APPENDIX C PREVIOUS SUBSURFACE INFORMATION



NQ2

CORE BARREL:

2"

PRELIMINARY BORING LOG

BORING NO.: **B-T5**SHEET: 1 OF 2
PROJECT NO.: 10-0014.2

ON 11/1/2012 AND 10.8' ON 11/6/2012

ENC	GINEERI	NG, INC	•			PROJECT NO.:	10-0014.2	
PROJECT / CLIENT:	PROPOSED	BLUE SKY WE	EST WIND POW	ER PROJECT / REE	ED & REED, INC.	DATE START:	11/1/2012	
LOCATION:	BINGHAM, M	AINE				DATE FINISH:	11/1/2012	
DRILLING CO.:	NORTHERN	TEST BORING	GS, INC.	DRILLER:	MIKE NADEAU	ELEVATION:	±1400'	
	TYPE	SIZE I.D.	HAMMER WT.	HAMMER FALL		SWC REP.:	PJO	
CASING:	NW	3"	140 LBS	30"		WATER LEVEL INFORM	MATION	
SAMPLER:	SS	1 3/8"	140 LBS	30"		WATER IN OPEN BORE HO	DLE AT 7.5'	

CASING BLOWS		SAN	SAMPLE SAMPLER BLOWS PER 6							PTH	STRATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DLI		OTRATA & TEOT DATA
NW									7	0.3'	FOREST DUFF
\vdash	1D	24"	24"	2.0'	1	2	3	10	\sim	1.5'	DARK BROWN SANDY SILT WITH ORGANICS ~LOOSE~
\vdash											LIGHT BROWN GRAVELLY SAND AND SILT (GLACIAL TILL)
									\ 4	4.4'	EIGHT BROWN GIVE ELLT GRAD AIRS GILT (GENGIAL TILL)
] `		
											PROMALORAVELLY CAMP AND OUT WITH CORPUSO (CLACIAL TILL)
											BROWN GRAVELLY SAND AND SILT WITH COBBLES (GLACIAL TILL)
*											~VERY DENSE~ w=9.0%
	2D	24"	18"	12.0'	20	18	29	50	1	1.5'	
											WEATHERED BEDROCK (SAPROLITE)
											· ,
	3D	12"	10"	16.0'	41	63					~VERY DENSE~ w=9.1%
									1:	7.3'	
									1	7.5	LIGHT GRAY META SANDSTONE; MEDIUM TO MODERATELY HARD; FINE GRAINED;
											SLIGHTLY WEATHERED, CORE AND FRACTURES STAINED WITH IRON OXIDE.
											CLOSELY SPACED MODERATE TO STEEP ANGLED FRACTURES AT 35-85 DEGREES.
	R1	4.7'	2.6'	22.0'					22	2.0'	RQD = 11% (VERY POOR) SAME ROCK DESCRIPTION AS R1; SLIGHTLY WEATHERED, FRACTURES AND
											EXTERIOR OF CORE STINED WITH IRON OXIDE. STEEP FRACTURE ANGLES
	R2	3.0'	3.0'	25.0'					_ 2	5.0'	RQD = 68% (FAIR) AT 55-85 DEGREES FROM HORIZONTAL.
											HIGHLY FRAGMENTED ZONE.
	R3	2.0'	1.0'	27.0'					27	7.0'	RQD = 0% (VERY POOR) SAME ROCK DESCRIPTION AS R1; CLOSELY SPACED FRACTURES
											STAINED WITH IRON OXIDE AT 35-85 DEGREES FROM HORIZONTAL.
	R4	3.4'	3.4'	30.4'					` \ _3(0.4'	RQD = 29% (POOR)
											SAME ROCK DESCRIPTION AS R1; SLIGHTLY WEATHERED, IRON OXIDE STAINED. SHALLOW TO STEEP FRACTURE ANGLES AT 20-75 DEGREES FROM HORIZONTAL.
	R5	3.4'	3.4'	33.8'					33	3.8'	RQD = 50% (POOR TO FAIR) CONTAINS QUARTZ VEINS.
]		SAME ROCK DESCRIPTION AS R1; SLIGHTLY WEATHERED, IRON OXIDE STAINED
											FRACTURES DIP BETWEEN 5 TO 75 DEGREES FROM HORIZONTAL.
											HEALED CRACKS DIP 20-45 DEGREES FROM HORIZONTAL. CONTAINS QUARTZ VEINS.
	R6	3.7'	3.7'	37.5'					37	7.5'	RQD = 42% (POOR)
									-	0.0'	
SAMPLE	ES:			SOIL C	LASSI	FIED BY	/ :		REM	ЛAR	KS:
D = SPL	IT SPC				•						
C = 2" S		_			ŀ	LLER -					STRATIFICATION LINES REPRESENT THE
S = 3" S U = 3.5"				X	•	L TECH ORATO					APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-T5
					l .						BOILING NO B-13



BINGHAM, MAINE

LOCATION:

DRILLING CO.:

C = 2" SHELBY TUBE

S = 3" SHELBY TUBE

U = 3.5" SHELBY TUBE

PRELIMINARY BORING LOG

MIKE NADEAU

DRILLER:

B-T5 BORING NO.: SHEET: 2 OF 2 10-0014.2

PROJECT NO.:

DATE START: 11/1/2012 DATE FINISH: 11/1/2012

ELEVATION: ±1400'

TYPE SIZE I.D. HAMMER WT. HAMMER FALL

PROJECT / CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.

DRILLER - VISUALLY

LABORATORY TEST

SOIL TECH. - VISUALLY

SWC REP.: PJO WATER LEVEL INFORMATION

CASING: NW 3" 140 LBS 30" SAMPLER: SS 1 3/8" 140 LBS 30" 2" NQ2 CORE BARREL:

NORTHERN TEST BORINGS, INC.

WATER IN OPEN BORE HOLE AT 7.5' ON 11/1/2012 AND 10.8' ON 11/6/2012

CASING BLOWS		SAN	ИPLE		SAMPLER BLOWS PER 6"			PER 6"	DEDTU	STRATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	SIRAIA & IESI DAIA
	R7	3.5'	3.5'	41.0'					41.0'	RQD = 36% (POOR)
	R8 R9 R10	5.1'	5.0'	46.1' 51.2'					. 46.1' . 51.2'	GRAY META SANDSTONE; SAME ROCK DESCRIPTION AS R1; CLOSELY SPACED, SHALLOW TO MODERATELY DIPPING FRACTURE ANGLES AT 5 TO 65 DEGREES. EXTERIOR OF CORE AND FRACTURE SURFACES STAINED WITH IRON OXIDE. CONTAINS QUARTZ VEINS. RQD = 47% (POOR) SAME ROCK DESCRIPTION AS R1; SLIGHTLY WEATHERED, CORE AND FRACTURE SURFACES STAINED WITH IRON OXIDE. MODERATE TO CLOSELY SPACED FRACTURES AT 0, 10 AND 90 FROM HORIZONTAL. CONTAINS QUARTZ VEINS. RQD = 32% (POOR) SAME ROCK DESCRIPTION AS R1; SLIGHTLY WEATHERED, IRON OXIDE STAINED. SHALLOW TO STEEP FRACTURE ANGLES AT 5, 45, 65 AND 90 DEGREES. RQD = 45% (POOR) BOTTOM OF EXPLORATION AT 55.0'
SAMPLI D = SPL		S: SOIL CLASSIFIED BY: T SPOON				/ :		REMAR	RKS:	

STRATIFICATION LINES REPRESENT THE

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.:

B-T5



BLUE SKY WEST WIND POWER PROJECT BINGHAM, BRIGHTON PLANTATION, MAYFIELD TOWNSHIP & KINGSBURY PLANTATION, MAINE



B-T5 R1 TO R6 (17.3'-37.5')



B-T5 R7 TO R10 (37.5'-55')



LOCATION:

DRILLING CO.:

BINGHAM, MAINE

PRELIMINARY BORING LOG

DRILLER:

MIKE NADEAU

BORING NO.: B-T12 SHEET: 1 OF 2

10-0014.2 PROJECT NO.:

DATE START: 11/1/2012

ELEVATION: ±1506'

11/1/2012

TYPE SIZE I.D. HAMMER WT. HAMMER FALL

PROJECT / CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.

PJO SWC REP.: WATER LEVEL INFORMATION

CASING: HW 4" 130LB 30" 1 3/8" SAMPLER: SS 130LB 30"

NORTHERN TEST BORINGS, INC.

