

## Boring Designation VB-FC18-13

<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	<b>SHEET 1</b> <b>OF 2 SHEETS</b>
<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks	
<b>2. BORING DESIGNATION</b> VB-FC18-13			<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)	<b>HORIZONTAL</b> NAD83 <b>VERTICAL</b> NAVD88
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ			<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b>	<b>DISTURBED</b> 4 <b>UNDISTURBED (UD)</b> 0
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b> 2	
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>14. ELEVATION GROUND WATER</b>	
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>15. DATE BORING</b> <b>STARTED</b> 01-01-19 <b>COMPLETED</b> 01-01-19	
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>16. ELEVATION TOP OF BORING</b> -57.8 Ft.	
			<b>17. TOTAL RECOVERY FOR BORING</b> 100 %	
			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-57.8	0.0						-57.8		
			SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, few sand to gravel-sized shell, trace silt, 10Y 5/1 greenish gray (SP)	100	1		Vibracore		
							-58.8		
				100			Vibracore		
-62.8	5.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, trace silt, 10Y 5/1 greenish gray (SP)		2		-62.8		
-64.8	7.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, 10Y 5/1 greenish gray (SP)	100			Vibracore		
					3		-66.8		
-67.8	10.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, trace silt, 10Y 5/2 dark greenish gray (SP)	100			Vibracore		
-70.1	12.3		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little fine to medium-grained sand-sized shell, trace silt, 10Y 5/2 dark greenish gray (SP)		4		-71.8		
-72.8	15.0			100			Vibracore		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 666,850 Y = 1,903,160			ELEVATION TOP OF BORING -57.8 Ft.																								
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																		
-77.8	20.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace shell, 10Y 5/2 dark greenish gray (SP-SM)	100			Vibracore																				
			NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Laboratory Testing Results  <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>9.0/9.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>14.0/14.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	1	1.0/1.5	SP*	2	5.0/5.5	SP*	3	9.0/9.5	SP*	4	14.0/14.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	1.0/1.5	SP*																									
1	1.0/1.5	SP*																									
2	5.0/5.5	SP*																									
3	9.0/9.5	SP*																									
4	14.0/14.5	SP*																									

DRILLING LOG		DIVISION South Atlantic		INSTALLATION Jacksonville District			SHEET 1 OF 2 SHEETS		
1. PROJECT Flagler HSDR Offshore Sand Sources 3A				9. SIZE AND TYPE OF BIT See Remarks					
2. BORING DESIGNATION VB-FC18-14		LOCATION COORDINATES X = 667,502 Y = 1,903,875		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83		VERTICAL NAVD88	
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER			
4. NAME OF DRILLER				12. TOTAL SAMPLES		DISTURBED 4		UNDISTURBED (UD) 0	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED				DEG. FROM VERTICAL		BEARING			
6. THICKNESS OF OVERBURDEN N/A				13. TOTAL NUMBER CORE BOXES 2		14. ELEVATION GROUND WATER			
7. DEPTH DRILLED INTO ROCK N/A				15. DATE BORING		STARTED 01-01-19		COMPLETED 01-01-19	
8. TOTAL DEPTH OF BORING 20.0 Ft.				16. ELEVATION TOP OF BORING -54.1 Ft.		17. TOTAL RECOVERY FOR BORING 95 %			
				18. SIGNATURE AND TITLE OF INSPECTOR					
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-54.1	0.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, 10Y 6/1 greenish gray (SP)	100			-54.1		
					1		-56.1		
				100			Vibracore		
					2		-60.1		
				100			Vibracore		
-63.1	9.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, 10YR 5/1 gray (SP)		3		-64.1		
				100			Vibracore		
-67.1	13.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine to coarse-grained sand-sized shell, trace silt, 10YR 5/1 gray (SP)		4		-68.1		
-68.1	14.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine to	100			Vibracore		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																				
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																				
LOCATION COORDINATES X = 667,502 Y = 1,903,875			ELEVATION TOP OF BORING -54.1 Ft.																							
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																	
-73.1	19.0		medium-grained sand-sized shell, trace silt, 10YR 5/1 gray (SP)	100			Vibracore																			
-74.1	20.0	NR		0			Vibracore (No Recovery)																			
NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Lost during recovery at depth 19'-20'.  4. Laboratory Testing Results  <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>14.0/14.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	1	2.0/2.5	SP*	2	6.0/6.5	SP*	3	10.0/10.5	SP*	4	14.0/14.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																								
1	2.0/2.5	SP*																								
1	2.0/2.5	SP*																								
2	6.0/6.5	SP*																								
3	10.0/10.5	SP*																								
4	14.0/14.5	SP*																								

