <u>11.4'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

<b>TEST PIT TP-163</b>			
DATE: <u>11/14/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
NO.	DEPTH	(FT)	
	0.5'	FOREST DUFF/TOPSOIL	
	1.1'	BROWN SILT	
	7.9'	GRAY-BROWN SILT, SOME SAND AND GRAVEL (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 7.9' NO REFUSAL	
COMPLETION DEPTH: <u>7.9'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	

<b>TEST PIT TP-164</b>			
DATE: <u>11/14/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
NO.	DEPTH	(FT)	
	0.8'	FOREST DUFF/TOPSOIL	
	1.7'	BROWN SILT WITH ROOTS	
	11.2'	GRAY SILT, SOME SAND AND GRAVEL WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		BOTTOM OF EXPLORATION @ 11.2' NO REFUSAL	
COMPLETION DEPTH: <u>11.2'</u>		DEPTH TO WATER: <u>SEEPAGE @ 4.6'</u>	



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-165</u>			
DATE: <u>11/14/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.7'	FOREST DUFF/TOPSOIL	In-situ Density Test @ 2.7' ± bgs w % = 13.3 $\gamma_d(\text{pcf}) = 122.1$ $\gamma_w(\text{pcf}) = 138.3$  Thermal Resistivity (rho) @ 2.7' ± bgs See Report Table for rho values
	1.5'	BROWN SILT WITH ROOTS	
		GRAY SILT, SOME SAND AND GRAVEL WITH BOULDERS (GLACIAL TILL)	
	10.2'	BOTTOM OF EXPLORATION @ 10.2' NO REFUSAL	
COMPLETION DEPTH: <u>10.2'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	

TEST PIT <u>TP-166</u>			
DATE: <u>11/15/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.1'	FOREST DUFF/TOPSOIL	
S-1	6'	BROWN SILT, SOME SAND AND GRAVEL WITH BOULDERS (GLACIAL TILL)	
	7.8'	REFUSAL @ 7.8' POSSIBLE BEDROCK OR BOULDER	
COMPLETION DEPTH: <u>REFUSAL @ 7.8'</u>		DEPTH TO WATER: <u>HEAVY SEEPAGE @ 3.9' AND 6.7'</u>	



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-167</u>			
DATE: <u>11/15/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.2'	FOREST DUFF/TOPSOIL	In-situ Density Test @ 2.2' ± bgs w % = 15.9 $\gamma_d(\text{pcf}) = 115.5$ $\gamma_w(\text{pcf}) = 133.9$  Thermal Resistivity (rho) @ 2.2' ± bgs See Report Table for rho values
	1.2'	BROWN SILT TRACE CLAY WITH ROOTS	
		GRAY-BROWN SILT, SOME SAND AND GRAVEL WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	11.6'	BOTTOM OF EXPLORATION @ 11.6' NO REFUSAL	
COMPLETION DEPTH: <u>11.6'</u>		DEPTH TO WATER: _____	SEEPAGE @ 8.8'

TEST PIT <u>TP-168</u>			
DATE: <u>11/15/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.5'	FOREST DUFF/TOPSOIL	In-situ Density Test @ 2.2' ± bgs w % = 28.8 $\gamma_d(\text{pcf}) = 97.2$ $\gamma_w(\text{pcf}) = 125.2$  Thermal Resistivity (rho) @ 2.2' ± bgs See Report Table for rho values
	1.3'	DARK BROWN SILT TRACE CLAY	
S-1	3.5'-5.5'	GRAY-BROWN SANDY SILT, SOME GRAVEL (GLACIAL TILL)	
	9.9'	BOTTOM OF EXPLORATION @ 9.9' NO REFUSAL	
COMPLETION DEPTH: <u>9.9'</u>		DEPTH TO WATER: <u>SOILS SATURATED /</u>	SEEPAGE @ 5.7'



# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

<b>TEST PIT <u>TP-169</u></b>			
DATE: <u>11/15/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.1'	FOREST DUFF/TOPSOIL	
	2.2'	BROWN SILT	
		GRAY-BROWN SILT, SOME SAND AND GRAVEL (GLACIAL TILL)	
	10.2'	BOTTOM OF EXPLORATION @ 10.2' NO REFUSAL	
COMPLETION DEPTH: <u>10.2'</u>		DEPTH TO WATER: _____	SEEPAGE @ <u>2.2'</u>

<b>TEST PIT <u>TP-170</u></b>			
DATE: <u>11/15/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	LOCATION: _____
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	0.3'	FOREST DUFF/TOPSOIL	
	1.8'	BROWN SILT WITH ROOTS	
	3.0'	GRAY SILT, SOME SAND AND GRAVEL (GLACIAL TILL)	
		REFUSAL @ 3.0' PROBABLE BEDROCK	
COMPLETION DEPTH: <u>REFUSAL @ 3.0'</u>		DEPTH TO WATER: _____	<u>NO FREE WATER OBSERVED</u>





# S.W. COLE ENGINEERING, INC.

## TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT  
 LOCATION: BINGHAM, MAINE  
 BACKHOE FIRM: SARGENT CORP. EXCAVATOR: KOMATSU PC100

PROJECT NO.: 10-0014.3  
 SWC REP.: SML

TEST PIT <u>TP-173</u>			
DATE: <u>11/18/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.6'	FOREST DUFF/TOPSOIL	
		GRAY-BROWN SILT, SOME SAND AND GRAVEL WITH COBBLES AND BOULDERS (GLACIAL TILL)	
	11.7'	BOTTOM OF EXPLORATION @ 11.7' NO REFUSAL	
COMPLETION DEPTH: <u>11.7'</u>		DEPTH TO WATER: <u>HEAVY SEEPAGE @ 7.6'</u>	

TEST PIT <u>TP-174</u>			
DATE: <u>11/18/2013</u>		SURFACE ELEVATION: <u>NOT AVAILABLE</u>	
		LOCATION: _____	
SAMPLE NO.	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
	1.1'	FOREST DUFF/TOPSOIL	In-situ Density Test @ 3.6' ± bgs w % = 14.5 $\gamma_d(\text{pcf}) = 120.1$ $\gamma_w(\text{pcf}) = 137.5$  Thermal Resistivity (rho) @ 3.6' ± bgs See Report Table for rho values
	2.1'	BROWN SILT TRACE CLAY	
	6.0'	GRAY-BROWN SILT, SOME SAND AND GRAVEL WITH COBBLES AND BOULDERS (GLACIAL TILL)	
		REFUSAL @ 6.0' POSSIBLE BEDROCK OR BOULDER	
COMPLETION DEPTH: <u>REFUSAL @ 6.0'</u>		DEPTH TO WATER: <u>NO FREE WATER OBSERVED</u>	