SOILS APPEARED SATURATED AT 6.0'

DATE FINISH:

NQ2 2" CORE BARREL:

CASING BLOWS		SAMPLE SAMPLER BLOWS PER 6				_OWS P	ER 6"	DEPTH	STRATA & TEST DATA		
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPIR	SIRAIA & IESI DAIA	
HW				0.201					0.4'	FOREST DUFF	
	1D	24"	14"	2.0'	1	7	9	12	1.7'	DARK BROWN SANDY SILT WITH ORGANICS ~LOOSE~	
										BROWN GRAVELLY SILTY SAND WITH ROOTLETS TO 24" (GLACIAL TILL)	
	2D	24"	24"	7.0'	6	7	8	8		~MEDIUM DENSE~	w=14.4%
									9.0'		
	3D	24"	24"	12.0'	11	20	28	32		GRAYISH BROWN GRAVELLY SAND AND SILT (GLACIAL TILL) ~DENSE BECOMING	w=14.0%
+	4D	24"	24"	17.0'	26	36	42	59		VERY DENSE~	w=11.7%
									20.0'		
	5D	5"	5"	20.4'	50/5"					GRAY GRAVELLY SAND AND SILT (GLACIAL TILL) WITH COBBLES AND BOULDERS	w=9.7%
	6D	18"	18"	26.5'	22	27	38			~VERY DENSE~	w=10.9%
	7D	10"	10"	30.9'	47	50/4"					w=14.2%
									1	ROLLER CONE THROUGH BOULDER FROM 34.4' TO 35' CORED THROUGH BOULDER FROM 35' TO 36'	
	8D	10"	8"	36.8'	52	50/4"					w=14.7%
CAMPI				2011 0	1 4001	TIED D'	/.		40.0'		
C = 2" S S = 3" S	AMPLES: SOIL CLASSIFIED BY: = SPLIT SPOON = 2" SHELBY TUBE DRILLER - VISUALLY = 3" SHELBY TUBE X SOIL TECH VISUALLY = 3.5" SHELBY TUBE X LABORATORY TEST						VISUAL I VISL	JALLY	REMAR	SOILS SATURATED AT 5' STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. BORING NO.:	B-T12



BINGHAM, MAINE

NORTHERN TEST BORINGS, INC.

LOCATION:

CASING:

SAMPLER:

CORE BARREL:

S = 3" SHELBY TUBE

U = 3.5" SHELBY TUBE

DRILLING CO.:

PRELIMINARY BORING LOG

MIKE NADEAU

DRILLER:

B-T12 BORING NO.: SHEET: 2 OF 2

PROJECT NO.: 10-0014.2

DATE START: 11/1/2012

11/1/2012

ELEVATION: ±1506'

SWC REP.:

PJO

WATER LEVEL INFORMATION

DATE FINISH:

TYPE SIZE I.D. HAMMER WT. HAMMER FALL HW 4" 130LB 30" SS 1 3/8" 130LB 30" 2" NQ2

SOIL TECH. - VISUALLY

LABORATORY TEST

PROJECT / CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.

SOILS APPEARED SATURATED AT 6.0'

CASING BLOWS		SAN	ИPLE		SAME	SAMPLER BLOWS PER 6"				STRATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	OTTATA LEGI DATA
										GRAY GRAVELLY SAND AND SILT (GLACIAL TILL)
									42.4'	WITH COBBLES AND BOULDERS
	9D	5"	5"	42.4'	50/5"				-	
										GRAYISH BROWN GRAVELLY SAND AND SILT
										PROBABLE WEATHERED ROCK (SAPROLITE)
	10D	6"	6"	47.5'	75					~VERY DENSE~
	100			47.0	70					WERT BENGE
									52.5'	
									54.0'	PROBABLE BEDROCK / ADVANCED BY ROLLER CONE TO 54.0'
										GRAY PELITE / META SANDSTONE
	R1	1.5'	0.9'	55.5'					55.5'	RQD = 25% (VERY POOR TO POOR)
										DOTTOM OF EVEN OD ATION AT SES
										BOTTOM OF EXPLORATION AT 55.5'
									-	
									1	
									1	
									1	
]	
SAMPLI	ES:			SOIL C	LASSIF	FIED B	/ :		REMAR	KS: SOILS SATURATED AT 5.0'
D = SPL										
C = 2" S	HELBY	TUBE			DRII	LLER -	VISUAL	.LY		STRATIFICATION LINES REPRESENT THE

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.:

B-T12



BLUE SKY WEST WIND POWER PROJECT BINGHAM, BRIGHTON PLANTATION, MAYFIELD TOWNSHIP & KINGSBURY PLANTATION, MAINE



B-T12 R1 (54.0'-55')



DRILLING CO.:

CASING:

SAMPLER:

CASING

PRELIMINARY BORING LOG

MIKE NADEAU

BORING NO.: **B-T28**SHEET: 1 OF 2

PROJECT NO.: 10-0014.2

PROJECT / CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.

DATE START:
DOATE FINISH:

DRILLER:

30"

ELEVATION: ±1513'

10/29/2012

10/29/2012

PJO

TYPE SIZE I.D. HAMMER WT. HAMMER FALL
HW 4" 130LB 30"

130LB

1 3/8"

NORTHERN TEST BORINGS, INC.

WATER LEVEL INFORMATION SOILS APPEAR WET TO SATURATED AT 6.0'

SWC REP.:

CORE BARREL: NQ2 2"

SS

CASING BLOWS		SAN	/IPLE		SAMPLER BLOWS PER 6"					CTDATA 0 TECT DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	STRATA & TEST DATA
HW									0.4'	FOREST DUFF
_	1D	24"	24"	2.0'	1	1	3	3	2.0'	BROWN SANDY SILT WITH ORGANICS ~LOOSE~ w=21.0%
										LICHT PROMINI CRAVELLY CAND AND CILT
										LIGHT BROWN GRAVELLY SAND AND SILT
									1	(GLACIAL TILL)
	2D	24"	12"	7.0'	7	8	13	9		~MEDIUM DENSE~ w=12.7%
									9.0'	
	R1	1.0'	1.0'	10.0'						RQD = 33% (POOR) GRAY PELITE / META SANDSTONE
	R2	0.7'	0.6'	10.7'					10.7'	RQD = 0% (VERY POOR) HIGHLY FRACTURED ZONE
	R3	0.6'	0.6'	11.3'					11.3	RQD = 55% (FAIR)
										CLOSELY SPACED FRACTURES STAINED WITH IRON OXIDE.
	R4	2.7'	2.5'	14.0'					14.0'	RQD = 16% (VERY POOR)
									_	GRAY PELITE; MEDIUM HARD; FINE GRAINED; SLIGHTLY WEATHERED, SHALLOW
									<u> </u>	TO STEEP FRACTURE ANGLES AT 20-75 DEGREES FROM HORIZONTAL. FOLIATION
	R5	3.0'	3.0'	17.0'					17.0'	RQD = 61% (FAIR) PARALLELS AND CROSS CUTS FRACTURES.
	Do	0.01	0.01	40.01					40.0	MODERATE TO STEEP FRACTURE ANGLES AT 45-85 DEGREES
	R6	2.0'	2.0'	19.0'					19.0	RQD = 64% (FAIR) FROM HORIZONTAL. CLOSELY SPACED MODERATE TO STEEP FRACTURE ANGLES
	R7	1.7'	1.7'	20.7'					20.7'	RQD = 53% (FAIR) STAINED WITH IRON OXIDE.
	IXI	1.7	1.7	20.7					- 20.7	SLIGHTLY WEATHERED, FRACTURE SURFACES IRON OXIDE STAINED.
										SHALLOW TO MODERATE ANGLED FRACTURES AT 10-50 DEGREES. STEEP
	R8	3.3'	3.3'	24.0'					24.0'	RQD = 76% (GOOD) ANGLED FOLIATION AT 60-70 DEGREES.
									1	CLOSELY SPACED VERTICLE FRACTURES.
	R9	2.0'	2.0'	26.0'					26.0'	RQD = 30% (POOR)
										SAME ROCK DESCRIPTION AS R5; FOLIATION GENERALLY PARALLELS
										STEEP FRACTURE SETS AT 60-70 DEGREES.
	R10	3.0'	3.0'	29.0'					29.0'	RQD = 77% (GOOD)
									_	SAME AS R10; QUARTZ VEINS CROSS CUTTING FOLIATION.
	R11	2.0'	2.0'	31.0'					31.0'	RQD = 50% (FAIR TO GOOD)
	D40	0.01	0.01	00.01					00.01	STEEP FRACTURES GENERALLY PARALLEL FOLIATION AT 60-75 DEGREES. IRON
	R12	2.0'	2.0'	33.0'					33.0	RQD = 20% (VERY POOR) OXIDE STAINED.
	R13	1.7'	1.7'	34.7'					3/1 7'	SEVERAL MECHANICAL FRACTURES.
	1113	1.7	1.7	54.7					34.7	RQD = 71% (FAIR) FOLIATION PARALLELS STEEP ANGLED FRACTURES AT 60-80 DEGREES
	R14	2.0'	2.0'	36.7'					36.7'	RQD = 55% (FAIR) FROM HORIZONTAL.
		2.0	2.0	00.7					, ,00:1	MODERATELY SPACED, STEEP ANGLED FRACTURES
	R15	2.3'	2.3'	39.0'					39.0'	RQD = 52% (FAIR) AT 60-80 DEGREES FROM HORIZONTAL.
									40.0'	 -
SAMPL				SOIL C	LASSII	FIED B	Y:		REMAR	RKS:
D = SPL					I					
C = 2" S		_		\ \			VISUAL			STRATIFICATION LINES REPRESENT THE
S = 3" S				X			i VISU DRY TE			APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. BODING NO. B. T29
U = 3.5"	SHELE	or IUB		Χ	LAB	UKA I (אלו וב	٥ I		AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-T28