DRILLING LOG		DIVISION South Atlantic		INSTALLATION Jacksonville District			SHEET 1 OF 2 SHEETS		
1. PROJECT Flagler HSDR Offshore Sand Sources 3A				9. SIZE AND TYPE OF BIT See Remarks					
2. BORING DESIGNATION VB-FC18-15		LOCATION COORDINATES X = 668,152 Y = 1,904,661		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83		VERTICAL NAVD88	
3. DRILLING AGENCY Corps of Engineers - CESAJ		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL		<input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER			
4. NAME OF DRILLER				12. TOTAL SAMPLES		DISTURBED 4		UNDISTURBED (UD) 0	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED				DEG. FROM VERTICAL		BEARING			
6. THICKNESS OF OVERBURDEN N/A				13. TOTAL NUMBER CORE BOXES		2			
7. DEPTH DRILLED INTO ROCK N/A				14. ELEVATION GROUND WATER					
8. TOTAL DEPTH OF BORING 20.0 Ft.				15. DATE BORING		STARTED 01-01-19		COMPLETED 01-01-19	
				16. ELEVATION TOP OF BORING		-53.3 Ft.			
				17. TOTAL RECOVERY FOR BORING		95 %			
				18. SIGNATURE AND TITLE OF INSPECTOR					
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-53.3	0.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, trace silt, 10Y 6/1 greenish gray (SP)	100			-53.3		0
							Vibracore		
				1			-54.3		
				100			Vibracore		
							-57.3		5
		2			Vibracore				
		100			-61.3				
		3			Vibracore				
-62.3	9.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine to medium-grained sand-sized shell, trace silt, 10Y 4/1 dark greenish gray (SP)	100			-64.3		10
							Vibracore		
				4			-67.3		
				100			Vibracore		
-67.3	14.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few fine to coarse-grained sand-sized shell, few silt,						15

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 668,152 Y = 1,904,661			ELEVATION TOP OF BORING -53.3 Ft.																								
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																		
-70.3	17.0		10Y 4/1 dark greenish gray (SP-SM)	100			Vibracore																				
-72.3	19.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, trace silt, 10Y 5/1 greenish gray (SP)																								
-73.3	20.0	NR		0								Vibracore (No Recovery)															
NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Lost during recovery at depth 19'-20'.  4. Laboratory Testing Results																											
<table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>11.0/11.5</td> <td>SP*</td> </tr> </tbody> </table>			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	4.0/4.5	SP*	2	4.0/4.5	SP*	3	8.0/8.5	SP*	4	11.0/11.5	SP*							
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	1.0/1.5	SP*																									
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3	8.0/8.5	SP*																									
4	11.0/11.5	SP*																									
*Lab visual classification based on gradation curve																											

## Boring Designation VB-FC18-18

<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District		<b>SHEET 1</b> <b>OF 2 SHEETS</b>
<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks		
<b>2. BORING DESIGNATION</b> VB-FC18-18		<b>LOCATION COORDINATES</b> X = 667,607 Y = 1,902,489		<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)	<b>HORIZONTAL</b> NAD83 <b>VERTICAL</b> NAVD88
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ		<b>CONTRACTOR FILE NO.</b>		<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b>	<b>DISTURBED</b> 4	<b>UNDISTURBED (UD)</b> 0
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b> 2		
<b>DEG. FROM VERTICAL</b>			<b>14. ELEVATION GROUND WATER</b>		
<b>BEARING</b>			<b>15. DATE BORING</b> <b>STARTED</b> 01-01-19 <b>COMPLETED</b> 01-01-19		
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>16. ELEVATION TOP OF BORING</b> -56.5 Ft.		
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>17. TOTAL RECOVERY FOR BORING</b> 100 %		
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>		