BINGHAM, MAINE

TYPE

NORTHERN TEST BORINGS, INC.

LOCATION:

CASING:

SAMPLER:

S = 3" SHELBY TUBE

U = 3.5" SHELBY TUBE

DRILLING CO.:

PROJECT / CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.

SOIL TECH. - VISUALLY

LABORATORY TEST

PRELIMINARY BORING LOG

B-T28 BORING NO.: SHEET: 2 OF 2

PROJECT NO.: 10-0014.2

DATE START: 10/29/2012 DATE FINISH: 10/29/2012

ELEVATION: ±1513'

SIZE I.D. HAMMER WT. HAMMER FALL SWC REP.: PJO

HW 4" 130LB 30" WATER LEVEL INFORMATION SS 1 3/8" 130LB 30" SOILS APPEAR WET TO SATURATED AT 6.0'

MIKE NADEAU

DRILLER:

2" NQ2 CORE BARREL:

CASING BLOWS		SAN	ИPLE		SAME	SAMPLER BLOWS PER 6"		DEPTH	STRATA & TEST DATA	
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEFIII	SINAIA & ILSI DATA
	R16	2.0'	2.0'	41.0'					41.0'	RQD = 60% (FAIR)
										GRAY PELITE; SAME ROCK DESCRIPTION AS R3;
										STEEP, MODERATELY SPACED NATURAL AND MECHANICAL FRACTURES
										AT 10, 60-80 DEGREES FROM HORIZONTAL.
	R17	3.4'	3.4'	44.4'					44.4'	RQD = 76% (GOOD)
	D40	0.51	2.51	40.01					40.01	MODERATELY SPACED FRACTURES AT 75 DEGREES
	R18	2.5'	2.5'	46.9'					40.9	RQD = 88% (GOOD) FROM HORIZONTAL. SLIGHTLY WEATHERED, IRON OXIDE STAINED, CLOSELY SPACED FRACTURES
									=	AT 5, 45 AND 90 DEGREES FROM HORIZONTAL.
	R19	1.5'	1.5'	48.4'					48 4'	RQD = 40% (POOR)
	R20	1.7'	1.7'	50.1'						RQD = 35% (POOR) FRACTURES PARALELL FOLIATION.
									`	HIGHLY FRACTURED AND IRON OXIDE STAINED.
	R21	2.4'	2.4'	52.5'					52.5	RQD = 33% (POOR)
]	FAINTLY WEATHERED, MODERATELY SPACED, STEEP ANGLED
										FRACTURES AT 10 AND 75 DEGREES FROM HORIZONTAL.
	R22	2.7'	2.7'	55.1'					<u>55.2'</u>	RQD = 99% (EXCELLENT)
									-	BOTTOM OF EXPLORATION AT 55.2'
									-	
									ł	
									-	
									1	
									=	
									1	
									-	
									-	
			-						ł	
									1	
SAMPL	ES:			SOIL C	LASSIF	FIED BY	/ :		REMAR	KKS:
_	LIT SPOON									
C = 2" S	SHELBY TUBE DRILLER - VISUALLY				VISUAL	LY.		STRATIFICATION LINES REPRESENT THE		

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES

BORING NO.:

B-T28

AND THE TRANSITION MAY BE GRADUAL.



BLUE SKY WEST WIND POWER PROJECT BINGHAM, BRIGHTON PLANTATION, MAYFIELD TOWNSHIP & KINGSBURY PLANTATION, MAINE



B-T28 R1 to R10 (9' to 29.0')



B-T28 R11 to R18 (30'-46.9')



B-T28 R11 to R13 (46.9'-55')



DRILLING CO.:

PRELIMINARY BORING LOG

MIKE NADEAU

DRILLER:

BORING NO.: **B-T36**SHEET: 1 OF 2

PROJECT NO.: 10-0014.2

PROJECT / CLIENT:	PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.
I OCATION:	BINGHAM MAINE

ELEVATION: ±1586'

10/29/2012

10/29/2012

PJO

 TYPE
 SIZE I.D.
 HAMMER WT. HAMMER FALL

 CASING:
 HW
 4"
 130LB
 30"

 SAMPLER:
 SS
 1 3/8"
 130LB
 30"

 CORE BARREL:
 NQ2
 2"

NORTHERN TEST BORINGS, INC.

WATER LEVEL INFORMATION
WATER AT 5.3' AFTER DRILLING

BORE HOLE CAVED AT 8' AFTER DRILLING

DATE START:

DATE FINISH:

SWC REP.:

BLOWS						PLER BI	OWS F	PER 6"	DEPTH	STRATA & TEST DATA			
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	<i>DEI</i> 1111	OTRAIA G TEOT DATA			
HW									1.0'	BROWN SANDY GRAVEL WITH ORGANICS (FILL) ~LOOSE~			
	1D	24"	12"	2.0'	2	2	4	5	-	BROWN SILTY GRAVELLY SAND (GLACIAL TILL) ~MEDIUM DENSE~			
•	2D	4"	3"	5.3'	30/4"				5.3'				
										GRAY PELITE; MEDIUM HARD; FINE GRAINED; SLIGHTLY WEATHERED,			
										CLOSELY SPACED FRACTURES AT 50-90 DEGREES FROM HORIZONTAL.			
										SILT SEAMS INFILLING FRACTURES.			
	R1	5.0'	4.5'	10.3'					. 10.2	POD - 200/ (VEDV DOOP)			
	ΚI	5.0	4.5	10.3					_10.3_	RQD = 20% (VERY POOR) SAME ROCK DESCRIPTION AS R1; SLIGHTLY WEATHERED, FRACTURE SURFACES			
										STAINED WITH IRON OXIDE. MODERTE TO CLOSELY SPACED FRACTURES AT			
										10 AND 90 DEGREES FROM HORIZONTAL. STEEP ANGLED FOLIATION.			
										SOFT SEAM AT 11.5', PROBABLE ZONE OF NO RECOVERY.			
	R2	5.0'	4.4'	15.3'					\ 15.3'	RQD = 54% (FAIR)			
									1 `				
										SAME ROCK DESCRIPTION; HIGHLY FRACTURED, MODERATELY			
										WEATHERED, ZONE OF CORE LOSS.			
	_												
	R3	5.0'	2.0'	20.3'					20.3	RQD = 6% (VERY POOR)			
										SAME ROCK DESCRIPTION; SLIGHTLY WEATHERED, FRACTURE SURFACES IRON OXIDE STAINED. FRACTURE ANGLES AT 45 AND 85 DEGREES.			
										NEAR VERTICLE FOLIATION.			
	R4	3.5'	3.5'	24.3'					24.3'	RQD = 85% (GOOD)			
		0.0	0.0	20					\				
										SAME ROCK DESCRIPTION; STEEP TO NEAR VERTICAL FRACTURES PARALLEL			
										FOLIATION AT 80-90 DEGREES FROM HORIZONTAL.			
										FRACTURE SURFACES STAINED WITH IRON OXIDE.			
	R5	5.0'	5.0'	29.3'					`_29.3'	RQD = 90% (GOOD TO EXCELLENT)			
										SAME ROCK DESCRIPTION; NUMEROUS SHALLOW TO STEEP ANGLED			
									-	FRACTURES (10-80 DEGREES) STAINED WITH IRON OXIDE.			
	R6	5.0'	4.7'	34.3'					24.21	POD = 20% (VEDV POOP)			
	Ν0	5.0	4./	34.3					34.3	RQD = 20% (VERY POOR)			
	R7	2.5'	1.8'	36.3'					36.8'	SAME ROCK DESCRIPTION; HIGHLY WEATHERED, WITH SOFT SEAMS. RQD =0% (VERY POOR)			
	137	2.0	1.0	00.0					- 20.0	SAME ROCK DESCRIPTION; SLIGHTLY WEATHERED, IRON OXIDE STAINED.			
									1	CLOSELY SPACED, SHALLOW TO STEEP ANGLED FRACTURES			
	R8	3.2'	3.2'	40.0'					40.0'	RQD = 16% (VERY POOR) AT 10-90 DEGREES.			
VWDI E				SOIL C	I V S S I L	TIED D	/.	1					
AMPLE = SPL		ON		SUILU	LASSIF	ובט א.	١.		REMAR	INO.			
	HELBY				וואס	LLER -	VISLIAI	ΙY		STRATIFICATION LINES REPRESENT THE			
	HELBY			X	i	L TECH				APPROXIMATE BOUNDARY BETWEEN SOIL TYPES			
		Y TUB	E	X	0	ORATO				AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-T36			



BINGHAM, MAINE

TYPE

HW

SS

NQ2

NORTHERN TEST BORINGS, INC.

4"

1 3/8"

2"

LOCATION:

CASING:

SAMPLER:

CORE BARREL:

S = 3" SHELBY TUBE

U = 3.5" SHELBY TUBE

DRILLING CO.:

PROJECT / CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.

SOIL TECH. - VISUALLY

LABORATORY TEST

SIZE I.D. HAMMER WT. HAMMER FALL

130LB

130LB

PRELIMINARY BORING LOG

MIKE NADEAU

DRILLER:

30"

30"

B-T36 BORING NO.: SHEET: 2 OF 2 10-0014.2

PROJECT NO.:

DATE START: 10/29/2012 DATE FINISH: 10/29/2012

ELEVATION:

±1586'

SWC REP.: PJO WATER LEVEL INFORMATION

WATER AT 5.3' AFTER DRILLING

BORE HOLE CAVED AT 8' AFTER DRILLING

ASING LOWS	SAI	MPLE		SAMI	PLER BI	LOWS F	PER 6"	DEPTH	STRATA & TEST DATA
PER NO	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	SIRATA & TEST DATA
RS		2.9'	42.9'						GRAY PELITE; QUARTZ VEINS 1/4" TO 2 1/2" THICK, HEALED MODERATE TO STEEP ANGLED CRACKS. SHALLOW TO STEEP ANGLED FRACTURES AT 5-90 RQD = 52% (FAIR) DEGREES. SAME ROCK DESCRIPTION; FOLIATION PARALLELS FRACTURES AT 45-80 DEGREE FROM HORIZONTAL. FRACTURE SURFACES STAINED WITH IRON OXIDE.
R1		3.1' 4.0'	46.0' 50.0'						RQD = 61% (FAIR) SAME ROCK DESCRIPTION; CLOSELY SPACED FRACTURES AT 35-75 DEGREES FROM HORIZONTAL. RQD = 20% (VERY POOR)
R1:		3.0'	53.0'						SAME ROCK DESCRIPTION; HIGHLY FRACTURED, IRON OXIDE STAINED. RQD = 0% (VERY POOR) CLOSELY SPACED FRACTURES STAINED WITH IRON OXIDE.
R1	3 2.0'	2.0'	55.0'					55.0'	RQD = 0% (VERY POOR)
									BOTTOM OF EXPLORATION AT 55.0'

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES

BORING NO.:

B-T36

AND THE TRANSITION MAY BE GRADUAL.



BLUE SKY WEST WIND POWER PROJECT BINGHAM, BRIGHTON PLANTATION, MAYFIELD TOWNSHIP & KINGSBURY PLANTATION, MAINE



B-T36 R1 to R5 (5.3' to 29.3')



B-T36 R6 to R10 (29.3'-46')



B-T36 R11 to R13 (46'-55')



DRILLING CO.:

PRELIMINARY BORING LOG

MIKE NADEAU

DRILLER:

BORING NO.: **B-T47**SHEET: 1 OF 2
PROJECT NO.: 10-0014.2

PROJECT / CLIENT:	PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.
LOCATION:	BINGHAM, MAINE

DATE START: 10/31/2012

DATE FINISH: 10/31/2012

±1686'

TYPE SIZE I.D. HAMMER WT. HAMMER FALL

SWC REP.: PJO

 CASING:
 NW
 3"
 140 LBS
 30"

 SAMPLER:
 SS
 1 3/8"
 140 LBS
 30"

 CORE BARREL:
 NQ2
 2"

NORTHERN TEST BORINGS, INC.

WATER LEVEL INFORMATION WATER IN OPEN BORE HOLE AT 7.5'

ELEVATION:

ON 10/31/2012 AND 14.5' ON 11/5/2012

CASING BLOWS		SAN	/IPLE		SAMI	PLER BI	LOWS F	PER 6"	DEPTH	STRATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEI III	SINAIA & ILSI DAIA
									0.3'	FOREST DUFF
	1D	24"	16"	2.0'	1	1	2	3	1.8'	DARK BROWN SANDY SILT WITH ORGANICS TO 2.0' ~LOOSE~
									l	LIGHT BROWN GRAVELLY SAND AND SILT
									3.0'	(GLACIAL TILL)
										WEATHERED BEDROCK (SAPROLITE)
										ADVANCED BY SOLID STEM AUGER
										ADVANCED BY SOCIO STEIN AUGEN
									10.0'	
										GRAY PELITE; MEDIUM TO MODERATELY HARD; FINE GRAINED.
	R1	1.5'	1.1'	11.5'					11.5	RQD = 25% (VERY POOR TO POOR)
	R2	1.2'	1.0'	12.7'					12.7'	RQD = 28% (POOR) NEAR VERTICAL FRACTURE ANGLES.
	R3	1.3'	1.3'	14.0'					14.0'	RQD = 38% (POOR) SAME AS R2.
									1	NEAR VERTICAL FOLIATION, CRACKS AND FRACTURES.
	R4	2.0'	2.0'	16.0'					16.0'	RQD = 0% (VERY POOR) STAINED WITH IRON OXIDE.
									1	GRAY PELITE; MEDIUM HARD; FINE GRAINED; SLIGHTLY WEATHERED,
										HORIZONTAL TO NEAR VERTICAL FOLIATION, CRACKS AND FRACTURES.
										CORE AND FRACTURE SURFACES STAINED WITH IRON OXIDE.
	R5	3.3'	3.3'	19.3'					\ 19.3'	RQD = 40% (POOR)
									1	SAME ROCK DESCRIPTION; SLIGHTLY WEATHERED, CLOSE TO MODERATELY
										SPACED FRACTURE ANGLES AT 5, 35 AND 90 DEGREES FROM HORIZONTAL.
										CORE AND FRACTURE SURFACES STAINED WITH IRON OXIDE.
	R6	3.8'	3.8'	23.1'					`\ 23.1'	RQD = 66% (FAIR)
									1	SAME ROCK DESCRIPTION; SLIGHTLY WEATHERED, EXTERIOR OF CORE AND
										FRACTURES STAINED WITH IRON OXIDE. CLOSE TO WIDELY SPACED FRACTURES
										AT 5, 35 AND 90 DEGREES FROM HORIZONTAL.
	R7	5.1'	5.1'	28.2'					`_28.2'	RQD = 84% (GOOD)
										SAME ROCK DESCRIPTION; FRACTURE SURFACES STAINED WITH IRON OXIDE.
										THIN QUARTZ VEINS APROX. 1/8" THICK DIPPING AT 30-40 DEGREES FROM
										HORIZONTAL. SHALLOW FRACTURE ANGLES AT 5-35 DEGREES FROM HORIZONTAL
	Dr	F 6'	F 61	00.01						DOD (00% (00.0D))
	R8	5.0'	5.0'	33.2'					`\33.2'	RQD = 82% (GOOD)
									-	SAME ROCK DESCRIPTION; FRESH TO SLIGHTLY WEATHERED, 2" THICK
										WEATHERED SEAM AT 36.8', IRON OXIDE STAINED. CLOSE TO WIDELY
										SPACED FRACTURES AT 5-10 DEGREES FROM HORIZONTAL. WEAKLY FOLIATED.
	R9	5.0'	5.0'	38.2'					38.2	RQD = 96% (EXCELLENT)
			0						40.0'	
AMPLE	S:			SOIL C	LASSI	FIED BY	/ :		REMAR	eks:
	.5. IT SPO	ON		JUIL	_, .0011	יבט טו	• •		I VEINICAL	
	HELBY				DRII	LLER -	VISUAI	LY.		STRATIFICATION LINES REPRESENT THE
_	HELBY	_		Х		L TECH				APPROXIMATE BOUNDARY BETWEEN SOIL TYPES
	SHELE		Е	X		ORATO				AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-T47
										B-14/