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-56.5	0.0						-56.5		
			SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, 10Y 6/1 greenish gray (SP)	100	1		Vibrocure		
							-57.5		
				100			Vibrocure		
					2		-62.5		
				100			Vibrocure		
-66.9	10.4		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little fine to medium-grained sand-sized shell, trace silt, 10GY 6/1 greenish gray (SP)		3		-67.5		
				100			Vibrocure		
-70.0	13.5		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, trace silt, 10Y 4/1 dark greenish gray (SP)		4		-70.5		
				100			Vibrocure		
-71.5	15.0								

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 667,607 Y = 1,902,489			ELEVATION TOP OF BORING -56.5 Ft.																								
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																		
-76.5	20.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, few silt, 10Y 4/1 dark greenish gray (SP-SM)	100			Vibracore																				
			NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Laboratory Testing Results  <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>11.0/11.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>14.0/14.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	6.0/6.5	SP*	2	6.0/6.5	SP*	3	11.0/11.5	SP*	4	14.0/14.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	1.0/1.5	SP*																									
2	6.0/6.5	SP*																									
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3	11.0/11.5	SP*																									
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<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks		
<b>2. BORING DESIGNATION</b> VB-FC18-19		<b>LOCATION COORDINATES</b> X = 668,260 Y = 1,903,257		<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)	<b>HORIZONTAL</b> NAD83 <b>VERTICAL</b> NAVD88
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ		<b>CONTRACTOR FILE NO.</b>		<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b>	<b>DISTURBED</b> 5	<b>UNDISTURBED (UD)</b> 0
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b> 2		
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>14. ELEVATION GROUND WATER</b>		
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>15. DATE BORING</b> <b>STARTED</b> 01-01-19 <b>COMPLETED</b> 01-01-19		
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>16. ELEVATION TOP OF BORING</b> -54.2 Ft.		
			<b>17. TOTAL RECOVERY FOR BORING</b> 100 %		
			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>		

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-54.2	0.0						-54.2		
			SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, 10Y 6/1 greenish gray (SP)	100			Vibracore		
					1		-56.2		
				100			Vibracore		
-59.2	5.0		SAND, poorly-graded, mostly fine to coarse-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, 10Y 6/1 greenish gray (SP)		2		-60.2		
				100			Vibracore		
-64.2	10.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, shell size up to 3", 10Y 6/1 greenish gray (SP)		3		-64.2		
				100			Vibracore		
-67.2	13.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few silt, few fine to medium-grained sand-sized shell, 10Y 6/1 greenish gray (SP)		4		-68.2		
				100			Vibracore		
-69.2	15.0								

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																								
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																								
LOCATION COORDINATES X = 668,260 Y = 1,903,257			ELEVATION TOP OF BORING -54.2 Ft.																											
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																					
-71.2	17.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace silt, trace shell, shell size up to 3", 10Y 5/1 greenish gray (SP)	100	5		Vibracore																							
-74.2	20.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace shell, shell size up to 3", 10Y 5/1 greenish gray (SP-SM)	100			Vibracore																							
			<p>NOTES:</p> <p>1. USACE Jacksonville is the custodian for these original files.</p> <p>2. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>3. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr><td>1</td><td>2.0/2.5</td><td>SP*</td></tr> <tr><td>2</td><td>6.0/6.5</td><td>SP*</td></tr> <tr><td>2</td><td>6.0/6.5</td><td>SP*</td></tr> <tr><td>3</td><td>10.0/10.5</td><td>SP*</td></tr> <tr><td>4</td><td>14.0/14.5</td><td>SP*</td></tr> <tr><td>5</td><td>16.0/16.5</td><td>SP*</td></tr> </tbody> </table> <p>*Lab visual classification based on gradation curve</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	6.0/6.5	SP*	2	6.0/6.5	SP*	3	10.0/10.5	SP*	4	14.0/14.5	SP*	5	16.0/16.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																												
1	2.0/2.5	SP*																												
2	6.0/6.5	SP*																												
2	6.0/6.5	SP*																												
3	10.0/10.5	SP*																												
4	14.0/14.5	SP*																												
5	16.0/16.5	SP*																												