S = 3" SHELBY TUBE

U = 3.5" SHELBY TUBE

PRELIMINARY BORING LOG

B-T47 BORING NO.: SHEET: 2 OF 2 PROJECT NO.: 10-0014.2

PROJECT / CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC. DATE START: 10/31/2012 LOCATION: BINGHAM, MAINE DATE FINISH: 10/31/2012 DRILLING CO.: NORTHERN TEST BORINGS, INC. DRILLER: MIKE NADEAU **ELEVATION:** ±1686'

TYPE SIZE I.D. HAMMER WT. HAMMER FALL SWC REP.: PJO

CASING: NW 3" 140 LBS 30" SAMPLER: SS 1 3/8" 140 LBS 30" WATER IN OPEN BORE HOLE AT 7.5' 2" NQ2 CORE BARREL:

SOIL TECH. - VISUALLY

LABORATORY TEST

ON 10/31/2012 AND 14.5' ON 11/5/2012

WATER LEVEL INFORMATION

CASING BLOWS		SAN	//PLE		SAME	PLER BI	_OWS P	PER 6"	DEDTU	STDATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPIR	SINAIA & IESI DAIA
BLOWS PER	R10 R11 R12								. 47.7' . 52.5'	GRAY PELITE; SAME ROCK DESCRIPTION; WIDELY SPACED MECHANICAL FRACTURES, VERTICAL NATURALLY OCCURRING FRACTURES. RQD = 96% (EXCELLENT) SAME ROCK DESCRIPTION; SHALLOW TO STEEP ANGLED FRACTURES AT 5-10, 45 AND 80-90 DEGREES FROM HORIZONTAL. RQD = 76% (GOOD) SAME ROCK DESCRIPTION; SLIGHTLY WEATHERED, CLOSELY SPACED FRACTURES HORIZONTAL AND VERTICEL FRACTURES STAINED WITH IRON OXIDE. RQD = 56% (FAIR) SAME ROCK DESCRIPTION; NUMEROUS CLOSELY SPACED VERTICAL FRACTURES. RQD = 50% (POOR TO FAIR) BOTTOM OF EXPLORATION AT 55.5'
SAMPLI D = SPL		OON		SOIL C	LASSIF	FIED BY	/:		REMAR	KS:
C = 2"S					DRII	LLER -	VISUAL	LY.		STRATIFICATION LINES REPRESENT THE

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES

BORING NO.:

B-T47

AND THE TRANSITION MAY BE GRADUAL.



BLUE SKY WEST WIND POWER PROJECT BINGHAM, BRIGHTON PLANTATION, MAYFIELD TOWNSHIP & KINGSBURY PLANTATION, MAINE



B-T47 R1 to R7 (10' to 28.2')



B-T47 R8 to R10 (28.2'-43.2')



B-T47 R11 to R13 (43.2'-55.5')



LOCATION:

PRELIMINARY BORING LOG

BORING NO.: B-T56
SHEET: 1 OF 2
PROJECT NO.: 10-0014.2

10/30/2012

10/30/2012

PJO

DATE START:

DATE FINISH:

SWC REP.:

PROJECT / CLIENT:	PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.	

BINGHAM, MAINE

DRILLING CO. : NORTHERN TEST BORINGS, INC. DRILLER: MIKE NADEAU ELEVATION: ±1559'

TYPE SIZE I.D. HAMMER WT. HAMMER FALL

 CASING:
 HW
 4"
 140 LBS
 30"
 WATER LEVEL INFORMATION

 SAMPLER:
 SS
 1 3/8"
 140 LBS
 30"
 SOILS APPEARED SATURATED AT 10'

CORE BARREL: NQ2 2"

CASING BLOWS		SAN	/IPLE		SAMF	PLER BL	OWS P	ER 6"	DEDTU	STRATA & TEST DATA	
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPIH	SIRAIA & IESI DATA	
									0.3'	FOREST DUFF	
	1D	24"	0"	2.0'					2.0'	DARK BROWN SANDY SILT WITH ORGANICS	
										LIGHT BROWN GRAVELLY SAND AND SILT (GLACIAL TILL)	
									ł		
	2D	24"	19"	7.0'	10	10	11	12		~MEDIUM DENSE~ w=14.8%	
									-		
										WEATHERED BEDROCK FRAGMENTS IN SPOON	
	3D	24"	19"	12.0'	45	30	18	18		~DENSE~ w=9.6%	
									12.4'	DEDDOCK	
									15.0'	BEDROCK ADVANCED BY ROLLER CONE FROM 12.4' TO 15'	
									15.0	GRAY META SANDSTONE; MEDIUM TO MODERATELY HARD; FINE GRAINED;	
										SLIGHTLY WEATHERED, IRON OXIDE STAINS ON SHALLOW	
									-	TO STEEPLY DIPPING FRACTURE ANGLES (10-80 DEGREES).	
	R1	3.1'	3.1'	18.1'					` 18.1'	RQD = 58% (FAIR)	
										SAME ROCK DESCRIPTION; SHALLOW TO STEEP FRACTURE	
										ANGLES AT 10-90 DEGREES FROM HORIZONTAL.	
	R2	3.6'	3.6'	21.7'					21.7	RQD = 56% (FAIR)	
									ŧ.	SAME ROCK DESCRIPTION; FRACTURE ANGLES AT 5,45	
	R3	4.1'	4.1'	25.8'					25.8'	AND 85 DEGREES FROM HORIZONTAL. RQD = 71% (FAIR)	
	110	7.1	7.1	20.0					20.0	RQD = 71% (FAIK)	
									1	SAME ROCK DESCRIPTION; GLACIAL TILL SEAMS INFILLING FRACTURE	
									1	SURFACES FROM 28 TO 29.8'. PROBABLE ZONE OF CORE LOSS.	
	R4	4.0'	3.1'	29.8'					29.8'	RQD = 43% (POOR)	
										SAME ROCK DESCRIPTION; FRESH WEATHERING,	
									-	WIDELY SPACED FRACTURES AT 45 DEGREES FROM HORIZONTAL.	
	R5	5.0'	5.0'	34.8'					21 0'	RQD = 98% (EXCELLENT)	
	IVΩ	5.0	5.0	J4.0					34.0	RQD = 96% (EACELLENT)	
									1	SAME ROCK DESCRIPTION; FRESHLY WEATHERED, WIDELY SPACED, SHALLOW	
									1	ANGLED FRACTURES AT 5, 10 AND 25 DEGREES FROM HORIZONTAL.	
										THIN QUARTZ VEINS DIPPING 40-60 DEGREES FROM HORIZONTAL.	
	R6	5.0'	5.0'	39.8'					39.8'	39.8' RQD = 96% (EXCELLENT)	
SAMPLE		ON		SOIL C	LASSI	FIED B	Y:		REMAR	KS: SOILS SATURATED AT 10'	
D = SPL C = 2" S					וופת	I FR -	VISUAL	ΙY		STRATIFICATION LINES REPRESENT THE	
S = 3" S				Х			I VISU			APPROXIMATE BOUNDARY BETWEEN SOIL TYPES	
U = 3.5"				X			DRY TE			AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-T56	
				_ ` `						DOMING NO B-130	



BINGHAM, MAINE

LOCATION:

CASING:

SAMPLER:

S = 3" SHELBY TUBE

U = 3.5" SHELBY TUBE

DRILLING CO.:

PRELIMINARY BORING LOG

MIKE NADEAU

DRILLER:

B-T56 BORING NO.: SHEET: 2 OF 2

PROJECT NO .: 10-0014.2

DATE START: 10/30/2012 DATE FINISH: 10/30/2012

ELEVATION:

±1559'

TYPE SIZE I.D. HAMMER WT. HAMMER FALL

SOIL TECH. - VISUALLY

LABORATORY TEST

PROJECT / CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT / REED & REED, INC.

SWC REP.: PJO WATER LEVEL INFORMATION

HW 4" 140 LBS 30" SS 1 3/8" 140 LBS 30" 2" NQ2 CORE BARREL:

NORTHERN TEST BORINGS, INC.

WATER AT 3.5' AFTER DRILLING

BORE HOLE CAVED AT 10'

CASING BLOWS		SAN	ИPLE		SAM	PLER BI	LOWS F	PER 6"	DEPTH	STRATA & TEST DATA	
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEFIN	STRATA & TEST DATA	
										GRAY META SANDSTONE; SAME ROCK DESCRIPTION;	
										VERY SLIGHTLY WEATHERED, SHALLOW ANGLED FRACTURES	
	D.7	4.01	4.0!	40.0!					40.01	AT 5-35 DEGREES FROM HORIZONTAL.	
	R7	4.0'	4.0'	43.8'					43.8	RQD = 83% (GOOD)	
										SAME ROCK DESCRIPTION; FRESH WEATHERING,	
										WIDELY SPACED SHALLOW ANGLED FRACTURES	
										AT 5-15 DEGREES FROM HORIZONTAL.	
	R8	5.0'	5.0'	48.8'					48.8'	RQD = 94% (EXCELLENT)	
										SAME ROCK DESCRIPTION; FRESH WEATHERING.	
	R9	4.8'	4.8'	53.6'					53.6'	RQD = 100% (EXCELLENT)	
	R10	1.4'	0.5'	55.0'						RQD = 36% (POOR) SAME ROCK DESCRIPTION;	
										BOTTOM OF EXPLORATION AT 55.0'	
AMPLE	ES:			SOIL C	LASSII	FIED BY	<u></u> -		REMAR	RKS:	
	.IT SPC	ON									
= 2" S	HELBY	TUBE			DRI	LLER -	VISUAL	LY		STRATIFICATION LINES REPRESENT THE	

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.:

B-T56



B-T56 R1 to R5 (15'-34.8')



B-T56 R6 to R10 (34.8'-55')



COMPLETION DEPTH: 8.3'

PRELIMINARY TEST PIT LOGS

DEPTH TO WATER: NO SEEPAGE OBSERVED

100				PROJECT NO.: 10-0014.2	
		BINGHAM, MAINE			SWC REP.: TJH
KHO	E FIRM:	SARGENT CORP.	EXCAVATOR: HITACHI	135	
			TEST PIT TP-1		
	DATE:	10/29/2012	SURFACE ELEVATION: NOT AVAILABLE	LOCATION:	TURBINE T-28 AREA
LE EPTH	DEPTH (FT)		STRATUM DESCRIPTION		TEST RESULTS
	√0.3'		FOREST DUFF		
	2.3'	DARKI	BROWN SANDY SILT WITH ORGANICS AND ROOTS		
3.0'			LIGHT BROWN SANDY SILT, SOME GRAVEL WITH COBBLES (GLACIAL TILL)		w = 16.5%
	8.3'				
		١	PRACTICAL REFUSAL AT 8.3' PROBABLE BEDROCK NOTE: SOILS APPEARED MOIST THROUGHOUT		
E	_E EPTH	DATE: LE DEPTH (FT) 0.3' 2.3'	(FT) 0.3' 2.3' DARK I	TEST PIT TP-1 DATE: 10/29/2012 SURFACE ELEVATION: NOT AVAILABLE E DEPTH (FT) 0.3' FOREST DUFF 2.3' DARK BROWN SANDY SILT WITH ORGANICS AND ROOTS LIGHT BROWN SANDY SILT, SOME GRAVEL WITH COBBLES (GLACIAL TILL) 8.3' PRACTICAL REFUSAL AT 8.3'	TEST PITTP-1 DATE: 10/29/2012 SURFACE ELEVATION: NOT AVAILABLE LOCATION: E DEPTH (FT) STRATUM DESCRIPTION 0.3' FOREST DUFF 2.3' DARK BROWN SANDY SILT WITH ORGANICS AND ROOTS LIGHT BROWN SANDY SILT, SOME GRAVEL WITH COBBLES (GLACIAL TILL) 8.3' PRACTICAL REFUSAL AT 8.3' PROBABLE BEDROCK

				TEST	Γ PIT TP-2		
		DATE:	10/29/2012	SURFACE ELEVA	ATION: NOT AVAILABLE	LOCATION:	SUBSTATION AREA
SAN	/IPLE	DEPTH		STRATUM	DESCRIPTION		TEST RESULTS
NO.	DEPTH	(FT)					
		0.3'			ST DUFF		
		2.3'	DAI	RK BROWN SANDY SILT	WITH ORGANICS AND ROOTS		
S-1	3.0'	4.9'			DY SILT, SOME GRAVEL S (GLACIAL TILL)		w = 13.6%
		5.6'		WEATHER	RED BEDROCK		
					REFUSAL AT 5.6' E BEDROCK		
				NOTE: SOILS APPEAI	RED MOIST THROUGHOUT		
	С	OMPLET	ION DEPTH:	5.6'	DEPTH TO WATE	R: NO SEE	EPAGE OBSERVED



COMPLETION DEPTH: 5.4'

PRELIMINARY TEST PIT LOGS

PRC	JECT/	CLIENT:	PROPOSED BLUE	PROJECT NO.:	10-0014.2		
	LO	CATION:	BINGHAM, MAINE			SWC REP.:	TJH
BA	CKHC	E FIRM:	SARGENT CORP.	EXCAVATOR: HITAC	HI 135	·-	
				TEST PIT TP-3			
		DATE:	10/31/2012	SURFACE ELEVATION: NOT AVAILABLE	LOCATION:	SUBSTATION AREA	
SAN	MPLE DEPTH STRATUM DESCRIPTION				TEST RESUL	.TS	
NO.	DEPTH	(FT)					
		0.4'		FOREST DUFF			
		1.9'	BRO	OWN SANDY SILT WITH ORGANICS AND ROOTS			
		ļ <u>.</u>		GRAY-BROWN GRAVELLY SAND AND SILT			
•		5.4'		SOME COBBLES (GLACIAL TILL)			
				PRACTICAL REFUSAL AT 5.4'			
				PROBABLE BEDROCK			
			Ņ	IOTE: SOILS APPEARED MOIST THROUGHOUT			
	-						
	1	i	l				

				TES	T PIT TP-4			
		DATE:	10/31/2012	SURFACE ELEV	ATION: NOT AVAILABLE	LOCATION	: SUBSTATION AREA	
SAMP	PLE	DEPTH		STRATUM	I DESCRIPTION		TEST RESULTS	
NO. [DEPTH	(FT)						
		0.4'		FORE	ST DUFF			
				BROWN SANDY SILT WI	TH ORGANICS AND ROOTS	3		
		2.5'						
		3.4'		LIGHT BROW	/N SANDY SILT			
				PRACTICAL	REFUSAL AT 3.4'			
					LE BEDROCK			
			PROBA	BLE BEDROCK OBSERV	ED AT 0.7' IN NORTH END C	F TEST PIT		
			NOT	E. COULO ADDEADED MO	IST 0-2.1' AND SATURATED	0.41.0.41		
			NOTI	E: SOILS APPEARED MO	1151 U-2.T AND SATURATED	0 2.1 - 3.4		
-								
	00	ND	ION DEPTH:	2.41	DEDTILITO W	ATED. CI	EEPAGE AT 2.1'	
	CC	JIVIPLE	ION DEPTH:_	3.4'	DEPTH TO WA	AIEK: SI	EPAGE AT Z.I	

DEPTH TO WATER: NO SEEPAGE OBSERVED

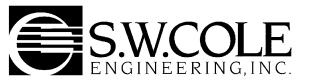


PRELIMINARY TEST PIT LOGS

PROJECT/CLIENT	PROPOSED BLUE	SKY WEST WIND POWER PROJECT	PROJECT NO.:	10-0014.2			
LOCATION	BINGHAM, MAINE		SWC REP.:	TJH			
BACKHOE FIRM	_						
	TEST PIT TP-5						
DATE	10/31/2012	SURFACE ELEVATION: NOT AVAILABLE LOCATION	: SUBSTATION AREA				
SAMPLE DEPTH		STRATUM DESCRIPTION	TEST RESUI	_TS			

ΙΑ	1PLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
10.	DEPTH	(FT)		12011120210
		0.2'	FOREST DUFF	
			BROWN SANDY SILT WITH ORGANICS AND ROOTS	
		2.3'	ODAY DDOMN ODAYELLY CANDY OF T	
		4.7'	GRAY-BROWN GRAVELLY SANDY SILT WITH COBBLES (GLACIAL TILL)	
		<u></u>	(02.101/12.112)	
			PRACTICAL REFUSAL AT 4.7'	
			PROBABLE BEDROCK	
			NOTE: SOILS APPEARED MOIST 0-1.7' AND SATURATED 1.7'-4.7'	