<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District		<b>SHEET 1</b> <b>OF 2 SHEETS</b>
<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks		
<b>2. BORING DESIGNATION</b> VB-FC18-20		<b>LOCATION COORDINATES</b> X = 668,944 Y = 1,904,009		<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)	<b>HORIZONTAL</b> NAD83 <b>VERTICAL</b> NAVD88
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ		<b>CONTRACTOR FILE NO.</b>		<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b>	<b>DISTURBED</b> 4	<b>UNDISTURBED (UD)</b> 0
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b> 2		
<b>DEG. FROM VERTICAL</b>			<b>14. ELEVATION GROUND WATER</b>		
<b>BEARING</b>			<b>15. DATE BORING</b> 01-01-19		
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>16. ELEVATION TOP OF BORING</b> -55.4 Ft.		
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>17. TOTAL RECOVERY FOR BORING</b> 88 %		
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>		

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-55.4	0.0						-55.4		
			SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to medium-grained sand-sized shell, trace silt, 5Y 6/1 gray (SP)	100	1		Vibrocure		
				100			Vibrocure		
					2		-59.4		
				100			Vibrocure		
-62.9	7.5		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine to coarse-grained sand-sized shell, trace silt, 10Y 6/1 greenish gray (SP)		3		-63.4		
				100			Vibrocure		
-66.3	10.9		SAND, poorly-graded, mostly fine-grained sand-sized quartz, few sand to cobble-sized shell, trace silt, trace metal debris up to 0.8" @ 14.5' depth, 10Y 5/1 greenish gray (SP)		4		-67.4		
				100			Vibrocure		
-68.4	13.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few fine to medium-grained sand-sized shell, trace silt, 10Y 5/1 greenish gray (SP-SM)						

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 668,944 Y = 1,904,009			ELEVATION TOP OF BORING -55.4 Ft.																								
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																		
-72.9	17.5	NR		100			Vibracore																				
-75.4	20.0			0			Vibracore (No Recovery)																				
			NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Lost during recovery at depth 17.5'-20'.  4. Laboratory Testing Results  <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>12.0/12.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	1	1.0/1.5	SP*	2	4.0/4.5	SP*	3	8.0/8.5	SP*	4	12.0/12.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	1.0/1.5	SP*																									
1	1.0/1.5	SP*																									
2	4.0/4.5	SP*																									
3	8.0/8.5	SP*																									
4	12.0/12.5	SP*																									

<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	<b>SHEET 1</b> <b>OF 2 SHEETS</b>
<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks	
<b>2. BORING DESIGNATION</b> VB-FC18-23			<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)	<b>HORIZONTAL</b> NAD83 <b>VERTICAL</b> NAVD88
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ			<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b>	<b>DISTURBED</b> 4 <b>UNDISTURBED (UD)</b> 0
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b> 2	
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>14. ELEVATION GROUND WATER</b>	
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>15. DATE BORING</b> <b>STARTED</b> 01-01-19 <b>COMPLETED</b> 01-01-19	
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>16. ELEVATION TOP OF BORING</b> -52.5 Ft.	
			<b>17. TOTAL RECOVERY FOR BORING</b> 100 %	
			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-52.5	0.0						-52.5		
			SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to medium-grained sand-sized shell, trace silt, 5Y 6/1 gray (SP)	100	1		Vibracore		
				100			Vibracore		
					2		Vibracore		
				100			Vibracore		
-62.5	10.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to medium-grained sand-sized shell, trace silt, 10YR 5/1 gray (SP)		3		Vibracore		
				100			Vibracore		
-67.5	15.0			100	4		Vibracore		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 668,366 Y = 1,901,850			ELEVATION TOP OF BORING -52.5 Ft.																								
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																		
-72.5	20.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few fine to medium-grained sand-sized shell, few silt, 10YR 5/1 gray (SP-SM) From El. -68.5 to -72.5 Ft., mostly fine-grained sand-sized quartz, few silt, trace shell, 10YR 5/1 gray	100			Vibracore																				
			NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Laboratory Testing Results  <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>14.0/14.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	1	1.0/1.5	SP*	2	5.0/5.5	SP*	3	10.0/10.5	SP*	4	14.0/14.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	1.0/1.5	SP*																									
1	1.0/1.5	SP*																									
2	5.0/5.5	SP*																									
3	10.0/10.5	SP*																									
4	14.0/14.5	SP*																									