	TEST PIT TP-6								
		DATE:	10/31/2012	SURFACE ELEVA	TION: NOT AVAILABLE	LOCATION:	SUBSTATION AREA		
SAM	1PLE	DEPTH		STRATUM	DESCRIPTION		TEST RESULT	S	
NO.	DEPTH	(FT)							
		0.3'		FORE	ST DUFF				
				BROWN S	SANDY SILT				
		3.6'		WITH ORGANI	CS AND ROOTS				
S-1	5.0'			GRAY-BROWN GRAV	ELLY SAND SOME SILT		w = 9.1%		
				WITH COBBLES	S (GLACIAL TILL)				
		8.8'							
				BOTTOM OF EX	CAVATION AT 8.8'				
-				NOTE: SOILS APPEARED	SATURATED THROUGHOUT	•			
	С	OMPLET	ION DEPTH:	8.8'	DEPTH TO WATE	R: HEAVY	SEEPAGE AT 8.3'		
	_								



COMPLETION DEPTH: 2.5'

PRELIMINARY TEST PIT LOGS

DEPTH TO WATER: NO SEEPAGE OBSERVED

PROPOSED BLUE SKY WEST WIND POWER PROJECT	PROJECT NO.: 10-0014.2										
BINGHAM, MAINE	SWC REP.: TJH										
SARGENT CORP. EXCAVATOR: HITACHI 135											
TEST PIT TP-7											
DATE: 10/31/2012 SURFACE ELEVATION: NOT AVAILABLE LOCATION: SUBSTATION AREA											
STRATUM DESCRIPTION	TEST RESULTS										
FOREST DUFF											
BROWN SANDY SILT WITH ORGANICS AND ROOTS											
LIGHT BROWN SANDY SILT WITH WEATHERED ROCK FRAGMENTS											
PRACTICAL REFUSAL AT 2.5' PROBABLE BEDROCK NOTE: SOILS APPEARED MOIST THROUGHOUT											
	TEST PITTP-7 10/31/2012 SURFACE ELEVATION: NOT AVAILABLE LOCATION: STRATUM DESCRIPTION FOREST DUFF BROWN SANDY SILT WITH ORGANICS AND ROOTS LIGHT BROWN SANDY SILT WITH WEATHERED ROCK FRAGMENTS PRACTICAL REFUSAL AT 2.5' PROBABLE BEDROCK										

		TEST PIT	Г <u>ТР-8</u>				
	DATE:	10/31/2012 SURFACE ELEVATION	N: <u>NOT AVAILAB</u> LE LC	CATION: A	CCESS RD BETWEEN T-5 & T-6		
SAMPLE	DEPTH	STRATUM DES	CRIPTION		TEST RESULTS		
NO. DEPTH	(FT)						
	1.1'	BROWN SANDY SILT WITH ORG.	ANICS AND ROOTS TO 0.9'				
		PRACTICAL REFUS PROBABLE BEI NO FOREST DUFF OBSERVED (PREVIOUS NOTE: SOILS APPEARED N	SAL AT 1.1' DROCK SURFACE DISTURBANCE - LO	OGGING)			
C	COMPLETION DEPTH: 1.1' DEPTH TO WATER: NO SEEPAGE OBSERVED						



PRELIMINARY TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLU	E SKY WEST WIND POWER PROJECT		PROJECT NO.:	10-0014.2
LOCATION: BINGHAM, MAINI			SWC REP.:	TJH
BACKHOE FIRM: SARGENT CORP	. EXCAVATOR: HITAC	CHI 135		
	TEST PIT TP-9			
DATE: 11/1/2012	SURFACE ELEVATION: NOT AVAILABLE	LOCATION:	TURBINE T-14 AREA	

	DATE:	11/1/2012 SURFACE ELEVATION: NOT AVAILABLE	LOCATION: TURBINE T-14 AREA
SAMPLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS
IO. DEPTH	(FT)		
	0.4'	FOREST DUFF	
		BROWN SANDY SILT WITH ORGANICS	
	3.6'	ROOTS TO 2.0'	
	<u> </u>		
	ļ	GRAY-BROWN SILT AND SAND, SOME GRAV	EL
3-1 4.5'	ļ	WITH COBBLES (GLACIAL TILL)	
-	10.0'		
	10.0		
		BOTTOM OF EXPLORATION AT 10.0'	
	Ì	NOTE: SOILS APPEARED SATURATED THROU	GHOUT
- Control			
	ļ		
-			
_	OMBLET	IONI DEDTILI	NATED. LIEAVIV OFFDAGE DELOW C. 41
C	OWPLE	ION DEPTH: 10.0' DEPTH TO	WATER: HEAVY SEEPAGE BELOW 3.4'

				TEST PIT TP-10	<u> </u>		
		DATE:	11/1/2012	SURFACE ELEVATION: NOT AVAILA	ABLE LOC	CATION:	ACCESS RD NEAR TURBINE T-74
SAN	1PLE	DEPTH		STRATUM DESCRIPTION			TEST RESULTS
NO.	DEPTH	(FT)					
		0.3'		FOREST DUFF			
		2.3'		BROWN SANDY SILT WITH ORGANICS AND			
		3.3'		GRAY-BROWN GRAVELLY SANDY SILT (GLAC	CIAL TILL)		
				WEATHERED BEDROCK			
		5.3'					
		,		PRACTICAL REFUSAL AT 5.3'			
				PROBABLE BEDROCK			
				NOTE: SOILS APPEAR MOIST THROUG	HOUT		
	_	OMDLET	ION DEPTH:	5.3' DEPTI	H TO WATER:	NO SEE	PAGE OBSERVED
	C		ION DEFIN.	UEPII	I TO WATER.	NO SEE	TAGE OBSERVED



COMPLETION DEPTH: 4.5'

PRELIMINARY TEST PIT LOGS

PRC	JECT/	/CLIENT:	PROPOSED BLUE	SKY WEST WIND POWER PROJECT		PROJECT NO.:	10-0014.2
	LO	CATION:	BINGHAM, MAINE			SWC REP.:	TJH
BA	CKHC	DE FIRM:	SARGENT CORP.	EXCAVATOR: HITACI	HI 135	. <u>-</u>	
		•				•	
				TEST PIT TP-11			
		DATE:	11/1/2012	SURFACE ELEVATION: NOT AVAILABLE	LOCATION:	TURBINE T-5 AREA	
SAN	1PLE	DEPTH		STRATUM DESCRIPTION		TEST RESUL	.TS
NO.	DEPTH	(FT)					
		0.2'		FOREST DUFF			
				BROWN SANDY SILT WITH ORGANICS			
		2.3'		ROOTS TO 2.8'			
S-1	3.3'			GRAY-BROWN GRAVELLY SAND AND SILT		w = 14.6%	
		4.5'		WITH SOME COBBLES (GLACIAL TILL)			
				PRACTICAL REFUSAL AT 4.5' PROBABLE BEDROCK			
			١	IOTE: SOILS APPEARED MOIST THROUGHOUT			

				TI	EST PIT TP-12		
		DATE:	11/1/2012	SURFACE EL	EVATION: NOT AVAILABLE	LOCATION:	TURBINE T-21 AREA
SAM	PLE	DEPTH		STRAT	TUM DESCRIPTION		TEST RESULTS
NO.	DEPTH	(FT)					
		0.2'		FC	DREST DUFF		
					Y SILT WITH ORGANICS		
		2.3'			DOTS TO 1.1'		
S-1	3.5'				GRAVELLY SAND AND SILT		w = 16.4%
		4.8'			COBBLES (GLACIAL TILL)		_
		5.9'		WEATH	IERED BEDROCK		
					AL REFUSAL AT 5.9' ABLE BEDROCK		
				NOTE: SOILS APPEA	ARED SATURATED THROUGHO	UT	
	C	OMPLET	ION DEPTH:	5.9'	DEPTH TO WA	TER: SEEF	PAGE BELOW 2.2'

DEPTH TO WATER: NO SEEPAGE OBSERVED



PRELIMINARY TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIN	ND POWER PROJECT	PROJECT NO.: 10	-0014.2
LOCATION: BINGHAM, MAINE		SWC REP.:	TJH
BACKHOE FIRM: SARGENT CORP.	EXCAVATOR: HITACHI 135		
	TEST PIT TP-13		

DEPTH (FT) 1.0'	BROWN SANDY SILT WITH ORGANICS - ROOT WEATHERED BEDROCK	'S TO 0.5'	TEST RESULTS
1.0'	WEATHERED BEDROCK	S TO 0.5'	
	WEATHERED BEDROCK	'S TO 0.5'	
3.3'			
3.3'			
3.3'	DDAGTION DEFINAL AT A A		
	DDAOTION DEFLICAL AT COL		
	PRACTICAL REFUSAL AT 3.3'		
	PROBABLE BEDROCK		
	DISCONTINUOUS FOREST DUFF FROM 0.0'	TO 0.1'	
	NOTE: SOILS APPEARED MOIST THROUG	HOUT	
	DI ETION DE DI	NOTE: SOILS APPEARED MOIST THROUG	NOTE: SOILS APPEARED MOIST THROUGHOUT

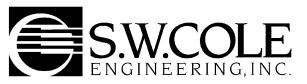
				TEST PIT_	TP-14		
		DATE:	11/2/2012	SURFACE ELEVATION: N	OT AVAILABLE LO	OCATION:	TURBINE T-24 AREA
SAM	1PLE	DEPTH		STRATUM DESCR	IPTION		TEST RESULTS
NO.	DEPTH	(FT)					
		0.2'		FOREST DUFF			
				BROWN SANDY SILT WITH	ORGANICS		
		2.6'		ROOTS TO 2.4'			
				GRAY-BROWN GRAVELLY SI	LT AND SAND		
				WITH COBBLES (GLACI	AL TILL)		
		5.9'					
				BROWN-GRAY GRAVELLY SA	_		
				WITH SOME COBBLES (GL	ACIAL TILL)		
S-1	11.5'						w = 13.0%
		12.6'					
				BOTTOM OF EXCAVATIO	N AT 12.6'		
						_	
			NOTE: SO	OILS APPEARED SLIGHTLY SA	ATURATED THROUGHOU	IT	
	-						
	C	OMPLET	ION DEPTH:	12.6'	DEPTH TO WATER:	LIGHT SI	FEPAGE BELOW 2.6'
	O	OIVII LL I	1011 DEI 1111.	12.0	DEI III 10 WATER.	LIGITIO	LLI NOL DELOW 2.0



PROJECT/CLIENT:	PROPOSED BLUE SKY \	VEST WIND POWER PROJECT	PROJECT NO.:	10-0014.2
LOCATION:	BINGHAM, MAINE	·	SWC REP.:	TJH
BACKHOE FIRM:	SARGENT CORP.	EXCAVATOR: HITACHI 135	_	

			TEST PIT TP-15				
		DATE:	11/2/2012 SURFACE ELEVATION: NOT AVAILABLE	LOCATION: TURBINE T-32 AREA			
SAMI	PLE	DEPTH	STRATUM DESCRIPTION	TEST RESULTS			
NO.	DEPTH	(FT)					
		0.4'	FOREST DUFF				
			BROWN SANDY SILT WITH ORGANICS				
		4.01	ROOTS TO 2.9'				
		4.0'					
			GRAY-BROWN GRAVELLY SAND AND SILT				
_			WITH COBBLES (GLACIAL TILL)				
			WITH BROWN SILT SEAMS TO 5.9'				
3-1	9.5'			w = 11.5%			
		11.3'					
			BOTTOM OF EXPLORATION AT 11.3'				
_			NOTE: SOILS APPEARED SLIGHTLY SATURATED THROUGH	IOUT			
		I		1			
COMPLETION DEPTH: 11.3' DEPTH TO WATER: LIGHT SEEPAGE BELOW 5.9'							

			TEST PIT TP-16	<u> </u>	
	DATE:	TURBINE T-31 AREA			
SAMPLE NO. DEP			STRATUM DESCRIPTION		TEST RESULTS
	0.4'		FOREST DUFF		
	4.0'		BROWN SANDY SILT WITH ORGANIC ROOTS TO 2.9'	S	
	11.6'		GRAY-BROWN GRAVELLY SAND AND S WITH COBBLES (GLACIAL TILL) WITH BROWN SILT SEAMS TO 5.5'		
			BOTTOM OF EXPLORATION AT 11.6 NOTE: SOILS APPEARED SATURATED THE		
	COMPLET	ION DEPTH:	11.6' DEPT	H TO WATER: HEAVY S	EEPAGE BELOW 2 0'



PRELIMINARY TEST PIT LOGS

PROJECT/CLIENT: PROPOSED BLUE SKY WEST WI	PROJECT NO.:	10-0014.2	
LOCATION: BINGHAM, MAINE		SWC REP.:	PJO
BACKHOE FIRM: SARGENT CORP.	EXCAVATOR: HITACHI 135	- -	
	TEST PIT TP-17		

			TEST PIT TP-17		
	DATE:	11/5/2012	SURFACE ELEVATION: NOT AVAILABL	E LOCATION:	TURBINE T-45 AREA
SAMPLE NO. DEPTH	DEPTH (FT)		STRATUM DESCRIPTION		TEST RESULTS
	0.4' 2.0'	С	FOREST DUFF DARK BROWN SANDY SILT WITH ORGANICS AND	ROOTS	
S-1 5.0'			LIGHT BROWN SILT AND SAND, TRACE GRAV WITH COBBLES AND BOULDERS (GLACIAL T		w = 14.5%
S-2 14.0'	10.0'		GRAY-BROWN SILT AND SAND WITH COBBLES AND BOULDERS (GLACIAL T	ILL)	w = 17.2%
			BOTTOM OF EXCAVATION AT 14.0' NOTE: SOILS APPEARED SATURATED THROU	GHOUT	
COMPLETION DEPTH: 14.0' DEPTH TO WATER: HEAVY SEEPAGE AT 3.0'					

TEST PIT TP-18							
		DATE:	11/5/2012	SURFACE ELE	EVATION: NOT AVAILABLE	LOCATION:	TURBINE T-57 AREA
SAM	IPLE	DEPTH		STRAT	UM DESCRIPTION		TEST RESULTS
NO.	DEPTH	(FT)					
		0.3'		FO	REST DUFF		
		1.8'			ITH ORGANICS AND ROOTLETS	1	
					VELLY SAND AND SILT		
		3.0'	WITH COE	BBLES AND WEATHERE	D BEDROCK FRAGMENTS (GLA	CIAL TILL)	-
				DD 4 0710 /			
					AL REFUSAL AT 3.0'		
				PROBA	ABLE BEDROCK		
				NOTE: COIL C ADDE	AD CATUDATED TUDOUCUOUT		
		-		NOTE: SOILS APPE	AR SATURATED THROUGHOUT		
	С	OMPLET	ION DEPTH:	3.0'	DEPTH TO WAT	ER: SE	EPAGE AT 3.0'



PROJECT/CLIENT: PROPOSED BLUE SKY WEST WIND POWER PROJECT				PROJECT NO.: 10-0014.2		
LOCATION: BINGHAM, MAINE					SWC REP.: PJO	
BA	CKHC	E FIRM:	SARGENT CORP. EXC	CAVATOR: HITACHI 135		
			TEST PIT T	'D 40		
			1E31 PII <u>I</u>	<u>P-19</u>		
		DATE:	11/5/2012 SURFACE ELEVATION: NOT	AVAILABLE LOC	CATION:	TURBINE T-42 AREA
SAMPLE D		DEPTH	STRATUM DESCRIP	ΓΙΟΝ		TEST RESULTS
NO.	DEPTH	(FT)				
		0.3'	FOREST DUFF			
		2.0'	BROWN SANDY SILT WITH ORGANICS	AND ROOTLETS		
			DDOWN ODAYELLY CAND A	ND OUT		
S-1	5.0'		BROWN GRAVELLY SAND A WITH COBBLES AND BOULDERS (-		w = 14.1%
3-1	5.0		WITH COBBLES AND BOOLDERS (JLACIAL TILL)		W = 14.1%
-						
		11.0'				
			BOTTOM OF EXPLORATION	AT 11.0'		
			NOTE: SOILS MOIST FROM 0.0-3.0' SOILS S.	ATLIBATED BELOW 3 0'		
			1401E. GOIEG WOLGT FROM 6.0 0.0 GOIEG O.	TOTALLE BELOW 0.0		
•						
	COMPLETION DEPTH: 11.0' DEPTH TO WATER: LIGHT SEEPAGE AT 3.0'					
COMPLETION DEPTH: 11.0' DEPTH TO WATER: LIGHT SEEPAGE AT 3.0'						

		TEST PIT	
	DATE:	SURFACE ELEVATION: LOCATIO	DN:
SAMPLE NO. DEPTH	DEPTH (FT)	STRATUM DESCRIPTION	TEST RESULTS
NO. DEPTH	(,		
COMPLETION DEPTH: DEPTH TO WATER:			