<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District		<b>SHEET 1</b> <b>OF 2 SHEETS</b>
<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks		
<b>2. BORING DESIGNATION</b> VB-FC18-24			<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)		<b>HORIZONTAL</b> NAD83
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ			<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b>		<b>VERTICAL</b> NAVD88
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b>		<b>DISTURBED</b> 4
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b>		<b>UNDISTURBED (UD)</b> 0
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>14. ELEVATION GROUND WATER</b>		
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>15. DATE BORING</b>		<b>STARTED</b> 01-01-19
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>16. ELEVATION TOP OF BORING</b> -52.6 Ft.		<b>COMPLETED</b> 01-01-19
			<b>17. TOTAL RECOVERY FOR BORING</b> 100 %		
			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>		

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-52.6	0.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, trace silt, 10YR 6/1 gray (SP)	100			-52.6		
					1		Vibracore		
				100			Vibracore		
					2		-57.6		
				100			Vibracore		
-62.6	10.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, 5Y 6/1 gray (SP)		3		-62.6		
				100			Vibracore		
-65.6	13.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, trace silt, 5Y 6/1 gray (SP)		4		-66.6		
-66.9	14.3		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little fine to	100			Vibracore		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 668,987 Y = 1,902,578			ELEVATION TOP OF BORING -52.6 Ft.																								
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																		
-69.4	16.8		coarse-grained sand-sized shell, trace silt, 5Y 5/1 gray (SP)																								
-72.6	20.0		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few sand to gravel-sized shell, few silt, 5Y 5/1 gray (SP-SM)	100			Vibracore																				
			NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Laboratory Testing Results  <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>14.0/14.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	5.0/5.5	SP*	2	5.0/5.5	SP*	3	10.0/10.5	SP*	4	14.0/14.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																									
1	1.0/1.5	SP*																									
2	5.0/5.5	SP*																									
2	5.0/5.5	SP*																									
3	10.0/10.5	SP*																									
4	14.0/14.5	SP*																									



## Boring Designation VB-FC18-25

<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	<b>SHEET 1</b> <b>OF 2 SHEETS</b>
<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks	
<b>2. BORING DESIGNATION</b> VB-FC18-25			<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)	
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ			<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b> 3	
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b> 2	
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>14. ELEVATION GROUND WATER</b>	
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>15. DATE BORING</b> 01-01-19	
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>16. ELEVATION TOP OF BORING</b> -57.1 Ft.	
			<b>17. TOTAL RECOVERY FOR BORING</b> 100 %	
			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-57.1	0.0						-57.1		
-58.1	1.0		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, few shell, trace silt, 5Y 6/1 gray (SP)	100			Vibracore		
			SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, some sand to gravel-sized shell, trace silt, 5Y 6/1 gray (SP)		1				
				100			Vibracore		
-62.1	5.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, trace silt, 5Y 5/1 gray (SP)		2				
				100			Vibracore		
					3				
-67.1	10.0						-65.1		
-67.9	10.8		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little fine to coarse-grained sand-sized shell, few silt, 10Y 6/1 greenish gray (SP-SM)						
			CLAY, fat, little fine-grained sand-sized quartz, few fine to coarse-grained sand-sized shell, 5GY 4/1 dark greenish gray (CH)	100			Vibracore		
-69.4	12.3		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few fine to medium-grained sand-sized shell, 10Y 5/1 greenish gray (SM)						
			From El. -70.4 to -71.3 Ft., some fine-grained sand-sized quartz, some sand to gravel-sized shell, little silt, 10Y 5/1 greenish gray						
			From El. -71.3 to -75.1 Ft., mostly						

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																		
LOCATION COORDINATES X = 669,671 Y = 1,903,365			ELEVATION TOP OF BORING -57.1 Ft.																					
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE															
-75.1	18.0		fine-grained sand-sized quartz, little silt, trace shell, 10Y 5/1 greenish gray	100			Vibracore																	
-77.1	20.0		SAND, clayey, mostly fine-grained sand-sized quartz, little sand to gravel-sized shell, little clay, 10Y 4/1 dark greenish gray (SC)				-77.1																	
			<p>NOTES:</p> <p>1. USACE Jacksonville is the custodian for these original files.</p> <p>2. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>3. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SP*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve</p>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	5.0/5.5	SP*	2	5.0/5.5	SP*	3	8.0/8.5	SP*						
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	1.0/1.5	SP*																						
2	5.0/5.5	SP*																						
2	5.0/5.5	SP*																						
3	8.0/8.5	SP*																						



<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District	<b>SHEET 1</b> <b>OF 2 SHEETS</b>
<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks	
<b>2. BORING DESIGNATION</b> VB-FC18-28			<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)	
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ			<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b> 4	
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b> 2	
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>14. ELEVATION GROUND WATER</b>	
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>15. DATE BORING</b> 01-01-19	
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>16. ELEVATION TOP OF BORING</b> -61.6 Ft.	
			<b>17. TOTAL RECOVERY FOR BORING</b> 100 %	
			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-61.6	0.0						-61.6		
			SAND, poorly-graded, mostly fine-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, 5Y 7/1 light gray (SP)	100	1		Vibracore		
				100			Vibracore		
-65.1	3.5		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little fine to medium-grained sand-sized shell, trace silt, 5Y 6/1 gray (SP)		2		-65.6		
				100			Vibracore		
-68.6	7.0		SAND, poorly-graded, mostly fine-grained sand-sized quartz, little fine to medium-grained sand-sized shell, trace silt, 10Y 5/1 greenish gray (SP)		3		-68.6		
-69.1	7.5		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, trace shell, 10Y 5/1 greenish gray (SP-SM)	100			Vibracore		
-71.6	10.0		SAND, poorly-graded with silt, mostly sand to gravel-sized shell, some fine-grained sand-sized quartz, few silt, 10Y 4/1 dark greenish gray (SP-SM)		4		-71.6		
-73.4	11.8		SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, few silt, few fine to medium-grained sand-sized shell, 10Y 4/1 dark greenish gray (SP-SM)	100			Vibracore		
-76.6	15.0								

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																					
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																					
LOCATION COORDINATES X = 669,111 Y = 1,901,275			ELEVATION TOP OF BORING -61.6 Ft.																								
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																		
-79.8	18.2		SAND, poorly-graded with silt, mostly sand to gravel-sized shell, some quartz, few silt, 10Y 6/1 greenish gray (SP-SM)	100			Vibracore																				
-81.6	20.0		SAND, silty, mostly fine-grained sand-sized quartz, little silt, few fine to coarse-grained sand-sized shell, 10Y 4/1 dark greenish gray (SM) From El. -80.4 to -81.6 Ft., some fine-grained sand-sized quartz, some fine to coarse-grained sand-sized shell, little silt, 10Y 4/1 dark greenish gray				-81.6																				
			NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Laboratory Testing Results  <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>7.0/7.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>10.0/10.5</td> <td>SP-SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	2	4.0/4.5	SP*	2	4.0/4.5	SP*	3	7.0/7.5	SP*	4	10.0/10.5	SP-SM*						
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3	7.0/7.5	SP*																									
4	10.0/10.5	SP-SM*																									

<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic	<b>INSTALLATION</b> Jacksonville District		<b>SHEET 1</b> <b>OF 2 SHEETS</b>
<b>1. PROJECT</b> Flagler HSDR Offshore Sand Sources 3A			<b>9. SIZE AND TYPE OF BIT</b> See Remarks		
<b>2. BORING DESIGNATION</b> VB-FC18-29		<b>LOCATION COORDINATES</b> X = 669,747 Y = 1,901,972		<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)	<b>HORIZONTAL</b> NAD83 <b>VERTICAL</b> NAVD88
<b>3. DRILLING AGENCY</b> Corps of Engineers - CESAJ		<b>CONTRACTOR FILE NO.</b>		<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
<b>4. NAME OF DRILLER</b>			<b>12. TOTAL SAMPLES</b>	<b>DISTURBED</b> 4	<b>UNDISTURBED (UD)</b> 0
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED			<b>13. TOTAL NUMBER CORE BOXES</b> 2		
<b>6. THICKNESS OF OVERBURDEN</b> N/A			<b>14. ELEVATION GROUND WATER</b>		
<b>7. DEPTH DRILLED INTO ROCK</b> N/A			<b>15. DATE BORING</b> STARTED 01-03-19 COMPLETED 01-03-19		
<b>8. TOTAL DEPTH OF BORING</b> 20.0 Ft.			<b>16. ELEVATION TOP OF BORING</b> -58.7 Ft.		
			<b>17. TOTAL RECOVERY FOR BORING</b> 100 %		
			<b>18. SIGNATURE AND TITLE OF INSPECTOR</b>		

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-58.7	0.0						-58.7		
			SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, little sand to gravel-sized shell, trace silt, 5Y 5/1 gray (SP)	100	1		Vibracore		
				100			Vibracore		
-63.7	5.0				2		-63.7		
-65.0	6.3		SAND, poorly-graded, mostly fine to medium-grained sand-sized quartz, some sand to gravel-sized shell, trace silt, 10Y 6/1 greenish gray (SP)	100			Vibracore		
			SAND, poorly-graded, mostly fine-grained sand-sized quartz, few fine to coarse-grained sand-sized shell, trace silt, 10Y 5/1 greenish gray (SP)		3		-66.7		
-67.2	8.5			100			Vibracore		
-68.0	9.3		SAND, poorly-graded, mostly fine-grained sand-sized quartz, trace shell, trace silt, 10Y 4/1 dark greenish gray (SP)		4		-69.7		
			SAND, poorly-graded, mostly fine-grained sand-sized quartz, little fine to medium-grained sand-sized shell, trace silt, 10Y 4/1 dark greenish gray (SP)	100			Vibracore		
-71.7	13.0			100			Vibracore		
-73.5	14.8		SAND, clayey, some fine-grained sand-sized quartz, some fine to coarse-grained sand-sized shell, little clay, 5G 5/1 greenish gray (SC)						

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																				
PROJECT Flagler HSDR			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88																				
LOCATION COORDINATES X = 669,747 Y = 1,901,972			ELEVATION TOP OF BORING -58.7 Ft.																							
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE																	
-75.5	16.8		CLAY, lean, few fine to coarse-grained sand-sized shell, few fine-grained sand-sized quartz, 5G 5/1 greenish gray (CL)	100			Vibracore																			
-77.2	18.5		SAND, silty, mostly fine to medium-grained sand-sized quartz, little fine gravel-sized shell, little silt, 10Y 6/1 greenish gray (SM)																							
-78.7	20.0			100			Vibracore (No Recovery)																			
NOTES:  1. USACE Jacksonville is the custodian for these original files.  2. Soils are field visually classified in accordance with the Unified Soils Classification System.  3. Lost during recovery at depth 18.5'-20'.  4. Laboratory Testing Results <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>1</td> <td>1.0/1.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>8.0/8.5</td> <td>SP*</td> </tr> <tr> <td>4</td> <td>11.0/11.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve			SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	1.0/1.5	SP*	1	1.0/1.5	SP*	2	5.0/5.5	SP*	3	8.0/8.5	SP*	4	11.0/11.5	SP*						
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